Perspectives on War
Collecting, Comparing and Disaggregating Data on Violent Conflicts
Sven Chojnacki* and Gregor Reisch**

Abstract: Generating data is analytically crucial for the identification of empirical trends and for theoretically explaining the occurrence, escalation and duration of war. Practically, it contributes to the objective of developing preventive measures. In order to evaluate the evolution and transformation of war, in this article, we first examine the macro-trends for the period between 1946 and 2007 compiled in a new Consolidated List of Wars. In the second part, we compare data from major data-gathering projects to assess both their degree of convergence and their usefulness for the scientific study of war. In the final section we open the black box of war. We present disaggregated violent events for the case of Somalia which is a striking example of organized violence between mostly non-state armed groups, the collapse of state authority and variations of violent events in time and space.

Keywords: war, armed conflicts, violent events, data projects, quantitative conflict research

1. Introduction
The scientific study of war has come a long way. Incremental progress has been achieved with several islands of empirical findings and theoretical explanations. Today, we can build both on empirical support for specific propositions (e.g. democratic peace) and on productive theoretical debates (see, for example, the controversy over greed and grievance in civil wars or the growing incorporation of gender and civilian agency). Besides this good news of both additive and – at least to some degree – integrative accumulation of knowledge, a number of practical and analytical issues remain controversial or unresolved.

First and foremost, war as a social institution and a mechanism for the allocation of certain values is still a present feature of politics. It thus remains of central importance for the study of politics and social processes in general and conflict escalation in particular. While intra-state violence is the dominant form of war in the contemporary international system, it would be premature to regard inter-state wars as on the brink of extinction. The enduring rivalry between India and Pakistan or the recent war in the Caucasus between Russia and Georgia in August 2008, as well as the interventionism of some democracies in Kosovo, Afghanistan and Iraq raise some doubt about this hypothesis.

Secondly, in contradiction to the underlying logic of intersubjectivity the “world of war is what researchers make of it” (Eberwein/Chojnacki 2001: 29). The major data gathering projects such as the Correlates of War project (COW), the Uppsala Conflict Data Program (UCDP) or the Arbeitsgemeinschaft Kriegs- sachenforschung (AKUF) at the University of Hamburg portray different worlds of wars depending on different definitions, operational criteria and classifications. One price to be paid for that pluralism is the problem of credibility in regard to con-
from the Arbeitsgemeinschaft Kriegsursachenforschung (AKUF), the Heidelberg Institute for International Conflict Research (HIK), the UCDP/PRIO Armed Conflict Dataset, and CoLoW, in order to evaluate both their degree of convergence and their usefulness for the scientific study of war. In the final section, we present a disaggregation of war for the case of Somalia, a country which is a striking example for war between mostly non-state armed groups, the collapse of state authority and variations of violent events in time and space. The data was collected by the Event Data Project on Conflict and Security (EDACS) which is part of the research center Governance in Areas of Limited Statehood. New Modes of Governance? (SFB 700) at the Free University of Berlin. While the SFB 700 in general focuses on "new" or hybrid modes of governance in areas of limited statehood, EDACS collects and analyzes event data in order to explain the evolution and demise of armed conflict and security in zones of turmoil in failed states.

2. The Consolidated List of Wars (CoLoW)

Among conflict researchers there is a growing consensus that the "classical" state-centric conception of war can no longer grasp a large number of armed conflicts (e.g. Bakonyi et al. 2006; Harbom 2007; Kaldor 1999). Departing from this observation, Chojnacki (2006) has developed a broadened typology of war which proceeds from the political status of the protagonists and from territorial expansion. Four core types of war result from this:

1. inter-state wars (between at least two sovereign states),
2. extra-state wars (between a state and one or more non-state groups outside its territorial boundaries),
3. intra-state wars (between a government and one or more non-state parties within the boundaries of an internationally recognized state), and
4. sub-state wars (between mostly non-state actors within or across borders).

The proposed integration of a sub-state war category reflects the debate about the changing patterns of warfare in the post-Second World War period and follows the underlying rule that a classification of war is best arranged according to the political status of the protagonists (see, similarly Sarkees/Singer 2001). In consequence, wars between private armed groups can be made accessible for both empirical and systematic analyses (concerning their occurrence, duration, and correlates) and for comparative purposes (in relation, for example, to intra-state and inter-state wars). The degree of differentiation is sufficient in order to obtain mutually exclusive categories which allow the comparative study of wars (Chojnacki 2006).

