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## Executive Summary

The **overall goal** of the Conflict Research Programme (CRP) is to provide an evidence-based strategic re-orientation of international engagement in places apparently afflicted by the world's most intractable violent conflicts. Its premise is that in these places, the ability of public authorities to provide even the most basic level of governance is subject to the functioning of the 'real politics' of gaining, managing and holding power, which we argue functions as a 'political marketplace'. This approach helps explain the frustrations of state-building and institutionally-focused engagement; it can also inform the design of improved interventions, which reduce the risk and impact of conflict and violence in developing countries, alleviating poverty and insecurity. A key objective of our research, and a key contribution to the 'Better Delivery' agenda within DFID, is to make policies better targeted, more nuanced and rooted in a clear understanding of the social condition that undergirds persistent contemporary conflict.

The locations for research are **Democratic Republic of Congo, Iraq, Somalia, South Sudan and Syria**. Our central hypothesis is that governance in these difficult places is dominated by the logic of a **political marketplace**. These political markets are turbulent, violent and integrated into regional and global networks of power and money. We also hypothesise that **moral populism** (most visible in identity politics, persecuting ideologies and violent extremism) is a counterpart to the marketisation of politics, and the two flourish in conditions of persistent uncertainty, conflict and trauma. Current policy frameworks and tools can neither capture the everyday realities of politics and governance in these difficult places, nor adjust to the dynamics of contested power relations. External interventions risk being enmeshed in logics of power and may end up inadvertently supporting violence and authoritarianism. At the same time, in all war-torn spaces, there are relatively peaceful zones: what we term **'pockets of civiness'**. These might be territorial (local ceasefires, or inclusive local authorities) social (civil society groups helping the vulnerable or countering sectarian narratives, or customary courts solving disputes fairly) or external (interventions that regulate flows of political finance).

The CRP will generate evidence-based, operationally relevant research that can enable real-time analysis of the dynamics of conflict, contestation, 'civiness' and public authority, enabling better interventions to manage and resolve armed conflict, reduce violence, and create conditions for more accountable and transparent governance. A core component of the CRP is to contribute to a better understanding of **"what works"** in addressing violent conflict across our research sites. We will develop comparative understanding of how different interventions affect violent conflict and the risk of renewed violent conflict, across our research sites. We will also examine the contextual factors that affect the effectiveness of these interventions. Intervention areas selected for comparative research: **Security interventions; civil society and community mediation interventions; resource interventions; and interventions designed to strengthen authority and legitimacy, including at the sub-national level**. We envisage emerging findings from our political economy analysis of conflict drivers to shape our comparative analysis of specific interventions.

Our research methods include (a) comparative political ethnography (b) refined datasets (c) models of violence and political business (d) socio-political mapping of the structural drivers of conflict and the groups involved in political mobilisation and coercion and (e) action research exploring agents of change. We have a unique and robust infrastructure of local researchers and civil society networks across all our sites that will facilitate both fieldwork research and remote research. The CRP team is already closely engaged with key political processes – and regional actors - in the countries concerned, designed to promote peace, humanitarian action, human rights and democracy. This engagement is a key part of our method and will ensure that evidence-based research is effectively communicated to institutions engaged in trying to reduce the risk and impact of violent conflict in our research sites. Our emphasis is upon a mix of research methods and mechanisms for engaging in policy and practice. In line with this flexible approach, we will hold an annual in-country workshop with each DFID country office, and key stakeholders, to work through the implications of our research for them in a practical, flexible and responsive way. This will be supplemented by regular written and face-to-face/virtual communication with country staff.

## Outline

This paper reviews some of the datasets and quantitative research that are relevant to the research of the Conflict Research Programme (CRP). Several different types of data – including conflict episode data, conflict incident data, lethality data, conflict networks data, and humanitarian/food security data – are considered. The first part of the paper provides a brief background on how conflict data emerged, showing where the field is coming from. The subsequent section discusses how there has been a turn to disaggregated event conflict data and agency in recent years. This turn to agency fits the research purposes of the CRP, as a focus on agency is critical for studying the logics of conflict utilised by the CRP, namely the political marketplace, moral populism and ‘civicness’, along with public authority, namely the concern with authority at all levels including the state. These concepts are new to social science and therefore have not been directly measured, but several of the data sources and methods examined in this paper will be explored in relation to these logics, insofar as it is possible. The study of the political marketplace is best suited to quantitative analysis because the constituent elements of a functional market, namely financial flows and budgets, transactions and prices, can in principle be measured either directly or by proxy, and are susceptible to mathematical modelling. Measurements of moral populism would of necessity be indirect or inferred, while ‘civicness’ could be measured through events such as ceasefires and humanitarian action. The paper concludes with identifying several potential avenues for future data-driven research by the CRP.

- *Phase I in the history of conflict data: a focus on conflict episodes.* In 1963, David Singer established the Correlates of War (COW) project at the University of Michigan. The rationale for the start of the COW project was to uncover the causes of large-scale armed fighting between states. In order to extent conflict data to also include the ‘no war’ cases, the International Crisis Behaviour (ICB) project was established in 1982. With the Cold War waning, conflict researchers began to focus more on civil wars and violence against civilians, rather than dynamics of interstate conflicts which had been predominant prior to this. The Uppsala Conflict Dataset Program (UCDP) began to collect data on both interstate and intrastate armed conflicts in 1988. Another major dataset that appeared in the 1980s is the Minorities at Risk (MAR) project. The

MAR dataset includes information on politically significant communal groups, which are often ethnic

and religious minorities. The creation of the MAR dataset was crucial in order to get insights into the dynamics leading up to wars within states.

- *Phase II in the history of conflict data: a turn to disaggregated data and agency.* The revolution in Geographic Information Systems (GIS) technology has made it possible to code geographic information on armed conflict. The geographic coordinates of the location of an incident can be tagged onto an observation in the dataset. This, in turn, makes it possible to consider the local context of conflict. Disaggregated data not only helps to study the local nature of armed conflict, it also shifts the focus to agency rather than structural variables associated with a given country.
- *The political marketplace.* The focus on agency in recent data-driven conflict research has led to the publication of some recent quantitative work and their associated datasets that are relevant for examining the three logics identified by the CRP. While it is in practice almost impossible to measure political budgets and the price of loyalty directly – as doing so would require significant intelligence resources – some studies have analysed networks and relationships to study transactional politics. Yet, it is clear that the covert actions of the political business leaders conducting transactional politics makes studying the political marketplace difficult. Future research should try to develop more precise proxy indicators of the political marketplace and collect more rigorous data.
- *Moral populism.* There are some quantitative studies that have examined the role of grievances, identity, and mobilisation, yet these studies have produced contradictory findings. What is more, these studies are all seriously hampered by the difficulty to operationalise these concepts. Indeed, since it is difficult to operationalise and measure ideas, moral populism is difficult to examine in a large-n study.
- *Public civicness.* Public civicness has received scant attention in the quantitative conflict research literature, but civicness could, in principle, be measured through events such as ceasefires and humanitarian action as proxies for civicness – though it should be noted that civicness is not necessarily equated with peacemaking. Much of the literature on peacemaking efforts focuses on peacemaking between states. Those large-n studies that do focus on peacemaking in civil war mainly look at efforts aimed at concluding a comprehensive peace agreement that is supposed to bring peace to



the entire country. Hence, while the analysis of local peacemaking efforts is already commonplace within the qualitative literature, data-driven research on local peacemaking has yet to develop.

- *Sector Security Reform*: Of the cross-cutting themes studied by the CRP, Sector Security Reform (SSR) has received relatively much attention within the field of quantitative conflict research. Most of these quantitative studies frame the issue in terms of the effectiveness of a standardised template of SSR. The evidence presented in these studies points in the direction that SSR is ineffective in preventing a resumption of violence. The CRP will instead frame the contested security landscape in a conflict-affected country as a security arena, and with the intent to study the political drivers of controlling security actors and reducing violence. Future large-n research on SSR should at least try to model the complexity and fluidity of the security arena. A network analysis might be one fruitful avenue to do this.
- *The Political Marketplace and Humanitarian Crisis*: Quantitative conflict research has a long way to go to examine the links between humanitarian issues and armed conflict. This is particularly apparent with regard to the links between food security, the political marketplace, and armed violence. It is striking though that analyses on food security rarely takes conflict data into account. Datasets like ACLED could be used to get an indication of levels of armed violence in particular areas of a country which could then be related to the data gathered by the Integrated food security Phase Classification (IPC) system. Political marketplace metrics can similarly be linked to food insecurity and humanitarian crisis. It is necessary to link the political marketplace to the food security because the political marketplace generates the predatory politics that creates food insecurity.

There are at least seven possible avenues for future data-driven research conducted by the CRP.

- *Network Analysis*: The numerous actors within the context of civil wars pose serious challenges to the data collection and analysis efforts of quantitative research scholars. A network analysis has the potential to deal with the complexity of contemporary wars. Syria is a telling example of a country in which a huge amount of armed actors operate and in which novel sources of data have become available, using social media and other crowd-based technologies. The CRP could initiate a collaboration among the different conflict data initiatives for Syria, with The Carter Center as a key player, in order to map all these different actors and

analyse the causes and consequences of the changes in these networks. The Syrian conflict dataset at the London School of Economics, which is based on crowd-seeding, would also be a very valuable resource to identify many conflict actors at specific site throughout Syria. In addition, the expert knowledge of the CRP country teams, as well as the local contacts of each country team, could be used to map relevant networks in each CRP focus country. If United Nations peacekeeping operations' Joint Mission Analysis Center (JMAC) data on the DRC and South Sudan will be obtained, these datasets could also be used to map networks. Collecting data on all relevant actors allows for an assessment of how conflict networks are shaped, transformed, and connected. Networks data is also very suitable for mapping the fragmentation of public authorities, as on the basis of these data different power networks can be identified. Crucially, with network data, the CRP could potentially analyse the logic of the political marketplace. One way to do this would be, for example, to examine whether transactional politics underlie changes in the relationships between all relevant actors in South Sudan from either 2005 or 2011 onwards.

- *Non-Violent and Violent Resistance and Changing Patterns of Authority*: Another research project could focus on explaining how a centralised political authority fragments into localised contested public authorities. Syria is an insightful case to examine in this regard. Prior to 2011, many observers interested in Syrian affairs believed that Syria was a stable state. Yet, minor protests in January 2011 had evolved into a massive uprising demanding democratic reforms by March 2011. The creation of the Free Syrian Army (FSA) in July 2011 marked another turning point. A systematic analysis of data on nonviolent and violent protest in Syria could shed light on how nonviolent protest escalated into armed conflict. Data on protests and armed clashes could be extracted from the Global Database of Events, Language, and Tone (GDELT) dataset. The CRP relates to the combined logics of the political market and moral populism (i.e. the business constraints of operating in a war economy alongside the utility of appeals to identity politics). If moral populists cannot fracture public civiness, they will resort to violent intimidation to curtail popular protest against them. A disaggregated analysis of the evolution of nonviolent and violent protest – with a focus on the interaction between the state, civil society, and the armed opposition – could shed light on aspects of the logic of moral populism.
- *Peace Events*: Another promising research project would be to study the effectiveness of local

peacemaking efforts. A wealth of quantitative studies have shown how likely ceasefires are to hold on a national level, yet what explains the durability of local ceasefires remains a gap in research. Since the Syrian Conflict data at the London School of Economics maps both peace and conflict events, this dataset could be used to model the effectiveness of local peacemaking. Another potential data source would be the UN missions JMAC data on the DRC or South Sudan. The study of local peacemaking efforts, using systematic data, could provide insight into the logic of the public civiness, as well as the logic of the political marketplace. Local peacemaking efforts are often a result of a bottom-up call for peace. On the other hand, the logic of the political marketplace suggest that whether local peacemaking efforts are successful depends on whether political entrepreneurs can reach an agreement about the price of loyalty or a division of the spoils. Depending on whether it will be possible to get systematic information on why armed actors conclude local agreements, a fruitful research project would be to examine whether successful local peacemaking efforts in the DRC and/or South Sudan are the product of skilled and resourced actors operating within a political marketplace.

