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Wars without borders: conditions for the development of regional conflict systems in sub-Saharan Africa

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Wars without borders: Conditions for the development of regional conflict systems in sub-Saharan Africa

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Abstract

How and under what conditions does war spread into regions and do regional conflict systems evolve? These systems are defined as geographically bound spaces of insecurity, ones that are characterized by interdependent armed conflicts in which a plurality of actors who concur and/or interact within complex networks, and on different levels of action, participate. The regionalization of armed conflict is conceptualized as either the geographical diffusion to a new territory or as the escalation of violence within the very same territory, with the involvement therein of a multiplicity of actors. The processes of diffusion and escalation of civil war in potential and existent regional conflict systems in sub-Saharan Africa between 1989 and 2010 are analyzed with the help of a multivalue Qualitative Comparative Analysis (mvQCA). By using such a QCA, it is possible to compare several different cases and produce results that go beyond the ones thus far discovered from small-*N* analyses. By comparing 12 cases it is also possible to identify the causal relationships and interactions between variables. The analysis shows that, in the cases compared, four specific conditions lead to a regional spread of violence: economic networks sustained through the support of neighboring countries; an intervention on the part of the government; militarized refugees; and, non-salient regional identity groups.

Keywords

Civil war, diffusion, escalation, mvQCA, sub-Saharan Africa

Introduction

In the last few decades the nature of war has changed around the globe: processes of national debordering and denationalization have led to new forms of warfare emerging, as well as to the regionalization and transnationalization of war. Armed conflicts in sub-Saharan Africa especially

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have demonstrated a tendency towards the diffusion or escalation of armed conflict to neighboring countries and, consequently, the development of regional conflict systems.

A textbook example of a regional conflict system is the conflict dynamics in the African Great Lakes region during the 1990s. In 1994 the Hutu majority committed genocide against the Tutsi minority in Rwanda, which would only ultimately be stopped by a Tutsi-led rebel group, the Rwandan Patriotic Front (RPF) (HRW, 2006). The intervention of the RPF led to hundreds of thousands of Hutu refugees fleeing the country, as they feared that the Tutsi rebels would take vengeance for the genocide. Also among the refugees were the genocidaires, the Hutu militia who had committed the genocide. Under the guise of a general exodus, it was possible for them to get out of the country and then subsequently reorganize with the help of humanitarian aid. The Hutu militias started to attack Rwandan territory to overthrow the newly formed Tutsi government, and they continue their attacks until today (Adelman, 2003; Manahl, 2000). Zaire's President Mobutu accepted this ongoing violence in the East of the country. In 1996 regional resistance against Mobutu took shape with the intervention of the Zairian rebel coalition Alliance des Forces Démocratiques pour la Libération du Congo-Zaïre (AFDL), supported by Rwandan, Ugandan and Angolan troops (Manahl, 2000). After a 7 month long war, the alliance overthrew Mobutu and Laurent-Desiré Kabila took power in his place. The regional conflict system thus developed through the diffusion of violence from Rwanda, Uganda and Angola to neighboring Zaire.

This is only one of many examples of the processes of the regionalization of war in sub-Saharan Africa. With this regionalization of conflict, civil wars are no longer confined to the borders of only one country—and consequently regional conflict systems evolve. To date, the processes of the regionalization of war and the causes of regional conflict systems have been insufficiently theoretically captured and only sporadically empirically analyzed. Often, the complex structures of regional conflict systems are only analyzed in small-N studies that cover all the actors involved and trace the exact causal relations that lead to a regional diffusion and/or escalation of war (Berg, 2008; Ntegeye et al., 2001; Pugh et al., 2003). They conceptualize, however, regional conflict systems as ideographic, and thus do not allow any general conclusions to be drawn about this phenomenon. Large-N studies dealing with regional conflicts, on the contrary, have a nomothetic perspective on regional conflict systems and assume their comparability (Salehyan and Gleditsch, 2006; Salehyan, 2007; Wallensteen and Sollenberg, 1998). Some of them, however, focus on the nationstate as the main level of analysis, thus encountering the problem of methodological nationalism (Chernilo, 2008). They thus cannot grasp processes and dynamics occurring at the regional level and beyond the nation-state. Furthermore, only the correlation of variables is tested by them, with the exact causal relationships between variables and outcome or the interaction effects between the causal variables¹—which in combination with each other may lead to the regionalization of war being overlooked. Lastly, the possibility that the outcome can occur by different means (equifinality) cannot be modeled with regression models as they are only limited to one causal path.

The present article seeks to address these problems and shed further light on the causes and dynamics of regional conflict systems by answering the following core research question: what structural framing conditions and dynamics lead to the regional spread of armed conflict and the occurrence of regional conflict systems? These systems are defined as geographically bound spaces of insecurity, ones that are characterized by interdependent armed conflicts in which a plurality of actors who concur and/or interact within complex networks, and on different levels of action², participate. These actors can be both state (national, subnational, or international) and non-state (political, economic) ones. A plurality of actors implies that there are not just two actors from different levels of action involved in a war (as in conventional warfare, e.g. in internal or international wars), but at least three or more actors from different levels of action are actively and directly involved in warfare. These processes can be distinguished from armed conflict that has a regional

element—such as regionally dispersed identity groups or the support of the neighboring government—but where conflict does not encompass more than two actors in the same territory (which would rather be perceived as "conventional" civil war; Levy and Thompson, 2011). The plurality of actors from different levels of action is thus in the focus of the analysis.