In conceptual terms, war is defined as an extreme type of militarized conflict. It results from the breakdown or absence of the state monopoly over the use of force. Therefore, we need an expansion of our existing typologies including non-state actors and information on civilian casualties. The scientific study of war needs to be adaptive, especially, when it comes to the chameleon like nature of war – to paraphrase Clausewitz.

Finally, the concept of war is an aggregate of various interactions and violent events with a predefined threshold of victims between political entities. But war comprises different social processes (Wood 2008) and multiple paths lead to the outbreak and escalation of war (see Bremer 1996 for internation wars; Kalyvas 2006 for the logics of internal violence). This implies that wars do not necessarily start as wars from the outset. Moreover, the existing yearly based country-level datasets presented by the leading data gathering projects make it difficult to analyze the spatial and temporal dynamics of violence (Buhag 2007; Restrepo et al. 2006). As a consequence, a new generation of projects is disaggregating the geographical and temporal dimensions of wars. Data-gathering projects like Armed Conflict Location and Event Data (ACLED) at the International Peace Research Institute, Oslo (PRIO) or the Event Data Project on Conflict and Security (EDACS) located at the research center SFB 700 Governance in Areas of Limited Statehood, Berlin, open the black box of war, which allows more precise analyses of time-dependent variations of conflict and regional or local differences in the occurrence of violent events (Chojnacki/Metternich 2008; Raleigh/Hegre 2005).

In order to ascertain and evaluate practical and analytical challenges, in the first section the article examines trends and developments of wars for the period between 1946 and 2007 compiled in the Consolidated List of Wars (CoLoW). This overview allows an assessment of how different types of wars have evolved over time and whether we can indeed witness the transformation from ‘old’ to ‘new’ wars during the past decades. It will be accompanied by a special focus on patterns and trends of war for the year 2007. In the second part, we compare data

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1 In the future, the Consolidated List of Wars and results from the Event Data Project on Conflict and Security will be presented in Security and Peace on a yearly basis. In addition to the empirical findings there will be a varying focus on a special issue concerning the scientific study of war.

2 For further details see Risse/Lehmkuhl (2006) and http://www.sfb-governance.de/en/index.html

3 This definition of sub-state wars also allows for the registration of some critical cases which by now were allocated to other categories or completely fell outside registration altogether. This applies not only to events after the end of the Cold War, but to developments after World War II in general (e.g. Lebanon, Afghanistan).
ly define the intensity of violence, the idea of a quantitative threshold is retained (Collier/Hoeffler 2001; Small/Singer 1982). The following criteria are applied to determine wars: With regard to inter-state wars, the Correlates of War Project’s (COW) threshold of 1,000 “battle deaths” for the whole conflict among military personnel only is kept. However, a differentiation is introduced in order to grasp the specific character of extra-state, intra-state, and sub-state wars: these conflicts resulted in at least 1,000 military or civilian deaths over their entire duration and at least 100 deaths per conflict-year. The reason is quite simple: in contrast to interstate wars, these wars are usually not characterized by huge decisive battles between regular armed forces but much more frequently by small skirmishes and focused attacks against civilian targets.\(^4\) In order to grasp the possible transition from one war type to another (such as the internal developments in Iraq reveal) we scrutinize and record changes in the types of war on an annual basis.

2.1 Patterns of War, 1946-2007

Based on the definitional and operational criteria described above, a total of 178 wars were coded for the period since World War II.\(^5\) By far the largest number of these, two thirds – or 118 to be precise – are intra-state wars. States fought 24 wars against each other, making inter-state war the second highest-ranking type right before extra- and sub-state wars with 19 and 17, respectively. Figure 1 shows how the yearly number of wars has changed over time.

The empirical results clearly indicate a dominance of intra-state wars at the global level for nearly the entire period. Since the 1960s, wars inside states are in the majority, reaching a peak proportion between 1980 and the mid-1990s. Since the end of the Cold War, the annual frequency of intra-state wars has decreased slightly, but they remain the dominant war phenomenon on a global scale.