- *Displacement and Conflict*: The CRP could also focus on how patterns of violence influence patterns of displacement of people and vice versa. Iraq would be a suitable candidate case to study the links between armed violence and displacement for two reasons. Firstly, there is high quality data on both displacement and violence patterns on Iraq. Secondly, and more importantly, Iraq has seen multiple and varied waves of forced displacement. These different waves of displacement give a lot of variation in the data, which can be leveraged to get insights into when and where people flee from armed violence. For instance, it could be examined whether state-orchestrated displacement and displacement as a result of state collapse impact patterns of violence differently. It would also be possible to examine the impact of displaced people returning to their place of origin. Finally, it would be a possibility to examine whether displacement from and to rural or urban areas have divergent effects. The study of patterns of displacements and violence relates to several overarching themes within the CRP. The different waves of displacements in Iraq all took place under different contextual circumstances. For example, the wave of displaced people that took place between 2006 and 2008 was very much a result of sectarian violence, which, in turn, came about through moral populism. In addition, the

different groups of displaced people in Iraq often relate to different authority structures. How these groups relate to a particular authority structure might influence the propensity of armed conflict related to displacement. Finally, displacement does not necessarily have to result in violence. Indeed, the logic of public civiness might shed light on why people fleeing can maintain peaceful relations with their host community.

- *Transnational Conflict Dynamics*: The CRP will also examine transnational conflict drivers, and in doing so important information about conflict networks could be revealed. Indeed, disaggregation is important, but is equally important to look beyond the borders of a state affected by civil war. The CRP will draw on the Transnational Violent and Coercive Politics in Africa (TVCPA) dataset, which can be extended to also cover the Middle East for the research purposes of the CRP. The analysis of transnational conflict data is relevant for the CRP because external support to domestic players has important ramifications for how the political marketplace operates. A leader of state that has a strong position in a regional marketplace can more efficiently prevent external support to rebels, which makes it easier to dominate the domestic patronage system. By contrast, leaders of a state in a subordinate position in the region will experience great difficulty in regulating others' entry into the domestic political market. Mapping the extent of transnational conflict, as well as shifts in which countries are the target of external support, thus gives insight into the dynamics of what de Waal refers to as a regionally integrated political marketplace.
- *Conflict, political markets and Food Security*: The CRP will also address the links between conflict and food security. The data used by humanitarians to assess food security is the integrated food security phase classification (IPC) system, which is a five-level scale that is intended to help governments and other humanitarian actors to quickly understand a food security crisis and take action. It is striking though that analyses on food security rarely take conflict data into account. Conflict datasets could be used to get an indication of levels of armed violence in particular areas of a country. Our political marketplace measurements can be used similarly. This information could, in turn, be used to get better predictions of food security. The CRP research on the links between conflict and food security would thus have to address questions about how conflict assessment data including violent incident reporting can be factored in to projections of humanitarian crises: is it possible to confidently predict that

certain patterns of violence are predictors of worsening hunger? To answer this question, it will be examined how the processes of obtaining and analysing conflict data and food security data can be aligned, with the aim of enriching both. In addition, it could be examined how political marketplace indicators and peace events help in assessing food security.

- *Comparing Data Collection Methodologies and Setting up a Network of Networks:* The major obstacle to data-driven conflict research is arguably not necessarily a lack of data, but that different datasets have not been merged enough. The main reason for this is that these datasets are all developed independently from each other, often with a singular purpose. Hence, what is necessary in the future is creating 'networked' data – a network of network data – through merging different types of data on the basis of common guidelines. The CRP could lead a collaborative project that would try develop these type of guidelines and would create networked data based on these guidelines. This project would also make a comparison possible of the strengths and weakness of different data sources, as well as the different methodologies used by actors collecting conflict data. The Syrian case is a good choice for this project because it well documented and extremely complex.

## Introduction

Otto von Bismarck famously stated that sausages cease to inspire respect in proportion as we know how they are made. The same has been said about conflict data.<sup>1</sup> Producing high quality data in conflict situations is challenging because contemporary armed conflicts are volatile and complex – and it is in the interest of conflict parties to operate covertly and misrepresent the situation to their political and military advantage.<sup>2</sup> Moreover, the turmoil and dangers associated with armed conflicts make it difficult for journalists, academics, humanitarians,

and other actors to collect information. As a result of these information collection challenges, routine data collection is interrupted or misleading and conflict datasets often underreport incidents.<sup>3</sup>

Indeed, there is often a huge level of variation in conflict fatality data. For example, in 2007, the International Rescue Committee (IRC) published a report – based on five retrospective mortality surveys – in which it was claimed that around 5.4 million people died between 1998 and 2007 because of the war in the Democratic Republic of the Congo (DRC). It was further estimated that more than 90 percent of these 5.4 million people died from war-exacerbated disease, malnutrition, or other nonviolent causes.<sup>4</sup> While the number of people that have died in the DRC surely is tragically high, several subsequent critical analyses of IRC's data and methodology raised doubts about the relatively low baseline mortality rate used in the IRC study, doubts about whether the survey locations were appropriately selected, and doubts about the use of questionable estimate methods. Indeed, other surveys suggest that the number of deaths as result of war in the DRC is much lower.<sup>5</sup>

Another example of the unreliability of conflict data is that, because of narrow coding rules, one of the most prominent dataset on armed conflicts, the Uppsala Conflict Data Program (UCDP), misses cases in which one or more national armies along with their proxy armed groups fight another coalition of one or more national armies along with their proxy armed groups. A telling example of this is the fight over the town of Damazin at the Kurmuk border between Ethiopia and Sudan. As recalled by de Waal, in November 1989, the "SPLA and Ethiopian troops, crossed the border at Kurmuk and were poised to take the town of Damazin, and the nearby Blue Nile dam that generated Khartoum's electricity supply. The Sudanese army was helpless – and was saved only by a secret commando action by the EPLF, which [at the invitation of and in coordination with the Sudanese] defeated the Sudan People's

<sup>1</sup> Ruggeri A, Gizelis T-I and Dorussen H. (2011) Events Data as Bismarck's Sausages? Intercoder Reliability, Coders' Selection, and Data Quality. *International Interactions* 37: 340-361.

<sup>2</sup>On the complexity of contemporary wars, see: Kaldor M. (2007) *New and Old Wars*, Palo Alto: Stanford University Press, Weinstein JM. (2006) *Inside Rebellion: The Politics of Insurgent Violence*, Cambridge: Cambridge University Press, de Waal A. (2015) *The Real Politics of the Horn of Africa: Money, War and the Business of Power*, Cambridge: Polity.

<sup>3</sup> De Waal A. (2004) The Politics of Destabilisation in the Horn, 1989-2001. In: De Waal A (ed) *Islamism and Its*

*Enemies in the Horn of Africa*. London: Hurst, Weidmann NB. (2015) On the Accuracy of Media-based Conflict Event Data. *Journal of Conflict Resolution* 59: 1129-1149, Duursma A. (2018) Counting Deaths While Keeping Peace: An Assessment of the JMAC's Field Information and Analysis capacity in Darfur. *International Peacekeeping*.

<sup>4</sup> International Rescue Committee. (1 May 2007) Mortality in the Democratic Republic of Congo: An ongoing crisis.

<sup>5</sup> An example of such a survey is a survey published by the Demographic and Health Survey (DHS) in 2007. Available at: <http://dhsprogram.com/what-we-do/survey/survey-display-239.cfm>.



Liberation Army (SPLA) and the Ethiopians in January 1990.<sup>6</sup> This armed clash is not taken into account by the UCDP because the UCDP only considers states as secondary parties that can contribute troops, ignoring foreign rebel parties that fight along governments.

In spite of the difficulties of conflict data collection and associated concerns about reliability and validity, conflict data holds great potential in the study of armed conflict. While comparative case studies are generally much more suitable for examining the causal mechanisms of a proposed theoretical argument, studies based on high quality conflict data have a comparative advantage in identifying general patterns.<sup>7</sup> Hence, rather than being opposites or mutually exclusive, large-n studies and in-depth case studies are complementary methods.<sup>8</sup> This data synthesis paper reviews some of the datasets and quantitative research that has been produced that are relevant to the research of the CRP. Crucially, several potential avenues for future data-driven research by the CRP are identified.

The paper references the logics of conflict utilised by the CRP, namely the political marketplace, moral populism and 'civicness', along with public authority, namely concerned with authority at levels lower than the state. These concepts are new to social science and therefore have not been directly measured, but several of the data sources and methods examined in this paper will be explored in relation to these logics, insofar as it is possible. The study of the political marketplace is best suited to quantitative analysis because the constituent elements of a functional market, namely financial flows and budgets, transactions and prices, can in principle be measured either directly or by proxy, and are susceptible to mathematical modelling. Measurements of moral populism would of necessity be indirect or inferred, while 'civicness' could be measured through events such as ceasefires and humanitarian action.

This review is organised in the following manner. The first part provides a brief background on how conflict data emerged, showing where the field is coming from. The subsequent section discusses how there has been a turn to disaggregated event conflict data and agency in recent years. Two major conflict event datasets currently exist: the UCDP Georeferenced Event Dataset (GED) and the Armed Conflict Location and Event Data (ACLED) project. The creation of these datasets allows for the testing of theoretical arguments that previously simply could not have been tested in a large-n study, but this turn to disaggregated event data also brings with it questions about the quality of this data and the politics surrounding conflict data. Next, this review turns to an assessment of the most recent developments with regard to how conflict data is used to analyse armed conflict. More specifically, this section reviews whether, and if so how, conflict data has been used to examine the logics of moral populism and the political marketplace. Current data collection efforts that relate to public civicness are also discussed. The subsequent section briefly discusses some large-n studies that have been conducted to examine issues related to sector security reform, local peacemaking, and humanitarian action. Finally, the last section discusses several options for large-n analyses of conflict data conducted by the CRP.

## A Brief History of Conflict Data

The emergence of conflict data is tied to the behavioural revolution in the social sciences. In the late 1950s, several scholars began to study armed conflict in what they often referred to as 'the scientific manner': through using formally stated arguments and systematic empirical analysis.<sup>9</sup> David Singer established the Correlates of War (COW) project at the University of Michigan in 1963. The rationale for the start of the COW project was to uncover the causes of large-scale armed fighting between states.<sup>10</sup> The COW project defines an

<sup>6</sup> de Waal A. (2015) *The Real Politics of the Horn of Africa: Money, War and the Business of Power*, Cambridge: Polity.

<sup>7</sup> Geddes B. (1990) How the Cases You Choose Affect the Answers You Get: Selection Bias in Comparative Politics. *Political Analysis* 2: 131-150, Lieberman S. (1991) Small N's and Big Conclusions: An Examination of the Reasoning in Comparative Studies Based on a Small Number of Cases. *Social Forces* 70: 307-320.

<sup>8</sup> See: Lieberman ES. (2005) Nested Analysis as a Mixed-Method Strategy for Comparative Research. *American Political Science Review* 99: 435, Small ML. (2011) How to Conduct a Mixed Methods Study: Recent Trends in a

Rapidly Growing Literature. *The Annual Review of Sociology* 37.

<sup>9</sup> Gleditsch KS, Metternich NW and Ruggeri A. (2014) Data and progress in peace and conflict research. *Journal of Peace Research* 51: 301-314, Clayton G. (2014) Quantitative and Econometric Methodologies. In: DeRouen K and Newman E (eds) *Routledge Handbook of Civil Wars*. Abingdon: Routledge

<sup>10</sup> For more on the Correlates of War project see <http://www.correlatesofwar.org/>. Note, however, that Richardson gathered conflict data on what he described as "deathly quarrels" from the 1930s and published a seminal

interstate war as a war that take place between or among states, which involves sustained combat, organised armed forces which are capable of "effective resistance" on both sides, and results in a minimum of 1,000 battle-related combatant fatalities within a twelve month period.<sup>11</sup> The COW data is still the most frequently used data to study interstate war.

One disadvantage of the COW data is that it only includes cases of war, yet it is crucial to also look at the 'no war' cases if one wants to explain why war breaks out or not. To put it in methodological terms, the COW project selects on the dependent variable. The creation of the International Crisis Behaviour (ICB) project in the early 1980s was very much motivated by the idea that the systematic study of cases that did not escalate to war could provide insight into the conditions that may prevent violence. The ICB dataset includes cases in which the decision makers of a state perceive a threat to their basic values and a limited time to respond to these threats. The leaders also need to perceive a high likelihood of involvement in military hostilities.<sup>12</sup> Hence, the creation of the ICB allowed scholars to study 'near misses' like the Cuban Missile Crisis that did not escalate to war.

With the Cold War waning, conflict researchers began to focus more on civil wars and violence against civilians, rather than dynamics of interstate conflicts which had been the predominant focus prior to this. To this purpose, the COW project began to collect data on intrastate wars from 1982 onwards.<sup>13</sup> However, as a result of employing the 1000 battle-related deaths threshold, the COW project missed the many low-intensity intrastate armed conflicts. It also did not adapt to the changing nature of wars and the predominance of civilian casualties in contemporary conflicts. Moreover, the COW project continues to make a rigid distinction between interstate and intrastate armed conflict.