Furthermore, a regional conflict system is, according to my view, characterized by geographical proximity. When conflict actors interact within one geographical limited space, they are considered as actors of one particular region. If they do not interact with each other and are not from the same region, they are not part of the regional conflict system.³ If there is an outside power intervening physically in one region (and thus interacting with the regional actors), it becomes, at least temporarily, part of the conflict region. A regional conflict system can evolve in different ways: in the mold of Lake and Rothchild (Lake and Rothchild, 1998), I conceptualize the regionalization of armed conflict as either a geographical diffusion to a new territory or as the escalation of violence within the very same territory, with the involvement therein of a multiplicity of actors hailing from other territories. Of interest here is the actual regionalization of an already existing (internal) war, not the outbreak of violent conflict in general.⁴

In the present paper the diffusion and escalation of internal violence to regional conflict systems are analyzed with a comparative area study; by comparing, with the help of a multivalue Qualitative Comparative Analysis (mvQCA), potential and existing conflict systems in sub-Saharan Africa in the years from 1989 to 2010. I decided to focus on all violent regions of sub-Saharan Africa, an area that continues to be highly affected by the regionalization of war and the development of regional conflict systems. By using the relatively new method of mvQCA, it is possible to compare several different cases and produce results that go beyond the ones that have emerged thus far out of small-*N* analyses. At the same time, only the cases in their entirety and the interactions between conditions are analyzed, and thus any causal relations and interactions between conditions are captured by the analysis.

The article proceeds as follows: the next section presents the theoretical underpinnings of the study. After that are presented the research design and the used method. The next section presents the results of the analysis and the interpretation thereof, while the final section concludes with some useful recommendations for future research.

Causes for a regionalization of armed conflict

In general, the existence of regional conflict systems is undisputed among academics. Wallensteen and Sollenberg (1998), looking at cases since 1989, identified 15 regional conflict complexes. Ward and Gleditsch have also confirmed the existence of regional conflict systems (Gleditsch and Ward, 2006). Detailed information on the causes or dynamics of these systems is, however, missing in the mentioned studies; the authors, furthermore, also assume causal links to exist, rather than analyzing them in detail. Collier et al. (2003) summarize the possible causes of conflict diffusion, but a systematic analysis of the reasons for the spread of armed conflict is missing here as well. From a qualitative perspective, several single case studies deal with the causes of the diffusion or escalation of violent conflict (e.g. Clark, 2002; Pugh et al., 2003).

Beyond these rather general approaches toward regional conflict systems there are countless studies that deal merely with single aspects of the regional spread of armed conflict. Among the structural factors that lead to a regionalization of armed conflict are weak state structures (Pugh et al., 2003; Salehyan, 2007), regional economic instability (Ades and Chua, 1997; Easterly and Levine, 1998) and transnational identity groups (e.g. Davis and Moore, 1997; Fearon, 1998; Lake and Rothchild, 1998; Saideman, 2001). Triggering factors can be regional economic networks (e.g.

Duffield, 2000, 2002; Elwert, 1999), the influx of refugees and their possible militarization (Lischer, 2000, 2003; Salehyan and Gleditsch, 2006; Stedman and Tanner, 2003).

A number of studies deal with the existence, structural conditions and triggering dynamics of regional conflict systems. There is, however, still a research gap of all conditions leading to the regional spillover of violence and the development of regional conflict systems. The present paper thus analyzes conditions and triggers for the development of regional conflict systems in sub-Saharan Africa with the help of a comparative area study—and contributes to the debate with generalizable results on how and why war diffuses in regions.

The outcome of the analysis is the regional spread of violence, that is, the regionalization of armed conflict. With regard to the interactions of actors, a regional conflict system develops if an already existent armed conflict (war) is not limited to only two distinct actors but spreads to a multiplicity of actors (at least three or more) having a transborder scope and being actively engaged in violence. It is, hence, not the emergence of conflict per se that is of interest here, but rather its regional spread. Regionalization of conflict can proceed in two ways (Lake and Rothchild, 1998: 23ff.): diffusion characterizes the spread of war to a new territory—such as the neighboring state—and thus involves a geographical expansion of violence. Escalation, meanwhile, denotes the involvement of different regional and international actors in a war in the same territory. The war remains within the confines of the same territory and thus does not spread geographically, but does draw in different actors. In the present paper, three hypotheses will be tested.

Regional state weakness

The first hypothesis focuses on diminished state capacity to implement a range of security policies and weak states in the region. The lack of a regulatory and controlling state force combined with weak state institutions can lead to the regional spread of violence. An already existing conflict leads to the development of insecurity, initially in one territory/country. In this scenario, there is no longer any protection offered to civilians from the violent exchanges occurring between conflict actors, and consequently a space of insecurity evolves. In this space, different actors—state or non-state, and with a local, national, regional and/or international scope of action—are involved both actively and directly in the fighting. Under the condition of regional state weakness, this space of insecurity can spread—in a variety of different ways—to the whole region.

First, an escalation—that is, the regional spread of armed conflict in the same territory—is caused by the insecurity that emanates from one or more weak states. Neighboring states may feel threatened by the insecurity present in their neighborhood, for example owing to the activities of rebel groups close to their border(s) or as a result of ongoing refugee flows, which may constitute as noted a risk to their own security and cohesion. To halt these processes, the neighboring state may intervene in the territory of the insecure and unstable party that caused the escalation of the original conflict.

Second, diffusion—that is, the geographical spread of armed conflict to a neighboring territory—is possible through the expansion of the interactions between conflict actors to include neighboring areas. Rebel groups of one country may cross the border into a weak and failed neighboring state and find a safe haven there (Salehyan, 2008). They use the state's weakness to pursue their activities unopposed: they take control of the territory, despoil villages and people, and proceed to attack enemies in their country of origin. In some cases, rebels may even exploit and sell valuable resources from, or fight against armed groups in, the new territory. By expanding the confrontations between conflict actors to a new territory, armed conflict diffuses and a regional conflict system evolves.

The following hypothesis will thus be tested in the analysis:

H1: The existence of weak and failed states in a region that is already affected by an intrastate armed conflict is a central condition for the regional spread of armed conflict.