Nevertheless, the relative importance of sub-state wars has grown over the last two decades. Since the end of the Cold War, the proportion of sub-state wars has increased from not even five percent (1971-80) to roughly a quarter, measured by the total number of wars per annum. Current sub-state wars in Somalia or the eastern parts of the Democratic Republic of Congo (DRC) are mainly fought between armed non-state actors. In these instances, actor constellations can no longer be reduced to the state vs. more or less organized rebel groups, which direct their political and military strategy in accordance with the principle of statehood. Rather, multiple zones of military and political control emerge, giving rise to partially overlapping loyalties and identities and the emergence of alternative, territorially restricted forms of coercive violence. This war type has somewhat superseded extra-state war, which gradually decreased in importance after the era of decolonization in the 1970s. However, the war between Israel and Palestine and armed resistance within at least temporarily dependent territories (e.g. Kosovo, Iraq) support the assumption that extra-state wars will not vanish completely.

Similarly, inter-state wars remain a part of the reality of international politics, but on a rather low level as well. Yet, the recent full-scale war in the Caucasus between Russia and Georgia over the political status of South Ossetia reminds us that drawing conclusions on inter-state violence and a potential declining

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\(^4\) In order to rule out massacres, and sporadic violence the conflict accounted for at least 25 deaths on each side per year and 100 death per year altogether. The beginning year is the first year in which at least 100 people were killed. A war is rated as having ended only if the intensity of conflict has remained below the threshold of 100 deaths for at least two years, if actors give up violence or if an effective peace agreement is concluded. If fighting within a state occurs in distinct regions and between different rebel groups, multiple wars are coded. For further details see Chojnacki (2006).

\(^5\) Coding manual and replication data are available at http://www.sfb-governance.de/teilprojekte/projektbereich_c/c4/data.html
relevance for regional and international security would be premature.

Concerning the durability of different war types, the order of relative relevance slightly changes. Of the wars which have ended (N=150) in the period under consideration, extra-state wars were the most persistent with a mean duration of 7.6 years. Intra- and sub-state wars lasted for 6 and 6.1 years while interstate wars were fought on average for just 2.1 years. The most war-prone decades in terms of war onsets were the 1970s and the 1990s with 36 new wars each. If the trend for the running decade continues it will be the one with the least outbreaks of wars since the 1950s with its 22 onsets.

From a regional perspective, Africa was the most war-ridden continent until the end of the last century, experiencing 62 of 178 war onsets between 1946 and 2007. The numbers for Asia, the Middle East, the Americas and Europe are 56, 30, 17 and 13, respectively. Only the current decade is experiencing a slight shift towards Asia. 6 of the 16 onsets since the year 2001 were in Asia and Asia is adversely affected by 12 of the 28 ongoing wars in 2007 followed by Africa with 4 and 11 wars in that order.

2.2 The World of Wars in 2007

Africa is not only special in regard to the total number of wars, but also in the amount of privatized large-scale violence it has experienced: 9 out of 17 sub-state wars have been fought in Africa. And with inter-communal violence in Nigeria and factional fighting in the DRC and in Somalia, the largest number of ongoing sub-state wars takes place there as well.6

Africa’s oldest internal-war is the one in southern Sudan, which devastated the country for 25 years and continued in the shadow of the mass violence in Darfur. More sub-Saharan internal-wars took place in Chad, Ethiopia, Nigeria’s delta region and Uganda. The violence in Burundi nearly ceased completely and it has to be determined on the basis of numbers for 2008 if the war actually ended in 2007, because it might have not reached the required threshold for two consecutive years. In the Maghreb, violence re-surfaced in Algeria after it had de-escalated in 2006.

As mentioned above, Asia is not only the continent with the most ongoing wars; it is hosting the longest running war as well. The war in Myanmar7 between diverse ethnic groups and the government started in 1948 and has been fought for 60 years now. In 2007 it was overshadowed by protests flaring up in August, leading to the largest anti-government demonstrations in twenty years, which were brutally suppressed by the military junta later that year. Other ongoing wars in Southeast Asia include the two very durable wars in the Philippines which both started at the beginning of the 1970s and the rather young war in Thailand, which started in 2004 with attacks by Muslim insurgents in the southern part of the country. Another part of Asia was plagued by even more war. Seven wars in 2007 took place on the Indian subcontinent where India alone had to deal with four different wars on its territory. Furthermore, fighting in the region slowed down significantly in Nepal, continued on a very high level in Sri Lanka where the war restarted in 2004 after two years of very low levels of violence and intensified in Pakistan, which experienced Asia’s only sub-state war.