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study on these data in 1948. The COW project built on several earlier conflict data collection efforts like the one by Richardson. See: Richardson LF. (1948) Variation of the frequency of fatal quarrels with magnitude. *Journal of the American Statistical Association* 43: 523-546.

<sup>11</sup> Small M and Singer JD. (1982) *Resort to Arms: International and Civil Wars, 1816-1980*, Newcastle upon Tyne: Sage.

<sup>12</sup> Brecher M and Wilkenfeld J. (1982) Crises in World Politics. *World Politics* 34: 380-417.

<sup>13</sup> Small M and Singer JD. (1982) *Resort to Arms: International and Civil Wars, 1816-1980*, Newcastle upon Tyne: Sage.

<sup>14</sup> Sundberg R and Harbom L. (2011) Systematic Data Collection: Experiences from the Uppsala Conflict Data Program. In: Höglund K and Öberg M (eds) *Understanding*

Hence, the COW project overlooked the blurring of the internal and external aspects of armed conflict.

The UCDP, which began to annually publish conflict data in the Stockholm Peace Research Institute (SIPRI) Yearbook from 1988 onwards, also collects data on both interstate and intrastate armed conflicts.<sup>14</sup> The UCDP defines armed conflicts as a contested incompatibility that concerns government and/or territory where the use of armed force between two conflict actors, of which at least one is the state, results in at least 25 battle-related deaths in one calendar year. The UCDP does include an intensity variable which labels armed conflicts with at least 25 but less than 1,000 battle-related deaths as minor armed conflict and refers to conflicts with more than more than 1000 battle-related deaths in one calendar year as war.<sup>15</sup> Accordingly, just like the COW project, the UCDP is particularly concerned with conflict intensity measured in number of battle-related death. Yet, the UCDP has a lower battle-related deaths threshold for conflicts included in its dataset. The UCDP's use of a lower threshold of battle-related deaths to measure armed conflict than the COW project is very much linked to an increased interest in armed violence within states. Although civil wars can be extremely bloody, the UCDP has identified many low-intensity intrastate armed conflicts. The significance of the lower battle-related deaths threshold of the UCDP became particularly apparent with the increasing number of smaller intrastate conflicts during the 1990s. This explains why the UCDP is used relatively more frequently than the COW project to analyse intrastate conflicts. However, like the COW project, the UCDP foregrounded battle-related deaths, which made it overlook civilian deaths. In other words, the UCDP Armed Conflict Dataset does not measure contemporary conflicts, because most violence is directed against civilians and this is not adequately captured in the UCDP.<sup>16</sup> In addition, the UCDP

*Peace Research: Methods and Challenges*. London: Routledge.

<sup>15</sup> Gleditsch NP, Wallensteen P, Eriksson M, et al. (2002) Armed Conflict 1946-2001: A New Dataset. *Journal of Peace Research* 39.

<sup>16</sup> However, note that, unlike the COW project, the UCDP does record a civilian that dies as a result of armed clashes between armed organized groups as a battle-related death. Yet, the direct targeting of civilians by organized armed groups was ignored by the UCDP. It was not until 2007 that the UCDP began to systematically collect data on direct violence against civilians conducted by organized armed groups, which the UCDP refers to as one-sided violence. See: Eck K and Hultman L. (2007) One-Sided Violence Against Civilians in War: Insights from New Fatality Data. *Ibid.*44: 233-246.

continued to focus on states, while in reality the warring parties are networks of state and non-state actors.

Another major dataset that appeared in the 1980s is the Minorities at Risk (MAR) project, which was developed at the University of Maryland by Ted Robert Gurr and James Scarritt in 1986. The MAR dataset includes information on politically significant communal groups, which are often ethnic and religious minorities. A group is considered to be politically significant if this group collectively suffers or benefits from systematic discriminatory treatment at the hands of other societal groups. The group also needs to be the foundation of political mobilisation in defence of self-defined interests.<sup>17</sup> The creation of the MAR dataset was crucial in order to get insights into the dynamics leading up to wars within states.<sup>18</sup>

Conflict research began to burgeon with the collection of more elaborate data on conflict processes throughout the 1990s, with another growth spurt from the turn of the century onwards. Illustrative in this regard are several datasets created by the UCDP. In 2002, the UCDP published conflict data that covered data on conflicts from 1946 onwards.<sup>19</sup> In 2007, the UCDP started to collect data on violence against civilians in civil war, which was referred to as one-side violence.<sup>20</sup> In the same year, the UCDP also began to collect data on armed conflict between non-state actors, including intra rebel violence and communal violence.<sup>21</sup> And in 2010, the UCDP published data on how armed conflicts terminate.<sup>22</sup>

Furthermore, several datasets became available that focused on conflict dyads rather than conflicts. Many conflict episodes involved more than two conflict parties. It is therefore often possible to identify several pairs of conflict parties in a single

conflict. Maoz published dyadic data on militarised interstate disputes.<sup>23</sup> Similarly, since 2008, the UCDP has annually released both conflict-level and dyadic-level datasets.<sup>24</sup>

In addition, many new datasets became available from the early 1990s onwards that could be used to study conflict. For instance, Jagers and Gurr published their Polity 3 data on democracy in 1995, which enabled scholars to examine the relationship between democracy and civil war.<sup>25</sup> Combining the Polity 3 data and the UCDP data, Hegre et al. show that robust democracies and harshly authoritarian states are relatively unlikely to experience civil wars, while intermediate regimes are the most conflict-prone.<sup>26</sup>

While more and better conflict data has constantly become available since the start of the COW project in 1963, the level of analysis of most of these data have been specified at the country or the conflict level. It is only since fairly recently that conflict data has become commonplace that takes the incident, rather than the state or the conflict episode, as the unit of analysis. The next section discusses this significant development, as well as some of the challenges associated with incident data.

## The Turn to Disaggregated Conflict Data

The reason why the availability of disaggregated conflict data matters so much is that analyses based on cross-country data implicitly assume that civil wars are distributed uniformly throughout the country. This is almost never the case. Civil wars often either take place in and around the capital or in the periphery of the country, often along international borders.<sup>27</sup> The revolution in Geographic Information

<sup>17</sup> Gurr TR. (1993) *Minorities at Risk*, Washington: United States Institute of Peace.

<sup>18</sup> Forsberg E, Duursma A and Grant L. (2012) Theoretical and Empirical Considerations in the Study of Ethnicity and Conflict: Summary Report from an International Workshop at the Department of Peace and Conflict Research. *UCDP Paper No 8*.

<sup>19</sup> Gleditsch NP, Wallensteen P, Eriksson M, et al. (2002) Armed Conflict 1946-2001: A New Dataset. *Journal of Peace Research* 39. In addition, the COW project covers interstate conflicts from 1918 onwards. Several recent studies draw on data on conflict and violence that goes even further back. For example, see: Pinker S. (2011) *The Better Angels of Our Nature: Why Violence Has Declined*, London: Penguin.

<sup>20</sup> Eck K and Hultman L. (2007) One-Sided Violence Against Civilians in War: Insights from New Fatality Data. *Journal of Peace Research* 44: 233-246.

<sup>21</sup> Sundberg R, Eck K and Kreutz J. (2012) Introducing the UCDP Non-State Conflict Dataset. *Ibid.*49.

<sup>22</sup> Kreutz J. (2010) How and when armed conflicts end: Introducing the UCDP Conflict Termination dataset. *Ibid.*47: 243-250.

<sup>23</sup> Maoz Z. (2005) Dyadic MID Dataset (version 2.0).

<sup>24</sup> Harbom L, Melander E and Wallensteen P. (2008) Dyadic Dimensions of Armed Conflict, 1946-2007. *Journal of Peace Research* 45: 697-710.

<sup>25</sup> Jagers K and Gurr TR. (1995) Tracking Democracy's Third Wave with the Polity III Data. *Ibid.*32: 469-482.

<sup>26</sup> Hegre H, Ellingsen T, Gates S, et al. (2001) Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816-1992. *The American Political Science Review* 95: 33-48.

<sup>27</sup> Buhaug H and Gates S. (2002) The Geography of Civil War. *Journal of Peace Research* 39: 417-433, Aas Rustad SC, Buhaug H, Falch Å, et al. (2011) All Conflict is Local:

Systems (GIS) technology has made it possible to code geographic information on armed conflict. The geographic coordinates of the location of an incident can be tagged onto an observation in the dataset. This, in turn, makes it possible to consider the local context of conflict.

Georeferenced, disaggregated events-level conflict data facilitates conflict researchers to examine the micro-level dynamics of civil war, as well as making it possible to include a more detailed specification of actors in quantitative models. For instance, using disaggregated conflict data, Weidman and Ward show that areas in Bosnia and Herzegovina during the civil war were more likely to experience armed fighting if the neighbouring areas experienced more armed violence; essentially showing a contagion effect. Also drawing on UCDP GED data, Beardsley and Gleditsch show that armed violence is more likely to spread if the conflict involves a rebel group that does not primarily fight for a specific ethnic group and that receives outside military support.<sup>28</sup>

Disaggregated conflict data has also made it possible to assess the effectiveness of conflict management efforts on a micro-level. For instance, while several seminal studies using cross-national data have established that the deployment of a peacekeeping mission in a country makes ceasefires more likely to hold<sup>29</sup>, it is only recently that a study was published that uses temporarily and spatially disaggregated data to show that the presence of a peacekeeping base shortens conflict episodes within the context of civil wars.<sup>30</sup>

Two leading datasets have emerged that provide geographic information on conflict events: the UCDP GED and ACLED.<sup>31</sup> ACLED records data in 'real time', publishing conflict data on 60 developing countries in Africa and Asia every month. ACLED, in general, does a better job than UCDP GED in identifying incidents in which no fatalities are reported. Moreover, unlike the UCDP GED, ACLED also reports

on non-violent events like troop movements and protests. However, the data quality of ACLED is very uneven. Compared to the UCDP GED, ACLED relatively often miscodes the location information of an incident. In a comparison between the two datasets, Eck finds that ACLED coders do not always distinguish between villages with the same name.<sup>32</sup> For instance, Eck notes that "an ACLED event for Burundi on June 13, 2000 states that 'Rebels tried to return to Tanzania through Musumba in Kinyinya Commune, but were repelled by police operating in Moso region.' The incident is geocoded to Musumba in Ngozi province, which is not on the border of Tanzania. It should have been coded to Musumba in Ruyigi province, which is where Kinyinya commune can be found. The location is thus some 150 kilometers off, putting the location in northern Burundi instead of southeast Burundi."<sup>33</sup>

Eck's finding is in line with a study by Duursma that compares ACLED data on the Darfur conflict with data collected by the Joint Mission Analysis Centre (JMAC) of the United Nations-African Union Mission in Darfur (UNAMID). In this study, Duursma finds that ACLED sometimes codes the wrong location because the localities of the towns in which armed clashes take place often have the same name as the administrative centre of this locality. Consequently, ACLED often incorrectly geocodes the location of the administrative centre even if the news article refers to the locality.<sup>34</sup> Finally, it should be noted that Weidman also has found some discrepancies between the locations reported in the UCDP GED and the "Afghanistan War Logs" compiled by the US army and released by WikiLeaks.<sup>35</sup> In short, many possible cases are overlooked or incorrectly geocoded as the result of the use of media sources in the major conflict incident datasets. Disaggregated data holds great promise, but it is not always clear whether disaggregated event data points are correct. It thus of great importance to ensure the

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Modeling Sub-National Variation in Civil Conflict Risk. *Conflict Management and Peace Science* 28: 15-40.

<sup>28</sup> Beardsley K, Gleditsch KS and Lo N. (2015) Roving Bandits? The Geographical Evolution of African Armed Conflicts. *International Studies Quarterly* 59: 503-516.

<sup>29</sup> Doyle MW and Sambanis N. (2006) *Making War and Building Peace: United Nations Peace Operations*, Princeton: Princeton University Press, Fortna VP. (2008) *Does peacekeeping work? shaping belligerents' choices after civil war*, Princeton, N.J.: Princeton University Press.

<sup>30</sup> Ruggeri A, Dorussen H and Gizelis T-I. (2017) Winning the Peace Locally: UN Peacekeeping and Local Conflict. *International Organization* 71: 163-185.

<sup>31</sup> In addition, the locations of all militarized interstate disputes in the COW project's Militarized Interstate

Disputes (MID) dataset have been geotagged. See: Braithwaite A. (2010) MIDLOC: Introducing the Militarized Interstate Dispute Location dataset. *Journal of Peace Research* 47: 91-98.

<sup>32</sup> Eck K. (2012) In data we trust? A comparison of UCDP GED and ACLED conflict events datasets. *Cooperation and Conflict* 47: 124-141.