Weak state capacity and the absence of overarching control represent ideal structural framing conditions for the development of regional spaces of insecurity and the violence-enhancing activities of private actors.

The establishment of economic networks

The failure of states and their lack of capacity to implement a range of security policies permit the establishment of parallel shadow and war economies (Duffield, 2002). Private, non-state agents of violence establish economic networks at the local and regional levels in order to fund their long-term war activities and to subsist from these even during the harsh times of war. Economic networks thus contribute to a perpetuation of violence, as they are exercised to fund ongoing and future violence. The development of strong state structures is hindered, as this would undermine the attainment of economic benefits (Pugh et al., 2003: 26ff.). In addition to economic network activities, funding for war may also be obtained through the military, political and/or economic support of neighboring governments who have amicable relations with rebel groups and who have an adversarial history with the other government(s) involved. To weaken their opponents, governments thus start giving support to the rebel groups.

Often, countless actors are involved in the maintenance of these economic networks: private, non-state agents of violence, such as rebel groups, who (may) have political motives and are interested in funding their war activities; state actors intent on weakening neighboring countries; or economic actors who are only interested in their own financial gain. If regional economic networks are formed, the spread of violence may take place in a number of different ways.

A diffusion of war—that is, the geographical spread of armed violence—can happen when the activities of conflict actors expand to neighboring states as a result of the formation of economic networks. The actors involved in these may, for example, conduct cross-border international trade in valuable goods such as diamonds, gold and silver, as well as coltan, timber and narcotics. Transnational contraband or illegal tax systems are also possible sources of funding for the sustenance and perpetuation of violent conflict. The territory of the neighboring state serves as a transit site for these valuable resources, which are often linked to the violent actions perpetrated by rebel groups in these lands. A diffusion of violence occurs when one actor—such as the government of the neighboring state or of the state of origin—opposes this cross-border trade and tries to contain its potency by engaging in combat with these regionally active rebel groups.

Another possibility with regard to regional economic structures is the support for rebel groups from sympathetic neighboring governments. Often, those fighting receive support in the form of arms, munitions and/or know-how from a government that is trying to help further weaken the rebel's opponents. These alliances are formed so as to better pursue their own strategic or economic interests. In some cases, rebel groups are even founded by neighboring governments themselves. A diffusion of violence occurs through the intervention of the country from where conflict originates so as to stop these sponsored activities. Consequently, the original conflict then diffuses to the neighboring state.

The establishment of economic networks can also lead to an escalation of violence. The crossborder trade of goods between rebel groups and neighboring actors can be an indicator of a longstanding alliance, which can culminate in the intervention of the partner in the country of origin in order to bring victory to its rebel allies. Another means of escalation is the intervention by a neighboring state because the country of conflict origin is giving financial support to neighboring rebel groups with the intention (due to rivalries) of weakening the adjacent state. In this case, an intervention by the neighbor so as to prevent the other government from supporting the rebel groups involved can lead to an escalation of violence.

The following hypothesis will thus be tested in the analysis:

H2: Establishing economic networks to support existing intrastate conflicts —developed either through economic trade or through support from neighboring governments—is a central condition for the regional spread of armed conflict.

Militarized refugees

Refugees can—under certain circumstances—contribute to the spread of armed conflict. In addition to the high economic costs that come with the arrival of hundreds of thousands of refugees from one or more neighboring countries, social tensions and the militarization of conflict can especially contribute to a spread of violence. The absence of regulations for these emergencies and the existence of spaces of insecurity can be among the key prerequisites for the breaking out of violence in the neighboring country as well.

There are different forms of militarized refugees. First, combatants of rebel groups may hide within the mass of refugees and become the aforementioned refugee warriors (Stedman and Tanner, 2003; Zolberg et al., 1989). They benefit directly from the humanitarian aid—food, shelter, medical supplies—that is provided by relief organizations (Lischer, 2003, 2005). Second, in situations where authority over a refugee camp is lacking, rebel groups can establish an illegal tax system so as to fund their activities. Third, rebels can also benefit from humanitarian aid even when they are not living onsite in refugee camps: the provision of goods to their families is assured in the camps, and also families, friends and/or supporters can continue to provide for them from within the refugee camp. Fourth, in some cases humanitarian aid is part of the war economy—as non-governmental organizations (NGOs) and refugees pay taxes or rebel groups control the distribution process in ways that are to their own benefit (Lischer, 2003: 84). Sometimes, they may pretend to be the source of donations themselves, which serves to increase their reputation among the populace. Food, medicine, vehicles and equipment are sometimes stolen from refugee camps and used to aid the combatants in times of war. Fifth, rebel groups also benefit from the legitimacy bestowed by humanitarian agencies: often, these organizations are forced to negotiate with the agents of violence about gaining access to victims. This provides rebel groups with certain legitimacy among their supporters, as well as among the local population.

The regional spread of violence through militarized refugees can occur in a number of different ways. Diffusion can occur through the direct involvement of militarized refugees in the violence itself. Combatants continue to participate in war activities without being directly exposed to, or confronted by, their opponents in the place of origin. To bring these activities to a halt, the country of origin may intervene in the target country or countries. Violence thus diffuses to the neighboring country that was serving as a safe haven for refugees and rebels.

An escalation of conflict in the same territory can occur as well: refugees are liable to bring insecurity to the neighboring countries, and thus the whole region. To prevent this happening, it is possible that some of the neighboring countries intervene in the country of conflict origin so as to stop the ongoing violence. By intervening in the original conflict, however, it often escalates further.

The following hypothesis has thus been formulated to test this relationship:

H3: The existence of militarized refugees—meaning if there are combatants among the refugees arriving in another, neighboring country—is a central condition for the regional spread of violence.