In Afghanistan the intensity of fighting increased because battle efforts by the Taliban insurgency reached new heights forcing the NATO-led International Security Assistance Force (ISAF) to push its troop levels from 31,000 in October 2006 through 41,000 in October 2007 to 52,700 (current as of 10 June 2008). The only other internal-war fought in the context of massive international intervention was the war in Iraq. Attacks against the coalition forces and its partners in Iraq dropped significantly in the second half of 2007, as did Iraqi civilian fatalities which reached their lowest rate since the end of 2003 according to The Brookings Institution’s Iraq Index8. The second war fought in the Middle East was the Israel-Palestinian conflict, which was the only extra-state war ongoing in 2007.

In Europe, the renewed war between Turkey and the Kurdistan Workers’ Party (Partiya Karkeren Kurdistan, PKK) shifted dynamics in 2007 when Turkish troops crossed the border into northern Iraq to attack PKK headquarters adding an extra-state dimension to the war. Right after the first war between Turkey and the PKK that ended in 2001, the Russian-Chechnyan war is the most durable in Europe since 1946. It started in 1999 and was still waged in 2007, but on a slightly lower level of intensity as in the years before, declining from full-scale war with more than 1,000 casualties in 2004.

After wars ended in El Salvador (1991), Guatemala (1995) and Peru (1999), the 43 year old war in Colombia is the only ongoing war in the Americas making it the continent with the least wars in 2007 right after Australia/Oceania with no ongoing wars. These two continents are exceptional in even more ways, being the only ones, which experienced no war onsets since the end of the Cold War. Furthermore, they are the only regions since 1946 without the occurrence of sub-state wars. Be that as it may, with the drug economy providing money for a large number of armed groups it seems unlikely that the Americas will become completely war-free in the near future.

This overview shows how the world of wars looks through the lens of the CoLoW. In the following section of this article we will compare the above outlined developments with empirical findings of other data projects, aiming for a more comprehensive understanding of war and its scientific coverage.

3. Different Worlds of War? A Comparison of Warlists

In order to explain the occurrence and duration of different classes of war and to contribute to the objective of prevention, empirical research needs plausible operational definitions and reliable data – and, of course, theoretical foundations. As we know that concepts and definitions of war are closely linked

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6 For a more detailed analysis of sub-state wars by example of the conflict in Somalia see the fourth part of this article.

7 With the data available it is very difficult to disaggregate potentially distinct episodes of conflict in Myanmar. Therefore, the conflict is coded as one war until data for Myanmar is gathered using the EDACS criteria.