<sup>33</sup> Ibid.

<sup>34</sup> Duursma A. (2017a) Counting Deaths While Keeping Peace: An Assessment of the JMAC's Field Information and Analysis capacity in Darfur. *International Peacekeeping* 24: 823-847.

<sup>35</sup> Weidmann NB. (2015) On the Accuracy of Media-based Conflict Event Data. *Journal of Conflict Resolution* 59: 1129-1149.



comprehensiveness and precision of conflict data when using these data.

The use of media reports is not only problematic because of its impreciseness or systematic underreporting, but also because of biases in underreporting. These biases can lead to flawed conclusions. For example, drawing on the UCDP GED, Pierskalla and Hollenbach find a strong correlation between cell phone coverage and armed violence in Africa, arguing that cell-phone coverage allows for effective mobilisation.<sup>36</sup> Using UCDP GED data, Weidmann also finds a strong correlation between cell phone coverage and armed violence in Afghanistan. Yet, when he uses military data from the US army – the so-called ‘Afghanistan War Logs’ – Weidmann finds that much of the correlation between cell phone coverage and armed violence is driven by the media-based data. In other words, the UCDP GED – and probably media-based datasets in general – are also more likely to report violent incidents in areas with high levels of cell phone coverage.<sup>37</sup>

Comparing JMAC and ACLED on Darfur, Duursma also identifies a bias in media-based conflict data: the JMAC dataset generally is more likely to report armed clashes, yet, compared to ACLED, it is especially more likely to report on battles that are not between the Government of Sudan and rebel parties.<sup>38</sup> A plausible explanation for this relative difference is that news media are prone to focus on the armed fighting relating to what Kalyvas describes as a civil war’s “master cleavage.”<sup>39</sup> The media might be more likely to report on events in line with the narrative of this master cleavage.

In addition, media-based data are often produced in real-time or within the same calendar year of when the violent event took place. However, the occurrence of violent events sometimes emerge much later. These type of events usually do find their way to much more detailed historical narratives (e.g. when the armed conflict is terminated), but media-based datasets often ignore historical narratives. Indeed, it is very rare for a media-based dataset to be

‘updated’ based on historical research. De Waal describes several of such cases in the Horn of Africa, which were never included in the UCDP.<sup>40</sup>

Another potential issue with the issue of incident data is the way in which data are often used in a subtle (or not-so-subtle) way to reinforce particular political narratives. The proliferation of data has often come without attendant scrutiny of the quality of the data points. Coding is almost always a reduction of a complex case. A lot of information is sacrificed to reduce a singular case to either to a discrete category or to a position on a continuous scale. How and what information is coded will influence how the data is read and used – and thus ultimately will determine what kind of knowledge can be produced. For this reason, coding can be regarded as political. Read and Mac Ginty note in this regard that a contradiction lies at the heart of conflict incident databases: “the adherence to conflict scientism ignores the highly subjective nature of the coding process.”<sup>41</sup> This observation not only holds for datasets produced by scholars based on media reports, but also – and perhaps especially – for datasets produced by NGOs, international organisations, and governmental organisations. For instance, the data released by the US government on the scale of civilian death in the wake of the US-led coalition’s invasion in Iraq in 2003 did not reflect the scale of the civilian death that later became apparent with the “Iraq War Logs” published by WikiLeaks in October 2010.<sup>42</sup>

Finally, several new types of data collection efforts have emerged that could remedy some the flaws of media-based conflict data, particularly with regard to data collection efforts on armed violence in Syria. Conflict data on Syria is emerging based on new Internet based sources, including social media, crowd seeding, and citizen journalism. The Syrian conflict dataset at the London School of Economics is an example of a dataset based on crowd-seeding. The Carter Center is currently hosting a dataset on Syria based on social media, mostly on Twitter and YouTube. Using social media, the Carter Center has

<sup>36</sup> Pierskalla JH and Hollenbach FM. (2013) Technology and Collective Action: The Effect of Cell Phone Coverage on Political Violence in Africa. *American Political Science Review* 107: 207-224.

<sup>37</sup> Weidmann NB. (2016) A Closer Look at Reporting Bias in Conflict Event Data. *American Journal of Political Science* 60: 206-218.

<sup>38</sup> Duursma A. (2017a) Counting Deaths While Keeping Peace: An Assessment of the JMAC’s Field Information and Analysis capacity in Darfur. *International Peacekeeping* 24: 823-847.

<sup>39</sup> Kalyvas SN. (2003) The Ontology of “Political Violence”: Action and Identity in Civil Wars. *Perspectives on Politics* 1: 475-494.

<sup>40</sup> De Waal A. (2004) The Politics of Destabilisation in the Horn, 1989-2001. In: De Waal A (ed) *Islamism and Its Enemies in the Horn of Africa*. London: Hurst.

<sup>41</sup> Read R and Mac Ginty R. (Unpublished manuscript) The Politics of Coding Violence: Exploring the Ontologies of Security Incident Databases.

<sup>42</sup> See: <https://wikileaks.org/irq/>.



identified 60,000 conflict events in Syria since it began collecting data in January 2015.

With all these new type of data collection efforts underway it clear that the major obstacle to data-driven conflict research is not necessarily a lack of data, but that these different datasets have not been merged enough. The main reason for this is that these datasets are all developed independently from one another, often with a singular purpose. Hence, what is necessary in the future is creating 'networked' data – a network of network data – through merging different types of data on the basis of common guidelines.

In sum, the lack of disaggregated data has meant that it is only recently that the study of the micro-dynamics of civil wars and armed violence have become feasible; previously, conflict data has been highly aggregated, commonly at the country level. Disaggregated conflict data has become available with the creation of datasets like ACLED and the UCDP GED. While these type of data hold great promise, it is important to be aware of the biases of these data, as well as the politics of coding conflict events. The next section reviews how disaggregated data also allows for a greater focus on agency – and how this furthers the study of the micro-level dynamics of conflicts.

## Using Conflict Data to Analyse the Logics of Armed Conflict

This section shows that disaggregated conflict data can help study the micro-level dynamics of conflicts. Disaggregated data helps to study the local nature of armed conflict, but also shifts the focus to agency rather than structural variables associated with a given country. Gleditsch et al. note that "Early studies tended to treat civil war as something that 'happened' in specific countries, with little interest in who may engage in conflict and their plausible motivation for doing so."<sup>43</sup> A telling example of such a study is the work of Paul Collier and Anke Hoeffler, who focused on macro-level indicators, like a country's GDP or the presence of lootable resources in a country, to make claims about rebel motivations to take up arms.<sup>44</sup> From this perspective, civil wars may seem inevitable in 'weak states' or will occur

whenever feasible. This perspective also focuses exclusively on the motives of the armed opposition, as though governments cannot initiate violence leading to war. Macro-level studies are thus unable to provide insight into the where and who of armed violence.

In order to show the merit of micro-level studies that are focused on agency and based on disaggregated data, the following three sub-sections will review how some recent quantitative work and their associated datasets are relevant for examining the three logics identified by the CRP.

### The Political Marketplace

The first logic is the logic of a political marketplace, which is a materialist logic that relates to the transactional nature of the politics of conflict. The political marketplace refers to politics shaped by rent and patronage, in which power is about access to resources and at the same time resources are needed to sustain power and the various clientilistic networks that underpin power positions. Hence, the leaders of conflict parties will try maximize their budget in order to maximize their chances of survival. De Waal's description of how the wish to maximize the political budget can motivate a rebel leader to wage war or make peace is worth quoting at length: "By threatening or staging a *rent-seeking rebellion*, a commander, chief or local administrator attracts attention, advertise his intent and determination, and strikes up a round of bargaining. [...] The rebellion is settled through a payroll peace: its leader is given a promotion and his fighters are put on the army payroll: arrears are paid, pay rises awarded, and more soldiers – real ones and ghosts – are salaried."<sup>45</sup> The leaders of conflict parties thus need a political budget to buy the loyalties of their constituency.

Some studies that find quantitative support for the logic of the political marketplace have already been published. Examining how the civil war in Tajikistan ended, Jesse Driscoll argues that the government side managed to lure warlords into the state based on promises of future financial rewards. The point of departure of this study is thus that while many civil wars end in a military victory by the incumbent regime, this rarely involves a comprehensive battlefield defeat. Instead, insurgent field

<sup>43</sup> Gleditsch KS, Metternich NW and Ruggeri A. (2014) Data and progress in peace and conflict research. *Journal of Peace Research* 51: 301-314.

<sup>44</sup> Collier P. (2000) Rebellion as a quasi-criminal activity. *Journal of Confl. Resolution* 44: 83, Collier P and Hoeffler A.

(2004) Greed and Grievance in Civil War. *Oxford Economic Papers* 56: 563-595.

<sup>45</sup> Emphasis in the original. de Waal A. (2015) *The Real Politics of the Horn of Africa: Money, War and the Business of Power*, Cambridge: Polity.

commanders are often selectively co-opted within the state. To test this argument, Driscoll created a dataset of 97 field commanders with biographical information on each of these commanders, including information such as the number of the fighters they command. Of these 97 field commanders, 57 joined the state between 1992 and 1997. A closer look at why these field commanders joined the state suggest that regardless of their characteristics, these field commanders were given amnesty and allowed to make large sums of money. A survival analysis based on these data suggests that the former war lords who had ties to the KGB or the 'deep state' were relatively likely to keep their job. Yet, Driscoll finds that in general warlords were very likely to be pushed out of their jobs. By December 2006, only sixteen out of the 57 field commanders that had joined the state between 1992 and 1997 remained. Former war lords were pushed out of their jobs at a rate of about three per year. As Driscoll puts it, "Most field commanders found that the arrangement which initially convinced them to join the state was void within a decade." What is more, in most of the cases in which former war lords lost their jobs, this occurred in the context of pitting different warlord factions against one another. This suggests that in addition to co-opting, the regime led by President Emomali Rahmon also engaged in a divide-and-rule strategy to maintain a monopoly on the use of violence within the state.

In another study that finds evidence supporting the logic of the political marketplace, Lee Seymour finds that political rivalries and patronage-based incentives – rather than ideological and ethnic cleavages, territorial control, or the balance of power – explain why armed actors switch sides in civil wars. In his dataset on side-switching in the north-south Sudan civil war and the civil war in Darfur, Seymour measures patronage incentives to induce side-switching as "collaboration contingent on material rewards, tracing the patronage politics behind alignments as closely as possible."<sup>46</sup> While Seymour's findings are plausible and line with observations from in-depth case studies, the problem with the data collected for this study is that is arguably easier to identify cases in which side-switching actually happened in anticipation of material rewards than it is to identify cases in which side-switching was refused, but in which material rewards were nevertheless offered as an incentive to switch sides. This potentially biases the findings

towards a conclusion that patronage incentives induce side-switching.

In a study that indirectly addresses dynamics related to the political marketplace, Milli Lake shows that efforts to build post-conflict institutions aimed at establishing a rule of law are often undermined because of transactional politics. Lake draws on several data sources – including both NGO reports and media-based datasets like ACLED and the UCDP GED – to identify 329 conflict incidents in North Kivu and South Kivu between 2005 and 2012. With the help of legal experts from the DRC, Lake subsequently finds that 79 of these 329 cases constituted a basis for a case file. Focusing on these 79 cases, Lake further finds that only 36 of these cases were in fact a case file. What is more, only eight of these 36 case files led to a trial. A qualitative assessment of the factors that explain why certain cases progress towards a trial suggests that elites often obstruct accountability efforts against adversaries when doing so can be exchanged for political, military, or economic payoffs from rival factions. In other words, Lake shows how institutions are used as a tool in the political marketplace. The threat of possible prosecution is used as a bargaining strategy to get more power. Lake thus essentially shows how patronage-based politics are also evident in the workings of formal institutions.<sup>47</sup>

In sum, while it is in practice almost impossible to measure political budgets and the price of loyalty directly – as doing so would require significant intelligence resources – some studies have analysed networks and relationships to study transactional politics in relation to conflict. Yet, it is clear that the covert actions of the political business leaders conducting transactional politics makes studying the political marketplace difficult. In her study of the political marketplace in Tajikistan, Driscoll simply assumes that former field commanders want to assume a position within the state for financial gain. Seymour uses a binary variable that whether financial incentives motivated a field commander to switch sides. Future research should try to develop more precise proxy indicators of the political marketplace and collect more rigorous data.

<sup>46</sup> Seymour LJM. (2014) Why Factions Switch Sides in Civil Wars: Rivalry, Patronage, and Realignment in Sudan. *International Security* 39: 92-131.

<sup>47</sup> Lake M. (2017) Building the Rule of War: Postconflict Institutions and the Micro-Dynamics of Conflict in Eastern DR Congo. *International Organization* 71: 281-315.