The three hypotheses will be tested in a mvQCA of potential and existing regional conflict systems in sub-Saharan Africa.

Research design

In order to allow for sufficiently comprehensive analyses in the testing of the hypotheses, I use an mvQCA—one of the refinements of the QCA originally invented by Charles Ragin (Berg-Schlosser et al., 2009; Cronqvist, 2004; Ragin, 2000, 2006). While a conventional QCA uses dichotomous conditions, I apply a method that is an advancement on this standard approach namely, one that uses multivalue conditions with whole numbers (Cronqvist and Berg-Schlosser, 2009; Cronqvist, 2007). QCA in general is not case-oriented (such as small-N studies) or variableoriented (such as large-N studies), but combines the focus on cases and variables and thus allows a variety of cases and many variables to be analyzed at the same time (Ragin, 2000: 35ff.). This diversity-oriented approach searches for patterns of similarities and distinction on the basis of contextual factors (conditions) that may have an influence on causal relationships (Ragin, 2000: 123). It is based on John Stuart Mill's method of difference that looks for the one explaining difference among cases that are fairly similar. To allow for a larger number of cases that cannot all be similar, the method is combined with elements of Boolean algebra that denotes truth values true and false—to the conditions (Cronqvist, 2007: 28; Ragin, 1987: 85). The cases represent configurations of truth values (the combination of all conditions to one expression) and can be minimized with the rules of Boolean Algebra.⁵ Thus, it is possible to compare a larger number of cases without losing the power of causal explanation for each case. While a conventional QCA uses dichotomous conditions, I will apply an advancement of the conventional method that uses multivalue conditions with whole numbers (cf. Cronqvist and Berg-Schlosser, 2009; Cronqvist, 2003, 2005, 2007). Even though mvQCA is seen critically by some researchers (cf. Schneider and Wagemann, 2006; Vink and Van Vliet, 2009), this variant is nevertheless the optimal way to scrutinize situations worthy of analysis. I theoretically distinguish between categories of conditions, not between degrees of conditions, which is why mvQCA is the logical choice for my analysis. Furthermore, unlike fsQCA, mvQCA relies on Boolean algebra and thus comes with the same logic as the original QCA crisp-set developed by Charles Ragin (1987). The use of mvQCA allows for a more detailed and qualitative translation of the complex social reality than fuzzy sets as it includes the qualitative description of conditions in the values (e.g. what type of economic networks are there, what type of refugees influxes are in the region). I include fuzzy-set measures for robustness tests of my results (see below).

Case selection: Violent regions in sub-Saharan Africa

The level of analysis in the present study is that of regions, defined as geographically bound spaces existing beyond the national level with two or more collective actors that are linked by their interactions. In the present study, those regions that have already been affected by violent conflict are of interest. I decided to focus on all violent regions of sub-Saharan Africa, an area that continues to be highly affected by the regionalization of war and the development of regional conflict systems. There are, however, some regions in sub-Saharan Africa that resist these general developments, although they show similar characteristics to the affected regions. This puzzle leads to a research design where a comparison is feasible between the cases that are affected by the regionalization of

war and those that are not. To avoid a Cold War bias, the time period for the analysis is set from 1989 to 2010. Previous events could, however, not completely be excluded from the analysis as they may have a high degree of influence on the conflict actors' relations and thus still affect today's conflicts. One example of this possibility is the hostilities between Tutsis and Hutus in Burundi and Rwanda, which have smoldered since colonial times and are of relevance still today.

To select all violent regions in Africa, the UCDP/PRIO Armed Conflict Dataset (UCDP, 2012) is used. As this database has conflict dyad years as the unit of analysis, I provide a slightly modified list of cases that takes region years as the unit of analysis.⁶ I combine single country cases with regional cases according to the aforementioned definition of the concept "region", which indicates that actors are "linked by their interactions". Thus all actors that are connected in one region through cooperative or hostile interactions are analytically considered part of one region, and thus are combined in one case. Table 1 shows the regions, the affected countries and the conflict period.⁷ A new case in the same region is demarcated when the constellation of the main involved actors in the regional conflict system changes, for example owing to the conclusion and implementation of peace agreements, the withdrawal of a conflict actor from the hostilities, or a qualitative change in one of the conflict actors (like in the case of West Africa in 1997, when former warlord Charles Taylor became Liberia's president).

Operationalization of conditions

In the analysis of the regional conflict systems in sub-Saharan Africa, the outcome is the regional spread of an already existing war. The presence of this outcome is coded 1 if a war with at least 1000 battle-related deaths is not limited to only two actors from one territory, but diffuses or escalates to a plurality of actors from a region who are directly involved in combat—on three or more levels of actions. This can occur through diffusion or escalation. These two forms of regional spread are not mutually exclusive and can occur even within the same conflict. If there is no diffusion or escalation of conflict—and thus no regional spread of war—the outcome is coded 0.

Regional state weakness is measured by the establishment and stability of the monopoly of force in a region, meaning among the neighboring country to the conflict country. Information on this has been gathered from reports of the UN and of NGOs such as Amnesty International, Human Rights Watch (HRW) and the International Crisis Group (ICG), as well as from single case studies. This data on the power of a state is only obtainable on the national level, but is aggregated to the regional level. If a region is affected by at least one weak state⁸ who cannot provide security for its inhabitants but there is still a government in place, then this condition is coded 1. If a region is affected by one or more failed states without a monopoly of force and any functioning government the condition is coded 2. If the countries involved in the armed conflict are stable and a monopoly of force exists in most of the territory the condition is coded 0.

The establishment of regional economic networks is characterized by the regional trading of valuable goods by rebel groups or the regional supporting of non-state actors with military equipment or funding by neighboring governments. The condition has three possible values that are assessed qualitatively: no regional economic network is coded 0; a regional economic network based on only one of either trade or support is coded 1; and, both regional trade with and regional support by a neighboring state is coded 2. Data has been taken from single case studies as well as from the international reports of the UN or of relevant NGOs.