### Moral Populism

The second logic is an ideational logic and relates to the use of populist narratives generally involving exclusion as a tool for political mobilisation. Moral populism can involve ethnic sectarianism, religious extremism, or appeals to the spirit world and to witchcraft. In essence, moral populists construct a narrative to create a sense of community among their followers to the exclusion of others. Identity politics is at the heart of this narrative, meaning that leaders claim authority on the basis of their identity.<sup>48</sup> Some large-n studies have specifically focused on the ethnic and religious identity component of moral populism. While this is often a dominant factor, it does not need not be the exclusive one.

A traditional view within conflict research is that authorities that consistently fail to provide public services face a higher chance of armed resistance. Indeed, since Ted Gurr published *Why Men Rebel* in 1970, a dominant view within conflict research is that relative deprivation can lead to grievances, which, in turn, can result in intergroup armed conflict.<sup>49</sup> The causal mechanism that connects grievances to armed conflict is that grievances motivate groups to take up arms to change the status quo, but also that grievances allow elites to effectively mobilise a fighting force. Around the turn of the century, some studies were published that argued against looking at political and economic grievances to explain the onset of war. These studies instead focused on opportunity structures. However, the findings of these studies were based on questionable data. For instance, it was concluded that inequality did not increase the likelihood of civil war, but the indicators of inequality related to the level of individual inequality.<sup>50</sup> Frances Stewart shifted the focus from individual inequality to inequality between groups – and in doing so found that higher levels of inequality between different groups in a given country make armed conflict significantly more likely.<sup>51</sup> Cederman

et al. take this research agenda further through drawing on disaggregated data that specifies the inequality between different (ethnic) groups within a country. Using a spatial method that combines geocoded data on ethnic groups' settlement areas with indicators of spatial wealth, Cederman et al. show that civil war is more likely in highly unequal societies. Moreover, within these highly unequal societies, both rich and poor groups are more likely to fight than those groups whose wealth lies closer to the country average.<sup>52</sup>

While Cederman et al.'s finding is highly informative, it does not necessarily provide an answer as to why individuals join a rebellion. Addressing the personal reasons for joining the rebel or the government side in civil wars, Humphreys and Weinstein conducted a survey in Sierra Leone.<sup>53</sup> Through this survey they recorded the attitudes and behaviour of 1,043 ex-combatants alongside a sample of 184 non-combatants in Sierra Leone's civil war. The survey suggests that indicators for grievances – including economic deprivation and a lack of access to education – are significant predictors of participation in violence.<sup>54</sup> Yet, crucially, these indicators are not only significant for individuals participating in rebel violence, but also for individuals participating in the defence of the state. Marginalisation might thus produce a greater disposition to participate in violence, but not necessarily because of a willingness to change the status quo. Furthermore, the survey results suggest that combatants often joined because of financial reasons. Humphreys and Weinstein also find that abductions of fighters occurred very often, shedding doubts about whether people always have agency over their decision to participate in violence. In short, while shifting the focus to the individual, Humphreys and Weinstein find that opportunity rather than grievances explain the participation in violence. The only exception in this regard is that they find that compared to the non-combatants, many of the ex-

<sup>48</sup> Kaldor M. (2007) *New and Old Wars*, Palo Alto: Stanford University Press.

<sup>49</sup> Gurr TR. (1970) *Why Men Rebel*, London: Paradigm Publishers.

<sup>50</sup> See for example: Fearon J and Laitin D. (2003) Ethnicity, Insurgency, and Civil War. *The American Political Science Review* 97: 75-90, Collier P and Hoeffler A. (2004) Greed and Grievance in Civil War. *Oxford Economic Papers* 56: 563-595.

<sup>51</sup> Stewart F. (2002) Horizontal Inequalities: A Neglected Dimension of Development. *QEH Working Paper Series, Number 81*, Stewart F. (2008) *Horizontal Inequalities and Conflict: Understanding Group Violence in Multiethnic Societies*: Palgrave Macmillan UK.

<sup>52</sup> Cederman LE, Gleditsch KS and Buhaug H. (2013) *Inequality, Grievances, and Civil War*: Cambridge University Press, Cederman L-E, Weidmann NB and Gleditsch KS. (2011) Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison. *American Political Science Review* 105: 478-495.

<sup>53</sup> Humphreys M and Weinstein JM. (2008) Who Fights? The Determinants of Participation in Civil War. *American Journal of Political Science* 52: 436-455.

<sup>54</sup> Note, however, that due to endogeneity issues, the relationship between poverty and armed violence is difficult to establish. On this, see: Justino P. (2009) Poverty and Violent Conflict: A Micro-Level Perspective on the Causes and Duration of Warfare. *Journal of Peace Research* 46: 315-333.

combatants did not support any political party when they joined the national army or a rebel group. This suggests that individuals that are alienated from mainstream political processes are more likely to participate in violence.<sup>55</sup> It might be the case that these politically alienated individuals in Sierra Leone were particularly susceptible to the messages of moral populists.

In addition to research on possible grievances that allow a basis for mobilisation, contemporary quantitative research focuses on the role of identities within civil wars. A debate is currently unfolding about what the most salient cleavage is for mobilisation in civil wars. Monica Toft argues that religion is the most salient factor and presents data that suggests that armed opposition groups that have their demands explicitly anchored in a religious tradition have become increasingly common between 1945 and 2000.<sup>56</sup> Challenging the argument that political violence is more likely to occur along religious divisions, Bormann et al. argue that linguistic divisions are the most conflict prone. They provide evidence for this argument by analysing relational data that records ethnic differences between potential challengers and the politically dominant group in a country. A major advantage of this data – referred to as the Ethnic Power Relations – Ethnic Dimensions (EPRED) dataset – is that this dataset also includes dyads which did not escalate to civil war. In other words, this data offers a more exogenous starting point to examine the onset of civil war, rather than the ex-post coding of mobilisation and subsequent war. Moreover, while Toft codes civil wars as either religious or linguistic, the dataset used by Bormann et al. allows for an ethnic dyad to be both religious and linguistic. Bormann et al.'s analysis suggests that intrastate conflict is more likely within linguistic dyads than among religious ones. Moreover, controlling for a set of possible confounding variables, Bormann et al. do not find support for Toft's argument that Muslim countries are disproportionately likely to experience civil war.<sup>57</sup>

Mobilisation plays a major role in the theoretical arguments of both Bormann et al. and Toft. For

instance, Toft argues that since religious authority often transcends the authority of the state, religious groups are relatively less hampered by collective action problems that impede the mobilisation of fighters.<sup>58</sup> Yet, neither Toft nor Bormann et al. explicitly test the role of a linguistic or religious identity in the mobilisation process leading up to civil war. Hence, these studies are informative about what type of identities make the onset of a civil war more likely, but tell us relatively little about how moral populists play the identity card to mobilise fighters.

In sum, while there are some quantitative studies that have examined the role of grievances, identity, and mobilisation, these studies have produced contradictory findings. What is more, these studies are all seriously hampered by the difficulty to operationalise these concepts. Indeed, since it is difficult to operationalise and measure ideas, moral populism is difficult to examine in a large-n study. Much of the current literature examines grievances and identities, assuming that these concepts explain the onset of civil war.<sup>59</sup> Yet, crucially, the causal mechanisms that link elites evoking a narrative that enhances a sense of community among their followers on the one hand and the use of armed violence on the other hand have yet to be examined in quantitative research. A telling example in this regard is the robust finding that territorial intrastate conflicts are more difficult to resolve than non-territorial intrastate conflicts.<sup>60</sup> While some have suggested that this is due to the symbolic value of territory, which allows elites to mobilise many fighters, this claim has not been tested in a quantitative study – and doing so would be exceptionally difficult.

### Civiness

The logic of public civiness refers to public authority based on something akin to a social contract rather than top-down economic or ideological pressures. Civiness thus relates to the delivery of public services by either the state or non-state actors. Much of the conflict data and quantitative research has focused on violent conflict,

<sup>55</sup> Humphreys M and Weinstein JM. (2008) Who Fights? The Determinants of Participation in Civil War. *American Journal of Political Science* 52: 436-455.

<sup>56</sup> Toft MD. (2007) Getting Religion? The Puzzling Case of Islam and Civil War. *International Security* 31: 97-131.

<sup>57</sup> Bormann N-C, Cederman L-E and Vogt M. (2015) Language, Religion, and Ethnic Civil War. *Journal of Conflict Resolution* 61: 744-771.

<sup>58</sup> Toft MD. (2007) Getting Religion? The Puzzling Case of Islam and Civil War. *International Security* 31: 97-131.

<sup>59</sup> A notable exception is Basedau M, Fox J, Pierskalla JH, et al. (2015) Does discrimination breed grievances—and do grievances breed violence? New evidence from an analysis of religious minorities in developing countries. *Conflict Management and Peace Science* 34: 217-239.

<sup>60</sup> See: Toft MD. (2002) Indivisible territory, geographic concentration, and ethnic war. *Security Studies* 12: 82-119, Toft MD. (2003) *The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory*, Princeton University Press.

while ignoring mass non-violent protest in societies over the failure of the delivery of public services. Due to the focus on violence in conflict data, the role of civil society in preventing contentious politics from escalating into violence conflict has been understudied. To remedy this gap in research, Bond et al. conducted a major data collection effort in the mid-1990s – based on the first automated coding software used by conflict researchers called the Kansas Event Data System (KEDS)<sup>61</sup> – to examine the role of civil society in mass political conflict.<sup>62</sup> They developed indices for two related concepts: (1) the conflict carrying capacity, which they defined as a regime's ability to regulate contentious interactions without resorting to violence; and (2) conflict civility, defined as the dominance of nonviolent (civil) coercion in mass contentious actions. Global data on violent and nonviolent incidents between 1987 and 1997 suggest that the more democratic and open regimes display stable and high conflict carrying capacity and conflict civility. Autocratic regimes can also score relatively stable on these indicators for an extended period of time, but the conflict carrying capacity of autocratic regimes can drop rapidly if autocratic leaders are faced with a high number of contentious actions.<sup>63</sup> Bond et al. thus essentially show that conflict researchers were too much focused on collecting data that solely pertains to violent events. Even if one is solely interested in explaining the onset of armed conflict, one should also examine conflict in the context of civil interactions.

Another issue that was understudied until recently is the effectiveness of popular mobilisation aimed at regime change. As early as 1973, Gene Sharp argued that that nonviolent action is generally more effective than violent action.<sup>64</sup> Yet, this claim was subsequently never tested using systematic data. This is precisely the gap in research taken up by Chenoweth and Stephan in their study on the effectiveness of nonviolent resistance.<sup>65</sup> Chenoweth and Stephan draw on the Nonviolent and Violent Campaigns and Outcomes (NAVCO) Dataset, which

includes violent and nonviolent resistance campaigns between 1900 and 2006. A campaign is defined as "as a series of observable, continuous, purposive mass tactics or events in pursuit of a political objective."<sup>66</sup> The criterion for the inclusion of violent campaigns draws on the COW project's 1,000 battle-related death criteria, while nonviolent campaigns are included if at least 1,000 protesters were involved in the nonviolent campaign. Drawing on the NAVCO dataset, Chenoweth and Stephan show that campaigns of nonviolent resistance were more than twice as effective as their violent counterparts. Moreover, the number of participants in nonviolent campaigns is generally much higher, a finding which the authors explain by pointing out that there are fewer obstacles to moral and physical involvement in nonviolent campaigns. Finally, Chenoweth and Stephan show that successful nonviolent resistance movements are relatively likely to progress to internally peaceful democracies.<sup>67</sup>

The work of Chenoweth and Stephan has led to the emergence of a rapidly expanding research agenda on nonviolent conflict. One promising research area seems to be the study of transitions from violent resistance to nonviolent resistance. To examine the reason why militant organisations use violent or nonviolent methods, one recent study by Shellman et al. models why the Tamil Tigers in Sri Lanka (LITE) and the Moro Islamic Liberation Front (MILF) in the Philippines used violent or nonviolent methods.<sup>68</sup> The dataset developed for this study is built by automatically coding sentiment data using advanced natural language processing software.<sup>69</sup> This software automatically codes sentiments expressed by citizens in news articles along a scale from -10 to 10. The main explanatory variable in Shellman's et al. study is a monthly average of the sentiment against the government side and the dissidents. The dependent variable of interest is the onset of a violent phase in a given month. The focus is thus on phases within a conflict. To ensure that endogeneity issues do not bias the findings, all independent variables, including the monthly

<sup>61</sup> This software was developed by Philip A. Schrodt. For more information, see:

<http://eventdata.parusanalytics.com/keds.dir/kedsmanual.pdf>.