The condition of militarized refugees is also assessed qualitatively. Data has been obtained from the UNHCR (the UN refugee agency), as well as from the World Refugee Survey and documents of the UN and of NGOs. This data is complemented by single case studies and the assessment of articles from LexisNexis. As, according to the UNHCR, there were and are refugees in every

Table 1. List of cases with affected countries and conflict period.

Region	Conflict period	Involved actors
Region West Africa South I	1989–1997	NPFL, LDF, LPC, ULIMO, RUF, private security companies (Gurkhas Security Guards, Sandline International, Executive Outcome), CDF; governments of Sierra Leone, Guinea, Côte d'Ivoire, Burkina Faso, Libya, Gambia; ECOWAS
Region West Africa South II	1997–2003	LURD, MODEL, ATU, SSS, SOD in Liberia, RUF, paramilitaries and vigilante groups in Sierra Leone, RFDG, MPIGO and MJP, governments of Liberia, Sierra Leone, Côte d'Ivoire, Guinea; regional/international organizations: ECOWAS, UNAMSIL
Region Côte d'Ivoire	2002–2005	Non-state actors of violence: MPCI, MPIGO, MJP (Forces Nouvelles since 2003), paramilitary groups to support Gbagbo such as GPP; state actors: governments of Côte d'Ivoire and Liberia, France, Togo as mediator
Region West Africa West	1998–1999	Non-state actors of violence: MFDC; state conflict actors: government Guinea–Bissau military Guinea–Bissau under Mané, government of Senegal and Guinea regional organizations: ECOMOG troops
Great Lakes Region I	1993–1994	Non-state actors of violence: Banyarwanda, Hunde, Nyanga; state actors: government of Mobutu, local authorities in Eastern Zaire
Great Lakes Region II	1994–1997	Non-state actors of violence: Hutu militias, LRA, ADF, UNITA, AFDL; state actors: governments of Zaire, Rwanda, Uganda, Angola
Great Lakes Region III	1998–2002	Non-state actors of violence: Rwandan Hutu militias, RCD, MLC, FDD, ADF, LRA, UNITA, Mai-Mai militias; governments of DRC, Rwanda, Uganda, Burundi, Zimbabwe, Namibia, Angola, Sudan, Chad; regional/international actors: MONUC; economic actors
Great Lakes Region IV	2003–2010	Non-state actors of violence: FDLR, LRA, CNDP, FDD, smaller rebel groups such as PARECO, FPJC, FNI, FRPI, UPC, MPC; governments of DRC, Rwanda, Uganda, MONUC
Region Congo- Brazzaville	1997–1999	Non-state actors of violence: Zulus, Cocoyes, Cobras, Ninjas; governments of Congo and Angola
Region Central Africa	2003–2010	Non-state actors of violence: SLA, JEM, UFDD, SCUD, RDL, APRD, UFDR; governments of Sudan, Chad, CAR; AMIS/UNAMID, MINURCAT + EUFOR Chad/CAR
Region Horn of Africa I	1991–2003	Non-state actors of violence: SSDF, SNM, USC, SDM, SDA, SNA, SNF, SSNM, RRA, SRRC; TNG; Ethiopia, UNOSOM I + II
Region Horn of Africa II	2004–2010	Non-state actors of violence: UIC, al-Shabaab, ARS, Ahlu Sunna Wal Jama'a, Hizbul Islam, ARPCT, Ahlu Sunna Wal Jama'a; TFG; Ethiopia; AMISOM

Note: The intrastate war between Eritrea and Ethiopia (1998–2000) is included as part of the dynamics of the region Horn of Africa. I furthermore decided to include the case of UNITA/Angola (1975–2002) only as part of other regions. There were several reasons for this choice. This conflict commenced in 1975, and could thus not be included in the present analysis as only cases from 1989 to 2010 are taken into consideration here. There is, however, a high degree of interdependence between this conflict and other ones in regions such as the Great Lakes or Congo–Brazzaville; hence, it is not excluded from the analysis altogether.

African country, the value of "no refugees" is not necessary and is thus only a dichotomous condition: if there are refugees that are not militarized it is coded 0; if there are militarized refugees that are actively engaged in the fighting it is coded 1.

According to the literature on regional conflict systems, there are several controls to the analysis: regional poverty and economic weakness; salient regional identity groups; alliances and interventions on the government's side; and, the engagement of regional or international organizations. Regional poverty and economic weakness are measured by the economic power and level of development of the states involved, information that is available for every state from the Human Development Reports of the UNDP. Missing data has been taken from the databases of the World Bank, African Development Bank, or from case studies. This information is aggregated for an entire region. As all regions in Africa are generally economically weak, I thus distinguish between weak (1) and less weak (0) regions. The threshold lies at US\$900 per capita (PPP)/region, as this turned out be a reasonable cut-off point for all involved cases according to the Tosmana threshold-setter.

Salient regional identity groups are regionally dispersed groups that are involved in armed conflict due to factors related to their (ethnic, religious, political, social) identity. Information on these groups has been taken from the Minorities at Risk (MAR) database,⁹ and is complemented by information that has been drawn from single case studies or from reports of the UN or NGOs. The condition is coded as follows: if there are any regionally dispersed identity groups that are involved in armed conflict a value of 1 is assigned; if there are regionally dispersed identity groups that are not directly involved in armed conflict a value of 0 is given.

The analysis also controls for the (formal) alliances of governments and whether they actively engage in fighting: if allies intervene in an armed conflict, this condition is coded 1; if there is no military intervention to the benefit of one government of the region, it is coded as 0. Data has been obtained from case studies, reports of the UN or NGOs, as well as from databases such as the UCDP/PRIO's Armed Conflict Dataset (UCDP, 2012).