<sup>62</sup> Bond D, Jenkins JC, Taylor CL, et al. (1997) Mapping Mass Political Conflict and Civil Society. *Journal of Conflict Resolution* 41: 553-579.

<sup>63</sup> Ibid.

<sup>64</sup> Sharp G. (1973) *The Politics of Nonviolent Action*: P. Sargent.

<sup>65</sup> Chenoweth E and Stephan MJ. (2011) *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*, New York: Columbia University Press.

<sup>66</sup> Ibid. In addition, NAVCO 2.0 has been released, which takes the nonviolent and violent conflict dyad as unit of analysis. See: Chenoweth E and Lewis OA. (2013) Unpacking nonviolent campaigns. *Journal of Peace Research* 50: 415-423.

<sup>67</sup> Chenoweth E and Stephan MJ. (2011) *Why Civil Resistance Works: The Strategic Logic of Nonviolent Conflict*, New York: Columbia University Press.

<sup>68</sup> Shellman SM, Levey BP and Young JK. (2013) Shifting sands: Explaining and predicting phase shifts by dissident organizations. *Journal of Peace Research* 50: 319-336.

<sup>69</sup> This automated coding software is much more advanced than, for example, the KEDS.



average of the sentiment, are lagged by one month. The sentiment data employed by Shellman et al. allows them to much better predict whether violent or nonviolent methods are used in a given month than if they would not draw on the sentiment data. A negative societal sentiment towards the government in a previous month is a significant predictor for the onset of a violent phase initiated by the LITE and the MILF. A positive sentiment towards the dissidents is only significantly correlated with the onset of a violent phase in the case of MILF.

In sum, civiness has received scant attention in the quantitative conflict research literature. A plausible explanation for why this is the case is that the concept is difficult to operationalise and measure. Yet, a research agenda is emerging that pays attention to the role of civil society when modelling conflict. A crucial area of research seems to be evolution of nonviolent conflict into violent conflict. In spite of this study by Shellman et al., relatively little remains known about how nonviolent campaigns evolve into violent campaigns. The political conflicts between opposition groups and the state in several Arab countries in North Africa and the Middle East that emerged in 2011 all took place initially in the form of non-violent uprising, but the outcomes were diverse. This demonstrates that incompatible goals between parties, even in highly insecure environments, do not necessarily lead to the use of violence.

## Interventions

This section first reviews what types of data-driven research has been conducted on sector security reform (SSR). Next, some of the peacemaking literature is reviewed, with particular attention being paid to local mediation efforts. The subsequent subsection addresses how humanitarian data and conflict data are currently not yet linked. This is particularly apparent when it comes to data on food security.

### Sector Security Reform

Most of the studies on SSR frame the issue in terms of the effectiveness of a standardised template of SSR.<sup>70</sup> Moreover, these studies typically draw on

cross-national data and focus on macro-level dynamics. In the first systematic study that looks specifically at rebel-military integration, Glassmyer and Sambanis find that integration does not have a significant impact on preventing civil war recurrence.<sup>71</sup> Yet, Glassmyer and Sambanis show that the reason why rebel-military integration has not been an effective peacebuilding mechanism is related more to poor implementation of peace agreements, which often include provisions for demobilisation and integration, than the inclusion of a rebel-military integration provision in the agreement itself. Similarly, Krebs and Licklider find that military integration may be a consequence rather than a cause of peace: when the underlying conditions for peace exist, military integration succeeds, and when they do not, integration fails.<sup>72</sup> This reflects an earlier finding by Hoddie and Hartzell, in an article that examines the impact of the implementation of military power-sharing provisions on the durability of peace agreements.<sup>73</sup> Hoddie and Hartzell understand military power-sharing not only as creating a unified army, but also consider provisions that stipulate that conflict parties maintain their own forces in different areas. Focusing on 16 peace agreements concluded between 1980 and 1996 that included provisions for the sharing or dividing of military power among the former adversaries, Hoddie and Hartzell find that the complete implementation of military power-sharing provisions significantly improves the prospects for maintaining peace. However, it is very well possible that Hoddie and Hartzell's study suffers from reversed causality: conflict parties that are motivated to maintain the peace are probably also more likely to implement military power-sharing provisions.

Most studies solely examine the macro-level dynamics of the restructuring of the security sector. A notable exception is a study by Humphreys and Weinstein, in which they examine the micro dynamics of DDR efforts, focusing on the factors that explain the successful demobilisation of former combatants. Drawing on a dataset of ex-combatants in Sierra Leone, they find that those former combatants that have participated in an abusive military faction are the least likely to succeed in achieving social reintegration.

<sup>70</sup> Detzner S. (2017) Modern post-conflict security sector reform in Africa: patterns of success and failure. *African Security Review* 26: 116-142.

<sup>71</sup> Glassmyer K and Sambanis N. (2008) Rebel–Military Integration and Civil War Termination. *Journal of Peace Research* 45: 365-384.

<sup>72</sup> Krebs RR and Licklider R. (2016) United They Fall: Why the International Community Should Not Promote Military Integration after Civil War. *International Security* 40: 93-138.

<sup>73</sup> Hoddie M and Hartzell C. (2003) Civil War Settlements and the Implementation of Military Power-Sharing Arrangements. *Journal of Peace Research* 40: 303-320.

Humphreys and Weinstein further find that wealthier and more educated combatants face greater difficulties to reintegrate economically and politically. Ideologues and younger fighters are the most likely to retain strong ties to their former factions. Finally, and crucially, Humphreys and Weinstein find that externally funded DDR programs are not more likely to facilitate DDR success.<sup>74</sup>

In short, some quantitative work has emerged on SSR. Most of the evidence points in the direction that SSR is ineffective in preventing a resumption of violence. The work that does find a positive correlation between the implementation of SSR and the durability of peace likely suffers from endogeneity. What is currently still missing within the quantitative literature on DDR and SSR, however, are studies that model reform effectors in what has been referred to as the security arena rather than the security sector.<sup>75</sup> Many different actors operate simultaneously in this security arena, including government forces, police, security services, rebel factions, and militias. The CRP will frame the contested security landscape in a conflict-affected country as a security arena, and with the intent to study the political drivers of controlling security actors and reducing violence. Indeed, future large-n research on SSR should try to model the complexity and fluidity of the security arena.

### Local Mediation

Much of the literature on peacemaking efforts focuses on peacemaking between states. For instance, drawing on ICB data, Beardsley finds that mediated peace agreements concluded to end international crises between states are often unsustainable.<sup>76</sup> Some studies do focus on mediation efforts to end a civil war, but the mediation efforts considered in these studies often are conducted by international third parties and focus on reaching a comprehensive peace agreement that brings peace to the entire country. For instance, focusing on civil wars in Africa, Duursma finds that African mediation efforts are more likely to lead to the conclusion of peace agreements than non-

African mediation efforts, but that mixed mediation efforts in which African and non-African third parties cooperate are the most effective.<sup>77</sup> Furthermore, data for mediation processes – as opposed to outcomes – is extremely poor, because most mediation processes have not been properly documented. Mediation archives are either non-existent or confidential, so researchers rely on mediators' memoirs for assessing what happened, and these are selective and subjective. In short, those large-n studies that do focus on peacemaking in civil war mainly look at efforts aimed at concluding a comprehensive peace agreement that is supposed to bring peace to the entire country.<sup>78</sup>

Yet, many peacemaking efforts in civil wars are 'local' and take place below the surface of highly publicised peace processes.<sup>79</sup> Most of the existing datasets overlook these local peacemaking efforts. An exception is the Political Settlements Research Programme at the University of Edinburgh, which includes local agreements in their dataset. This dataset records around 1400 peace agreements between 1990 and 2016, though the vast majority of these agreements pertain to peace processes aimed at bringing peace to the entire country.<sup>80</sup> One dataset that does specifically focus on local peacemaking efforts is the Syrian Conflict dataset at the London School of Economics. These data have been collected through crowdseeding conflict and peace events throughout various locations in Syria. What the Syrian Conflict dataset lacks in terms of the comprehensive coverage of Syria, it makes up in terms of the precision in terms of geo-coding (e.g. some observations in the dataset contain the exact coordinates of a building rather than the coordinates of a city like many other datasets). Moreover, the inclusion of local peace events makes the dataset fairly unique, making it possible to analyse the effectiveness of local peacemaking.

Finally, while most studies on violent conflict use indicators like the conclusion of peace agreements, the implementation of peace agreements, or a lack of armed fighting to measure peace, Mac Ginty proposes to use bottom-up indicators of peace,

<sup>74</sup> Humphreys M and Weinstein JM. (2007) Demobilization and Reintegration. *Journal of Conflict Resolution* 51: 531-567.

<sup>75</sup> Hills A. (2014) Security Sector or Security Arena? The Evidence from Somalia. *International Peacekeeping* 21: 165-180.

<sup>76</sup> Beardsley K. (2008) Agreement without Peace? International Mediation and Time Inconsistency Problems. *American Journal of Political Science* 52: 723-740.

<sup>77</sup> Duursma A. (2017b) Partnering to Make Peace: The Effectiveness of Joint African and non-African Mediation

Efforts. *International Peacekeeping* 24. See also: Duursma A. (2017c) When to Get Out of the Trench: Using Smart Pressure to Resolve Civil Wars. *Civil Wars* 17: 43-61.

<sup>78</sup> See also: Duursma A. (2014) A current Literature Review of International Mediation. *International Journal of Conflict Management* 25: 81-98.

<sup>79</sup> For example, see: Autesserre S. (2010) *The Trouble with the Congo: Local Violence and the Failure of International Peacebuilding*, Cambridge: Cambridge University Press.

<sup>80</sup> See: <http://www.peaceagreements.org/>.

which he refers to as the Everyday Indicators of Peace. The underlying rationale of creating bottom-up indicators of peace is the idea that locals often know very well whether peace is likely to be sustainable or not. For instance, after the troubles had ended in Belfast, people started to replace the wooden pallets in front of the windows again with glass windows.<sup>81</sup> A major bottom-up data collection effort in local communities in South Africa, South Sudan, Uganda, and Zimbabwe has resulted in the development of indicators like armed men giving up their weapons, people being able to walk freely at any time, people being able to worship whatever religion people want, and inter-ethnic marriages; but the list is very long and diverse, since it has been produced on the basis of the input of locals.<sup>82</sup> This makes the Everyday Indicators of Peace very hard to use as the basis for comparative work.

In sum, while the analysis of local peacemaking efforts is already commonplace within the qualitative literature, data-driven research on local peacemaking has yet to develop. One straightforward way to measure the effectiveness of local peacemaking efforts would be to measure whether levels of violence decline, which essentially means measuring whether a concluded ceasefire holds. This approach, however, would miss important other aspects of peace which are measured in bottom-up indicators of peace, including for example community reconciliation.

### Humanitarian Action

Humanitarian action takes place in all the countries on which the CRP focuses. Severe food insecurity is rampant throughout South Sudan, Somalia, and Syria. Conflicts in all the countries on which the CRP focuses have also produced large flows of displaced people. It is not difficult to see that the political marketplace has created the violent and predatory politics that led to the high levels of food insecurity and displaced people in these places. A confidential UN report on South Sudan concluded that "The bulk of evidence suggests that the famine in Unity state has resulted from protracted conflict." However, the quantitative conflict research that connects conflicts

to humanitarian issues is relatively underdeveloped. Crucially, there are no quantitative studies that connect the logic of the political marketplace to food insecurity. Yet, political marketplace metrics can be linked to food insecurity and humanitarian crisis. It is necessary to link the political marketplace to the food security because the political marketplace generates the predatory politics that creates food insecurity. Indeed, political entrepreneurs often reduce people to commodities or instruments of bargaining.

Some studies have addressed the push and pull factors of displacement, including the presence of armed conflict.<sup>83</sup> Other studies have addressed the impact of climate change and drought on conflict. For instance, von Uexkull et al. find, using disaggregated data on Africa and Asia from 1989 onwards, that sustained periods of drought increases the likelihood of armed conflict in areas with agriculturally dependent groups and politically excluded groups in very poor countries.<sup>84</sup>

What is missing from the literature is the linking of armed conflict and food insecurity in a quantitative and rigorous manner. A good start is the research that was recently published by Jones et al. in which they estimate the effect of food insecurity and state vulnerability on the occurrence of violent uprisings in Africa between 1991 and 2011.<sup>85</sup> Using this data, the authors find that state vulnerability moderates the impact of food insecurity on the likelihood of violence. Another finding is that capable governance is an even better guarantor of peace than good weather. However, the measurement of food insecurity used by Jones et al. is based on questionable indicators. Jones et al. rely on three variables to measure a state's susceptibility to food insecurity: "First, we capture how efficient and productive a state's agricultural sector is using agricultural value added as a percentage of a state's GDP, which measures net outputs minus inputs. Second, we capture how reliant on (and thus dependent on) agriculture a state is by including a measure of the percentage of a state's land that is actively dedicated to agriculture. Finally, we include

<sup>81</sup> Mac Ginty R. (2014) Everyday peace: Bottom-up and local agency in conflict-affected societies. *Security Dialogue* 45: 548-564.