Finally, it is assumed that engagement by the international community can help to end an armed conflict (Doyle and Sambanis, 2000; Fortna, 2008). If any regional or international organizations such as the African Union, the UN or the EU thus intervene in an armed conflict, it is coded 1; if there is no engagement, it is coded 0.

Analysis

Descriptive data and results

When applying the coding rules to the cases, the following configuration table (Table 2) shows an overview of all cases and the value of conditions.¹⁰

In this configuration table, we see the three conditions:

- regional state weakness (STATEFAIL);
- regional economic networks (ECONET); and
- regional militarized refugees (MILREF).

as well as the control conditions:

- regional poverty and economic weakness (ECOFAIL);
- salient regional identity groups (REGID);
- alliances and interventions on the governments side (INTGOV); and
- the engagement of regional or international communities (ENGIC).

The table also includes the outcome of cases O and the Case ID. This data can, with the aid of the computer program Tosmana, be used to comparatively analyze the cases.

Table 2. Configuration table with all cases and conditions.	Table 2.	Configuration	table with a	II cases and	conditions.
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Truth	table:							
vI:	STATEFAIL v2:			FAIL				
v3:			v4:		NET			
v5:			v6:	INT	GOV			
v7: ENGIC								
O:	Outcome		id:	CAS	E ID			
٧l	v2	v3	v 4	v5	v6	v7	0	Id
2	1	0	2	0	0	1	I	West Africa South I
I	- 1	0	2	I	0	1	I	West Africa South II
0	0	I	1	I	1	1	I	Côte d'Ivoire
1	1	I	2	0	1	1	I	West Africa West, Great Lakes III
1	1	1	0	0	0	0	0	Great Lakes I
1	1	1	1	1	0	0	I	Great Lakes II
1	1	1	2	0	0	1	0	Great Lakes IV
0	0	0	1	0	0	0	I	Congo-Brazzaville
1	- 1	1	1	0	1	1	I	Central Africa
2	- 1	I	2	0	0	1	0	Horn of Africa I
2	1	I	2	0	1	1	I	Horn of Africa II
Created with Tosmana Version 1.3								

The analysis yields the following result:¹¹

Regional spread of war =
$$REGID\{0\} + ECONET\{1\} + INTGOV\{1\}$$

(using 232 *simplifying assumptions*¹²) or

$$REGID\{0\} + MILREF\{1\} + INTGOV\{1\}$$

(using 244 simplifying assumptions)

The main implicants¹³ cover the following cases:

- REGID {0} covers in both equations the cases West Africa South I, West Africa South II, and the region Congo—Brazzaville, meaning there are regionally dispersed identity groups that are not directly involved in armed conflict.
- ECONET {1} covers the cases region Côte d'Ivoire, Great Lakes II, Congo—Brazzaville and Central Africa, where the support from neighboring governments rather than regional trade in valuable goods led to the spread of violence.¹⁴
- INTGOV{1} covers in both equations the cases region Côte d'Ivoire, West Africa West, Great Lakes III, Central Africa and Horn of Africa II, meaning that an intervention of a neighboring government led to the spread of violence;
- MILREF{1} covers the cases West Africa South II, region Côte d'Ivoire and Great Lakes II, where the existence of militarized refugees led to the regional spread of violence.

In the equations, the conditions are combined with a logical disjunction or alternation (+). This means that the equation is already true if only one of the logical expressions is valid. In the present case, it means that a regional spread of violence occurs if only one of the conditions is present. This shows that the outcome can occur by many potential means. It furthermore means that the four conditions are sufficient, but not necessary: the conditions lead in all cases where they are present to the outcome of regional spread of violence. However, this outcome can be reached by several different conditions and thus different ways, which is why these conditions are not necessary.

All four implicants have a consistency of 100% as they lead in all cases where they are present to the expected outcome. The empirical relevance (covering), however, differs slightly among the implicants: both REGID {0} und MILREF {1} have an empirical relevance of 33% (three cases), ECONET {1} has an empirical relevance of 44% (four cases), and INTGOV {1} has the strongest empirical relevance with 55% (five cases).

To calculate the results, 232 respectively 244 simplifying assumptions were used. This means that the program made assumptions about non-existing cases to calculate the results, minimizing configurations with the help of Boolean algebra to reach a parsimonious result. The use of simplifying assumptions can be seen as problematic, as they do not have correlating evidence in reality—and critics say that they should thus not be used for analysis. This is, however, a problem that is inherent in QCA in general (Ragin and Sonnett, 2004). As war in general and regional conflict systems are quite rare phenomena, it is unavoidable to use simplifying assumptions to calculate the results. The results have to be seen against the light of the actual cases: at the moment, only the analyzed cases can account for the result, under the assumption that there is no other actual case that shows any different configuration.

To test the robustness of the results, I conducted several robustness tests.¹⁵ As suggested by Skaaning (2011), I replicated the study with both crisp- and fuzzy-set values. In the analysis with crisp-set values, the results are very similar to that of the multivalue QCA: regionally dispersed identity groups that are not directly involved in armed conflict, the support from neighboring governments, and the existence of militarized refugees lead to the regional spread of violence. The results differ slightly as the calibration is much more aggregated owing to crisp-set values of the conditions (Skaaning, 2011: 400). Another robustness test with fuzzy-set conditions¹⁶ also confirms mostly the results of the mvQCA: the three conditions support from neighboring governments, existence of militarized refugees and economic networks are seen as important for the spread of regional violence. Again, the results slightly differ from the ones from the mvQCA, this time owing to a more detailed calibration of conditions (Skaaning, 2011: 400).¹⁷

Interpretation of results

In the comparison of 12 regionally conceptualized conflict cases in sub-Saharan Africa, four factors turned out to be of relevance for the regional spread of violence:¹⁸ economic networks sustained through the support of neighboring countries; an intervention on the part of a government; militarized refugees; and non-salient regional identity groups, for example, such groups that are *not* involved in armed conflict owing to factors related to their (ethnic, religious, political, social) identity. The results thus confirm two of the three hypotheses—the ones on regional economic networks (H2) and on militarized refugees (H3)—about the regional spread of armed conflict. The assumption that regional state weakness is an important condition for the development of regional conflict systems (H1) was, however, not confirmed.

Regional economic networks and especially the supporting of non-state actors by neighboring states led to the regional spread of war in the analyzed cases. This cross-border support occurs

often in terms of military equipment, training and/or financial aid and is aimed at funding the ongoing activities of rebel groups.

In the region Côte d'Ivoire, for example, the diffusion of violence occurred through the mutual military support of rebel groups back and forth between Liberia and Côte d'Ivoire: then president of Liberia Charles Taylor was an opponent of the government of Bédié in Côte d'Ivoire, ¹⁹ as the Ivorian government had supported Liberian rebel groups fighting against Taylor's NPFL. As revenge, he started to give military support to the Mouvement pour la Justice et la Paix (MJP) and the Mouvement Populaire Ivoirien du Grand Ouest (MPIGO) of Côte d'Ivoire (ICG, 2003: 14). Added to that was the military support given to the Mouvement Patriotique de Côte d'Ivoire (MPCI) by the government of Burkina Faso (e.g. HRW, 2005: 9; ICG, 2003: 18). Only this support made the conflict in Côte d'Ivoire possible; the war thus diffused from Liberia to the territory of Côte d'Ivoire.

Alliances formed by a conflict-affected government and a subsequent intervention in the conflict country can lead to a regional spread of war under certain circumstances. In the cases of Côte d'Ivoire, West Africa West, Great Lakes II, Central Africa and Horn of Africa II, the intervention of allies consequently led to a regional escalation of war. These alliances are the product of long-term interactions and relationships between the actors involved. The reasons for intervention are complex. In addition to the obligation that comes with an alliance there are also other, sometimes hidden interests at play—such as the exploration of resources in the target country (as happened in the DRC), protection of the stability of the neighboring region or the desire to cut off the possibilities for retreat available to rebel groups.

In the case of West Africa West, for example, Senegal and Guinea intervened in Guinea–Bissau in 1998 just before an expected coup d'état and the outbreak of internal violence (Evans, 2004: 5). The military, together with the Senegalese rebel group Mouvement des Forces Démocratiques de Casamance (MFDC), tried to overthrow Guinea–Bissau's President João Bernardo "Nino" Vieira. In the weeks before the outbreak of violence, Vieira tried to quell the support of the Guinea–Bissau military for the MFDC—with whom they had long-term links. With the intervention of Senegal and Guinea, the war was not brought to a halt but actually escalated even further (ICG, 2008: 13): Senegalese and Guinean troops fought on the side of Vieira against the military of Guinea–Bissau and the Senegalese MFDC operating in Guinea–Bissau. With this intervention, a regional conflict system evolved that would last until May 1999. On 8 May 1999 the military of Guinea–Bissau ousted Vieira, who then fled the country. Without this external intervention, the outcome of the armed conflict would probably have been decided earlier—to the benefit of the mutinying military. However, the Senegalese intervention especially did not occur without its own underlying interests: the aim here was the decimation of the MFDC and their allies within the military of Guinea–Bissau.

Another factor that contributes to the regional spread of war is militarized refugees. A lack of separation between combatants and civilians leads to a situation in which rebels may benefit from humanitarian aid and the shelter provided for refugees. They thus continue to participate in the conflict without being directly attackable, as they remain in the neighbor's territory. By finding shelter in a safe haven like this, the conflict can diffuse to the neighboring territory. Often, governments of the country of origin intervene in the target country to stop the ongoing activities of militarized refugees; a diffusion of violence is thus more likely.

The regional conflict system in the African Great Lakes region from 1996–1997 (case II) is seen as a case of militarized refugees par excellence (Adelman, 2003; Lischer, 2003). Those Hutu militias that committed the genocide in 1994 in Rwanda easily reorganized and benefited from the humanitarian aid provided in the refugee camps of eastern Zaire (Adelman, 2003: 95ff.). They also developed an illegal tax system within the camps to

fund their ongoing activities (Lischer, 2003). Humanitarian organizations thus abetted—albeit unintentionally—the situation of the Hutu militias (Lischer, 2003): in order to collect sufficient donations for the masses of refugees present, these organizations painted a very simplistic picture of the conflict in the region. In this, it was not clear that there were also combatants hiding among the refugees. The local administration as well as aid organizations were not able to separate militants out from refugees. The lack of control on the part of the Zairian government and the freedom to reorganize thus led to the ongoing participation of rebels in violence against the new Tutsi regime in Rwanda. The aim of these attacks was the overthrow of the regime, a return to power of Hutus, and an elimination of Tutsis. As a consequence, Rwanda intervened, together with Uganda, in Zaire in 1996—with the aim of stopping the violence and supporting the rebel group AFDL against Mobutu. Rwanda's violence thus diffused with the movement of militarized refugees into neighboring Zaire.

With the condition of non-salient regional identity groups (REGID {0}), the regional identity of collective actors is not the direct cause of conflict (i.e. they are not salient), but may serve as an important motivator in the recruitment drive undertaken by non-state actors—as happened in West Africa South I and II (Florquin and Berman, 2005: 242, 246). Added to that is the insecure economic and political situation in these cases, which constitutes important opportunity structures for the motivation to participate in rebel groups. Non-salient regional identity groups are thus an important structural condition for the development of a regional conflict system, as they lay the foundations for continued participation in violence.