<sup>82</sup> Firchow P and Ginty RM. (2017) Measuring Peace: Comparability, Commensurability, and Complementarity Using Bottom-Up Indicators. *International Studies Review* 19: 6-27.

<sup>83</sup> See: Czaika M and Kis-Katos K. (2009) Civil Conflict and Displacement: Village-Level Determinants of Forced Migration in Aceh. *Journal of Peace Research* 46: 399-418.

<sup>84</sup> von Uexkull N, Croicu M, Fjelde H, et al. (2016) Civil conflict sensitivity to growing-season drought. *Proceedings of the National Academy of Sciences* 113: 12391-12396.

<sup>85</sup> Jones BT, Mattiacci E and Braumoeller BF. (2017) Food scarcity and state vulnerability: Unpacking the link between climate variability and violent unrest. *Journal of Peace Research* 54: 335-350.

a variable for a state's imports as a percentage of the state's GDP."<sup>86</sup>

In short, quantitative conflict research has a long way to go to examine the links between humanitarian issues and the political marketplace. This is particularly apparent with regard to the links between food security and armed violence. Jones et al. have examined the effect of food insecurity on armed violence, but they use questionable indicators of food security. Moreover, while food insecurity is indeed likely to influence armed conflict, the causal direction could also go the other way.

## Possible Ways Forward

This final section identifies seven possible avenues for future data-driven research conducted by the CRP.

### Network Analysis

It is increasingly recognised within the quantitative conflict literature that the armed opposition in armed conflict is not a homogenous movement.<sup>87</sup> Some studies have examined why rebels fight other rebel movements.<sup>88</sup> Another type of non-state armed actor to which scholars have turned their attention is militias.<sup>89</sup> The numerous actors within the context of civil wars pose serious challenges to the data collection and analysis efforts of quantitative research scholars. One method of analysis that has the potential to deal with the complexity of contemporary wars is network analysis. An example of such an analysis is a study by Metternich et al. in which they find and employ data on conflicts in Thailand from 2001 to 2010 to show that fragmented opposition network structures lead to an increase in conflictual actions.<sup>90</sup>

Syria is a telling example of a country in which a huge amount of armed actors operate. The CRP could initiate a collaboration among the different conflict data initiatives for Syria, with the Carter Center as a key player, in order to map all these different actors and analyse the causes and consequences of the changes in these networks. Since the Carter Center

began collecting conflict data on Syria on 1 January 2015, it has identified 60,000 conflict events.<sup>91</sup> The Syrian conflict dataset at the London School of Economics, which is based on crowd-seeding, would also be a very valuable resource to identify many conflict actors at specific sites throughout Syria. As this dataset is based on crowd-seeding, many actors have been added to this participatory network dataset over the course of the time frame that this dataset covers.

In addition, the expert knowledge of the CRP country teams, as well as the local contacts of each country team, could be used to map relevant networks in each CRP focus country. If the JMAC data on the DRC and South Sudan will be obtained, these datasets could also be used to map networks. Collecting data on all relevant actors allows for an assessment of how conflict networks are shaped, transformed, and connected.

Data on networks is very suitable for mapping the fragmentation of public authorities, as on the basis of these data different power networks can be identified. Having network data also makes it possible to examine how relations between different actors change. Crucially, with network data, the CRP could potentially analyse the logic of the political marketplace. One way to do this would be, for example, to examine whether transactional politics underlie changes in the relationships between all relevant actors in South Sudan from either 2005 or 2011 onwards. In order to examine whether political marketplace considerations explain the changes in the network, one could examine each of these changes and code them accordingly. Alternatively, one could develop proxy indicators for the behaviour of political markets on relationships between different actors and levels of armed violence. For example, in the case of South Sudan, one could take the oil revenues the government generates as a proxy for the government's political budget. In the case of Syria, one could examine whether defections to the Islamic State are more likely in the period following the levying of tax by the Islamic State; the assumption being that the Islamic State has a greater political budget in this period, allowing it to

<sup>86</sup> Ibid.

<sup>87</sup> See: Cunningham KG, Bakke KM and Seymour LJM. (2012) Shirts Today, Skins Tomorrow. *Journal of Conflict Resolution* 56: 67-93, Bakke K, Cunningham K and Seymour L. (2012) A Plague of Initials: Fragmentation, Cohesion, and Infighting in Civil Wars. *Perspectives on Politics* 10: 265-283.

<sup>88</sup> Fjelde H and Nilsson D. (2012) Rebels against Rebels. *Journal of Conflict Resolution* 56: 604-628.

<sup>89</sup> Raleigh C. (2016) Pragmatic and Promiscuous: Explaining the Rise of Competitive Political Militias across Africa. *Ibid.* 60: 283-310.

<sup>90</sup> Metternich NW, Dorff C, Gallop M, et al. (2013) Antigovernment Networks in Civil Conflicts: How Network Structures Affect Conflictual Behavior. *American Journal of Political Science* 57: 892-911.

<sup>91</sup> <https://www.cartercenter.org/syria-conflict-map/>

buy the loyalties of potential defectors. Yet, it is acknowledged that better proxies should be developed.

### **Non-Violent and Violent Resistance and Changing Patterns of Authority**

Another research project could focus on explaining how a centralised political authority fragments into localised contested public authorities. Syria is an insightful case to examine in this regard. Prior to 2011, many observers interested in Syrian affairs believed that Syria was a stable state. Yet, minor protest in January 2011 had evolved into a massive uprising demanding democratic reforms by March 2011. The creation of the Free Syrian Army (FSA) in July 2011 marked another turning point. A systematic analysis of data on nonviolent and violent resistance in Syria could shed light on how nonviolent protest escalated into armed conflict. Data on protests could be extracted from the Global Database of Events, Language, and Tone (GDELT) dataset. Data on armed clashes could also be extracted from the GDELT – or perhaps these data could be taken from ACLED and UCDP GED if these two datasets have published any data on Syria by the time this proposed research is conducted. The GDELT data – as well as the ACLED and UCDP GED data – are geocoded, making it possible to spatially analyse how nonviolent protests and violent resistance emerged.

There is a conception that a mass uprising simply evolved into an armed uprising in Syria, yet there is a strong spatial element in this story that is often overlooked. While nonviolent protest emerged in urban areas, violent militias were mainly based in rural areas. The question, then, is what explains this difference? Is it a difference in a greater propensity to use violence or is it just opportunity? A disaggregated sentiment analysis could perhaps shed light on whether a difference in sentiment in the urban areas or the rural areas explain this difference. Another question that could be examined in a spatial analysis is how areas where the dominant form of resistance was nonviolent protest transformed into areas where the dominant form of resistance was the use of violence. It could be examined whether this transformation is perhaps related to violent crackdowns by government forces.

This research project relates to the logic of moral populism. If moral populists cannot fracture public

civicsness, they will resort to violent intimidation to curtail popular protest against them. A disaggregated analysis of the evolution of nonviolent and violent protest – with a focus on the interaction between the state, civil society, and the armed opposition – could shed light on aspects of the logic of moral populism. Disaggregated datasets make it possible, in principle, to move from the state, the individual, and armed groups as units of analysis to public authority.

### **Peace Events**

Another promising research project would be to study the effectiveness of local peacemaking efforts. A wealth of studies have shown how likely ceasefires are to hold on a national level, yet what explains the durability of local ceasefires remains a gap in research. Studying peacemaking efforts using large-n data is important because peacemaking efforts fail very often. Different types of peacemaking efforts therefore need to be systematically compared to determine what works and what does not work. Biased conclusions are more likely if only a few instances of peacemaking are studied.<sup>92</sup>

Borrowing a statistical technique from the medical literature in which the risk of a patient dying after having received some treatment is modelled, the hazard rates of a locally concluded ceasefire failing can be determined based on numerous factors that are associated with the conclusion of this ceasefire and which can be considered different types of treatment (i.e. the type and number of parties that are involved in the ceasefire agreement, whether a mediator was involved in the negotiations, whether a local or international mediator was involved, or the intensity of fighting prior to the conclusion of the ceasefire agreement).

Since the Syrian Conflict data at the London School of Economics maps both peace and conflict events, this dataset could be used to model the effectiveness of local peacemaking. Another potential data source would be JMAC data on the DRC or South Sudan. Duursma shows that JMAC's operational data not only offers great range of incidents and disaggregation, but is also very

<sup>92</sup> See: Duursma A. (2014) A current Literature Review of International Mediation. *International Journal of Conflict Management* 25: 81-98.



precise.<sup>93</sup> Duursma also shows that JMAC data<sup>94</sup> on Darfur is suitable to assess the effectiveness of local peacemaking efforts. JMAC data on the DRC and South Sudan is likely to also be suitable for this purpose. Additionally, another promising research project would be to study the long-term impact of mediation of land disputes in the DRC, but whether this is feasible depends on if it will be possible to get data on the resolution of land disputes in the DRC.

Finally, an assessment of local peacemaking efforts in the DRC and/or South Sudan could also be combined with a study of DDR efforts. Humphreys and Weinstein find that externally funded DDR programs are not more likely to facilitate DDR success.<sup>95</sup> A study of local peacemaking efforts could examine the effectiveness of internally, politically driven DDR processes. This would make it possible to determine whether disarmaments and demobilisation is more likely to succeed if it grows out of a wish by the communities to disarm themselves.

The study of local peacemaking efforts, using systematic data, could provide insight in the logic of the public civiness, as well as the logic of the political marketplace. Local peacemaking efforts are often a result of a bottom-up call for peace. On the other hand, the logic of the political marketplace suggests that whether local peacemaking efforts are successful depends on whether political entrepreneurs can reach an agreement based on transactional politics. Depending on whether it will be possible to get systematic information on why armed actors conclude local agreements, a fruitful research project would be to examine whether successful local peacemaking efforts in the DRC and/or South Sudan are the product of skilled and resourced actors operating within a political marketplace.

### Displaced People and Conflict

The CRP could also focus on how patterns of violence influence patterns of displacement of people and *vice versa*. Unsurprisingly, previous research has found that armed clashes motivate

people to flee their homes.<sup>96</sup> However, the quantitative conflict research field has yet to fully examine the links between displacement and armed violence.

Iraq would be a suitable country case to study the links between armed violence and displacement for two reasons. Firstly, there is high quality data on both displacement and violence patterns on Iraq. The International Organisation for Migration (IOM) has data on patterns and levels of displacement across Iraq with very short time intervals, making it possible to track displacements over time. In terms of conflict data, one option would be to draw on the UCDP GED. Another much more comprehensive and precise, though also more controversial source, would be the so-called "Iraq War Logs" which was published by WikiLeaks in 2010 and contains 391,832 geo-coded and categorised reports.<sup>97</sup> Secondly, and more importantly, Iraq has seen different waves of displaced people. The intervention in Iraq in 2003 by the US and its allies and the subsequent counterinsurgency operation displaced people from Fallujah, Najaf, Kufa, Ramadi, Kerbala, Tal Afar, Samarra, Basra, and Baghdad. Another wave of displacement occurred between 2006 and 2008, as a result of sectarian violence. Yet another wave of displacement started with the Islamic State growing stronger from 2014 onwards. These different waves of displacement give a lot of variation in the data, which can be leveraged to get insights into when and where people flee from armed violence. For instance, it could be examined whether state-orchestrated displacement and displacement as a result of state collapse impact patterns of violence differently. Not only would it be possible to examine the impact of violence on displacement and the impact of displaced people settling in new areas on violence, but it would also be possible to examine the impact of displaced people returning to their place of origin. Finally, it would be a possibility to examine whether displacement from and to rural or urban areas have divergent effects.

The study of patterns of displacements and violence relates to several overarching themes within the CRP

<sup>93</sup> Duursma A. (2017a) Counting Deaths While Keeping Peace: An Assessment of the JMAC's Field Information and Analysis Capacity in Darfur. *International Peacekeeping* 24: 1-25.

<sup>94</sup> JMAC units are tasked with collecting and analysing information to support the leadership of UN peacekeeping missions. See: Shetler-Jones P. (2008) Intelligence in Integrated UN Peacekeeping Missions: The Joint Mission Analysis Centre. *International Peacekeeping* 15: 517-527, Duursma A. (2018) Information Processing Challenges in Peacekeeping Operations: A Case Study on Peacekeeping

Information Collection Efforts in Mali. *International Peacekeeping* 25: 446-468.

<sup>95</sup> Humphreys M and Weinstein JM. (2007) Demobilization and Reintegration. *Journal of Conflict Resolution* 51: 531-567.

<sup>96</sup> For example, see: Czaika M and Kis-Katos K. (2009) Civil Conflict and Displacement: Village-Level Determinants of Forced Migration in Aceh. *Journal of Peace Research* 46: 399-418.

<sup>97</sup> See: <https://wikileaks.org/irq/>.

project. The different waves of displacements all took place under different contextual circumstances. For example, the wave of displaced people that took place between 2006 and 2008 was very much a result of sectarian violence, which, in turn, came about through moral populism. In addition, the different groups of displaced people in Iraq often relate to different authority structures. How these groups relate to particular authority structure might influence the propensity of armed conflict related to displacement. Finally, displacement does not necessarily have to result in violence. Indeed, the logic of public civiness might shed light on why people fleeing can maintain peaceful relations with their host community.

### Transnational Conflict Dynamics

The CRP will also examine transnational conflict drivers, and in doing so this will also reveal important information about conflict networks. Indeed, disaggregation is important, but it is equally important to look beyond the borders of a civil war state.<sup>98</sup> The CRP will, among others, draw on the Transnational Violent and Coercive Politics in Africa (TVCPA) dataset. The TVCPA has been created as part of research conducted for a report conducted by the World Peace Foundation for the African Union.<sup>99</sup> The TVCPA can be extended to also cover the Middle East for the research purposes of the CRP.

The TVCPA makes it possible to study the neglected transnational dimensions of armed conflicts in Africa. Previous research suggests that the number of interstate armed conflicts in Africa is relatively low in comparison to other regions of the world. For instance, Lemke found that “[...] there is something different, something exceptional about Africa in terms of interstate war. [...] African dyads are disproportionately less likely to experience war than are non-African dyads. Not only is the effect

statistically significant, but it is also substantively large. The risk ratio indicates that African dyads are only about one-tenth as likely to experience war as are other dyads. Even controlling for all of the ‘usual suspects,’ African dyads are disproportionately peaceful according to this analysis.”<sup>100</sup> However, Lemke’s analysis only focuses on those instances in which interstate armed conflicts escalate beyond 1,000 battle-related deaths. While interstate wars in Africa are indeed quite rare in comparison to the vast number of civil wars that Africa has experienced, African leaders often decide to support a foreign rebel party as a way to fight a rival state.<sup>101</sup> Hence, what conventionality is considered a civil war is in fact often simultaneously an indirect confrontation between rival African states in which one or both of the states have decided to delegate the conflict to a foreign rebel party. This empirical reality blurs the lines of what conceptually can be meaningfully understood as a civil war.<sup>102</sup> Moreover, Africa has experienced many low-level direct military confrontations between states.

Several datasets exist that capture some elements of interstate, transnational violent and coercive politics in Africa. The Militarised Interstate Dispute (MID) dataset compiled by the COW project focuses on low-intensity military confrontations between states.<sup>103</sup> The UCDP External support dataset focuses on external support to conflict parties in the form of troops, funding, logistics, military equipment, intelligence, and safe havens.<sup>104</sup> These datasets have been used to generate important findings with regard to the role of MIDs<sup>105</sup> and external support<sup>106</sup> respectively. Yet, a comprehensive dataset that captures a wide array of transnational conflict does currently not exist.

The TVCPA fills this gap. The TVCPA dataset is built by combining, augmenting and revising several existing datasets each of which capture some

<sup>98</sup> For instance, see: Brosché J and Duursma A. (2017) Hurdles to peace: a level-of-analysis approach to resolving Sudan’s civil wars. *Third World Quarterly* 39: 560-576.

<sup>99</sup> See: World Peace Foundation. (2016) African Politics, African Peace: Report submitted to the African Union by the World Peace Foundation.

<sup>100</sup> Lemke D. (2003) African Lessons for International Relations Research. *World Politics* 56: 114-138.

<sup>101</sup> Hughes G. (2014) *My Enemy’s Enemy: Proxy Warfare in International Politics*, Brighton: Sussex Academic Press, Mumford A. (2013) *Proxy Warfare*, Cambridge: Polity Press.

<sup>102</sup> Salehyan I. (2010) The Delegation of War to Rebel Organizations. *Journal of Conflict Resolution* 54: 493-515.

<sup>103</sup> Jones DM, Bremer SA and Singer JD. (1996) Militarized Interstate Disputes, 1816–1992: Rationale, Coding Rules, and Empirical Patterns. *Conflict Management and Peace Science* 15: 163-213.

<sup>104</sup> Pettersson T. (2011) Pillars of Strength: External Support to Warring Parties. In: Pettersson T and Themnér L (eds) *States in Armed Conflict 2010, Research Report no. 94*. Uppsala: Universitetsstryckeriet.

<sup>105</sup> Senese PD and Vasquez JA. (2008) *The Steps to War: An Empirical Study*, New Jersey: Princeton University Press, Mitchell SM and Prins BC. (1999) Beyond Territorial Contiguity: Issues at Stake in Democratic Militarized Interstate Disputes. *International Studies Quarterly* 43: 169-183.

<sup>106</sup> Salehyan I, Gleditsch KS and Cunningham DE. (2011) Explaining External Support for Insurgent Groups. *International Organization* 65: 709-744, Sawyer K, Cunningham KG and Reed W. (2015) The Role of External Support in Civil War Termination. *Journal of Conflict Resolution*.

elements of transnational violent and coercive politics, including interstate wars, external state support in interstate wars, low-intensity confrontations between states, external interventions in civil wars, and external support to rebels or coup-makers. The TVCPA shows that the conventional wisdom that Africa has experienced little interstate conflict is stood on its head: the majority of African conflicts must be considered internationalised-internal.

Moreover, the TVCPA data makes it possible to conduct a network analysis of transnational conflict. Such analysis could reveal which actors are central in providing support and which countries are the prime target of support, either for the regime or for rebel forces fighting against it. Changes over time could also be tracked this way, for example showing how countries rise or fall within the transnational political hierarchy.

The analysis of transnational conflict data is relevant for the CRP because external support to domestic players has important ramifications for how the political marketplace operates. A leader of state that has a strong position in a regional marketplace can more efficiently prevent external support, which makes it easier to dominate the domestic patronage system. By contrast, leaders of a state in a subordinate position in the region will experience great difficulty in regulating entry into the political marketplace and deterring external support to rebels. Mapping the extent of transnational conflict, as well as shifts in which countries are the target of external support, thus gives insight into the dynamics of what de Waal refers to as a regionally integrated political marketplace.<sup>107</sup>

### Conflict, Political Markets, and Food Security

The CRP will also address the links between conflict and food security. Many researchers have tried to find these links. Some have claimed to have done so, yet there is reason for serious caution in interpreting results as this research is often based on questionable proxy indicators of food security.<sup>108</sup> Moreover, if any links are found, these links are often indirect and mediated by other factors such as state capacity or poverty. Nevertheless, this topic is of

great importance and therefore warrants much better research.

The principal data system used by humanitarians to assess food insecurity is the integrated food security phase classification (IPC) system, which is a five-level scale that is intended to help governments and other humanitarian actors quickly understand a food crisis (or potential crisis) and take action. Indeed, the IPC is “designed from the perspective of decision-making. Thus, rather than ‘pushing’ complex information to decision-makers, the IPC is designed to be demand driven – taking stock of the essential aspects of situation analysis that decision-makers consistently require, and focusing on providing that information in the most reliable, consistent and accessible way.”<sup>109</sup> Phase 1 reflects “food secure”, phase 2 reflects “stressed”, phase 3 reflects “crisis”, phase 4 reflects “emergency”, and phase 5 reflects “famine”. These phase classifications sometimes relate to an administrative boundary and sometimes relates to a livelihood zone. The IPC data output is thus simply a number between 1 and 5 relating to a specific area. The famine that the UN has declared in Somalia, South Sudan, and Yemen is based on the IPC system. What is more, the reason why famine has not yet been declared in Syria is likely due to the fact that Syria does not have an IPC mechanism in place.

In addition to the IPC data, there is the Famine Early Warning Systems Network (FEWSNET) data on food security. This data is IPC compatible, but not IPC per se. Moreover, the FEWSNET data is published for the current situation, but each FEWSNET report also includes 3 and 6 months forecasts.

What number is assigned to a specific area in the IPC and FEWSNET data is the result of analytical judgment rather than purely an amalgamation of data. Data on nutrition, consumption, mortality rates, livelihood changes, and other relevant food security data is taken into account to come to this analytical judgement, but conflict data is generally ignored.

It is striking that analyses on food security rarely takes conflict data into account. Datasets like ACLED could be used to get an indication of levels of armed violence in particular areas of a country. This information could, in turn, be used to get better predictions of food security. Political marketplace metrics can similarly be linked to food insecurity and

<sup>107</sup> de Waal A. (2015) *The Real Politics of the Horn of Africa: Money, War and the Business of Power*, Cambridge: Polity.

<sup>108</sup> For example, see: Jones BT, Mattiacci E and Braumoeller BF. (2017) Food scarcity and state vulnerability: Unpacking

the link between climate variability and violent unrest. *Journal of Peace Research* 54: 335-350.

<sup>109</sup> Partners G. (2012) *The Integrated Food Security Phase Classification. Technical Manual Version 2.0: Evidence and Standards for Better Food Security Decisions.*

humanitarian crisis. It is necessary to link the political marketplace to the food security because the political marketplace generates the predatory politics that creates food insecurity. Indeed, political entrepreneurs often reduce people to commodities or instruments of bargaining. The CRP research, on the links between the political marketplace, conflict, and food security would thus have to address questions about how conflict assessment data including violent incident reporting can be factored in to projections of humanitarian crises: is it possible to confidently predict that certain patterns of violence are predictors of worsening hunger? To answer this question, it will be examined how the processes of obtaining and analysing conflict data and food security data can be aligned, with the aim of enriching both. In addition, it could be examined how peace events and governance factors help in assessing food security.

An analysis on the links between armed conflict events and food security will have to deal with at least three methodological challenges. First, it will be necessary to determine the appropriate time horizon over which the effects of armed conflict happen. Armed conflict probably has an immediate effect on food security, but perhaps the level of armed violence over the course of a year has to be taken into account as well. Second, it will be necessary to determine the spatial effects of armed violence on food security. Violence in one place, may affect food security in other places. For instance, armed violence could undermine the transport of food from ports and over roads. It is very challenging to model these spatial effects. Third, the causal direction of the correlation between armed violence and food security is difficult to establish.

In short, none of the current humanitarian data programs used to assess food security take levels of conflict into account. The CRP could explore ways in which conflict data could help inform IPC assessments.

### **Comparing Data Collection Methodologies and Setting up a Network of Networks**

The major obstacle to data-driven conflict research is arguably not necessarily a lack of data, but that different datasets have not been merged enough. The main reason for this is that these datasets are all developed independently from each other, often with a singular purpose. Hence, what is necessary in the future is creating 'networked' data – a network of network data – through merging different types of data on the basis of common guidelines. The CRP

could lead a collaborative project that would try to develop these type of guidelines and to create networked data. This project would also make a comparison possible of the strengths and weakness of different data sources, as well as the different methodologies used by actors collecting conflict data.

ACLED and UCDP GED data is based on media reporting. A previous comparison between MAC data and ACLED data for Darfur showed that ACLED underreported on armed clashes. Yet, the quality of JAMC data might be uneven across time and space (moreover, JMAC data is only available for countries in which a UN peace mission is active). A relatively new type of data collection is currently pursued by the Carter Center. The Carter Center is pioneering new methods of recording conflict data in Syria, heavily drawing on social media to track events. This is an exciting new development, but it is currently unclear the extent to which the Carter Center fails to record certain events and what type of events would be missed. Comparing the different data collection efforts in Syria might give insight into the different biases of each data source.

This research project would involve the "standardisation", "pooling" and "validation" of data on the war in Syria. The Syrian case is a good choice for this project because it is well documented and extremely complex. "Standardisation" refers to the definition of guidelines for a lowest common denominator across datasets which they would have to fulfil to enable pooling. "Pooling" refers to the merging of existing datasets (e.g. the Carter Center and the London School of Economics datasets on Syria) to connect multiple topics and test richer hypotheses. "Validation" is the use of topically similar, overlapping datasets to check quality and learn methodologically. The overlap of these different datasets will make it possible to improve methodologies and data quality.



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