Conclusion

The observation of gaps in research on regional conflict systems was the starting point for this paper. It was asked how and under what conditions war spreads into regions and regional conflict systems evolve. The processes of diffusion and escalation of civil war in potential and existent regional conflict systems in sub-Saharan Africa between 1989 and 2010 were analyzed with the help of a multivalue Qualitative Comparative Analysis. By using this method, it was possible to compare several different cases and produce results that go beyond the limited ones that have so far emerged out of the small-*N* analyses conducted. By comparing 12 different cases, it was also possible to identify the causal relationships and interactions between conditions.

The analysis showed that four specific conditions may lead to a regional spread of violence in the compared cases: economic networks sustained through the support of neighboring countries; an intervention on the part of a government; militarized refugees; and non-salient regional identity groups.

The findings add an important piece to the puzzle regarding our understanding of why and how war spreads to regions. The use of the mvQCA method provided a new perspective and allowed results to be gained that, on the one hand, can be generalized to other cases and that, on the other, provide more detailed information than is offered by quantitative studies on causal relations between conditions and the outcomes. The findings can be connected to the research on the regional aspects of violence and the interdependence of armed conflicts originating from within different nation-states, leaving a perspective that adheres to methodological nationalism.

The findings are particularly important for the African continent that is strongly affected by transborder dynamics owing to porous borders and the arbitrary colonial demarcation. Seeing that some wars in other regions of the world have similar characteristics, it may be concluded that the results can be generalized to other cases as well. In those cases where economic networks, an intervention on the part of a government, militarized refugees and non-salient regional identity groups are existent, the risk of a regionalization of war is increased. There are, however, also some

limitations to the analysis: as the results were calculated with the use of simplifying assumptions, the results can only be generalized to those cases that have similar characteristics.

The use of an mvQCA and the comparison of several African cases also revealed the policy relevance of the findings: it became evident that approaches to conflict resolution in such contexts cannot only focus on the primary conflict actors of the conflict-affected country, but also need to involve regional actors and elites that may have stakes in the hostilities as well. It is, for example, important to prevent regional support being given by neighboring governments to rebels: the threat of sanctions against the neighboring country may be a useful tool for regional and/or international organizations here. The early engagement of the international community in conflict mediation is another way to prevent local interventions that may lead to the subsequent escalation of conflict. With regard to the fleeing of hundreds of thousands of refugees, a quick and efficient emergency aid program combined with a clear means of separating combatants out from refugees is of the utmost importance. Future policy should thus focus on regionally relevant conditions for conflicts, and should try to address them in their mediation strategies.

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Notes

- Quantitative studies can include interaction effects. They are, however, limited to two-way and sometimes three-way effects and are thus likely to result in multicollinearity (Jaccard and Turrisi, 2003). Other studies (e.g. Brambor et al., 2005) point to difficulties when interpreting three-way interactions.
- 2. These levels of action depend on the actor's strength and the scope of their actions—they can be at the local, national, regional and/or international levels.
- 3. I thus disagree with a concept of region that is completely detached from geographical proximity, such as for example, Adler and Barnett's (1998: 33) concept of region.
- 4. This topic forms instead part of the wider study of the causes of violent conflict, a theme that has been extensively investigated. For an overview, see, for example, Levy and Thompson (2011).
- 5. This says that, if two Boolean expressions (configurations) differ in only one causal condition yet produce the same outcome, the causal condition distinguishing the two expressions can be considered irrelevant and can be removed to create simpler, combined expressions (Ragin, 1987: 93).
- 6. By using country-aggregated databases, I cannot myself completely avoid the accusation of being susceptible to methodological nationalism. These databases are, however, the only reasonable sources for a reliable and valid case selection.
- A detailed description of cases, involved actors, and the reasons for the distinctions between cases are
 provided in the Online Appendix: http://www.giga-hamburg.de/en/team/ansorg.
- 8. I define a weak state as one that is no longer able to fulfill one or more of its core functions—such as the provision of security or the rule of law. A government is, however, still in office—even although it may be corrupt and/or very inefficient in its provision of key services. This distinguishes it from a failed state, where not only is a government either completely missing or only a façade but nearly all functions of a modern state are no longer being fulfilled.
- 9. Available online at: http://www.cidcm.umd.edu/mar/
- 10. The evaluation and explanation of all conditions for each condition can be found in the Online Appendix.
- 11. The original reports of Tosmana can be found in the Online Appendix.

- 12. These are assumptions about non-existing cases the program uses to calculate the results. For a discussion of these simplifying assumptions see below.
- 13. The conditions responsible for the occurrence of the outcome.
- 14. Detailed information can be found in the Online Appendix.
- 15. Please see the Online Appendix for the report of the results.
- 16. As already mentioned before, it is quite difficult to translate most of the conditions into fuzzy-set logic, which is why I only changed three of the conditions (regional state failure, economic networks, militarized refugees) and one of the control condition (regional economic weakness) to fuzzy-set, while the others are crisp conditions.
- 17. For instance, the condition "regional state weakness" is translated into a seven-value fuzzy set with 1 = fully in, 0.83 = mostly but not fully in, 0.67 = more or less in, 0.5 = crossover—neither in nor out, 0.33 = more or less out, 0.17 = mostly but not fully out, and 0 = fully out. For more information on coding see (Ragin, 2000: 156).
- 18. Owing to space constraints, only one case is interpreted for each specific condition.
- 19. The long-lasting president of Côte d'Ivoire, Félix Houphouët-Boigny, supported Taylor in his early years of rebellion and allowed him to intervene from the territory of Côte d'Ivoire in 1989. Relations between the two countries, however, deteriorated after Houphouët-Boigny's death and with the subsequent president Henri Konan Bédié.

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