The point of departure for these considerations was a comparison of data on
is clearly the case considering the Korean War (an inter­
tary intervention can take place in a variety of settings. This
and why other types are not being considered. Evidently, mili
CoLoW integrates the sub­state type of war, UCDP/PRIO in
Wars, but differs with respect to the fourth category. While
this typology overlaps closely with the Consolidated List of
alized internal
armed conflict:
Thus similar to CoLoW, UCDP/PRIO uses quantitative criteria.
In classificatory terms, the program also integrates four types of
armed conflict: extrastemic, interstate, internal, and internationalized internal of which the latter is characterized by interven­
tion from secondary parties on one or both sides. Obviously, this
typology overlaps closely with the Consolidated List of
Wars, but differs with respect to the fourth category. While
CoLoW integrates the sub­state type of war, UCDP/PRIO in­
troduces internationalized internal armed conflicts. Notwith­
standing the goal of a sound classification, it is unclear why the ‘intervention criterion’ is proposed only for internal conflicts
and why other types are not being considered. Evidently, mili­
tary intervention can take place in a variety of settings. This
is clearly the case considering the Korean War (an inter­state
war) or the sub­state war in Liberia in the 1990s.13 Irrespective
of this particular weakness and given the perceived conceptual
limitation of a state­centered perspective, UCDP recently de­
veloped a new dataset in which data on non­state armed conflicts
is collected promoting a more comprehensive analysis of the
incidence of war (Kreutz 2008). But due to the limited time­
span (2002­06), we have excluded this promising new dataset from our analysis.
In contrast to the Consolidated List of Wars and UCDP/PRIO, both
the AKUF group and the HIIK make use of qualitative de­
scriptions of armed conflict and war. AKUF defines war as “vio­
| lent mass conflict” between armed forces of two parties or more
(of which at least on one side regular armed forces of a particular
government are involved) with a minimum of control and or­
ganization on both conflicting sides and a “certain durability”
indicating a systematic strategy of fighting (Schreiber 2008: 10).
Similar to AKUF, the Heidelberg group uses qualitative criteria
such as “certain continuity”, “extensive measures” where the
destruction is “massive and of long duration” (HIIK 2007).14
Obviously, the definitions of these qualitative projects can lead
to different interpretations of specific events, complicate the
replication of the data and, therefore, undermine the criterion
of intersubjectivity.15 A major advantage of the AKUF dataset,
however, is the descriptive information provided for single wars
that are classified as anti­regime, autonomy and secession, inter­
tate, decolonization or other intra­state war.16 HIIK in con­
trast, offers only a simple dichotomous typology differentiating
between internal wars and international wars.17
By including all types of war, the results for the yearly number
of ongoing wars reveal partly different worlds of war on a glob­
al level.18 Given the different operational criteria, we should
expect some level of agreement between similar projects, i.e.
greater discrepancies between quantitative­based and qualita­tive­oriented research programs. Surprisingly, given its broad
and fairly vague definition of war, HIIK offers the lowest values
for all war­years. All other projects report numbers of wars three

9 The point of departure for these considerations was a comparison of data on
violent conflicts, conducted by Eberwein and Chojnacki (2001). The key fin­
ding was that the data­gathering projects analyzed showed different ‘worlds’
of violence irrespective of whether they were based on either qualitative or
quantitative operational criteria.
10 Therefore, we have excluded the following projects: (a) the war data from the
Correlates of War project (which has been the most influential research pro­
gram on the scientific study of war for more than three decades), because of
the limited time­span of currently available data (­1997); (b) information from
the Political Instability Task Force which focuses only on revolutionary wars,
ethnic wars, genocides, and politicides; (c) the Major Episodes of Violence com­
plied by Monty Marshall at the University of Maryland, because it offers no
precise differentiation between the two conflict intensities of “major episodes
of political violence” and “war” including a vague definition of “war”.
11 For the following comparison the UCDP/PRIO Armed Conflict dataset v.4­
2008, 1946­2007 was used, available at http://www.princeton.edu/research/UCDP/
12 UCDP/PRIO also collects data on “minor armed conflicts” with at least 25 but
fewer than 1,000 battle­related deaths in a given year.
13 Therefore, and in contrast to UCDP/PRIO, unilateral or multilateral inter­
vention should not be treated as a type of war in its own right, but rather as
a particular form of external conflict behaviour that can then be related to
the respective types of war. By incorporating military intervention into the
scientific study of war in this manner, it would allow for an assessment of
qualitative transformations of violence over time, thus rendering a theoreti­
ically and practically important point of departure for clarifying the relation
between external intervention and war dynamics (Chojnacki 2006).
14 In the following comparison we included the “high” intensity levels of “severe
crisis” and “war”, but excluded the “low” and “medium” levels of conflict, be­
dcause of the non­violent or sporadic character of these types of disputes. HIIK
defines “war” as “violent conflict in which violent force is used with a certain
continuity in an organized and systematic way. The conflict parties exercise
extensive measures, depending on the situation. The extent of destruction is
massive and of long duration.” A “severe crisis” is defined by violent force that is
used repeatedly in an organized way (HIIK 2007).
15 In social sciences the criterion of intersubjectivity is the regulatory mecha­
nism used to compensate for the definitional voluntarism. Any person must
be able to reproduce the same dataset using the same criteria and, by logical
implication, to reproduce thereby the results obtained by others (Eberwein/
Chojnacki 2001: 8).
16 For the data comparison we use the information found at AKUF’s web page:
http://www.sozialwiss.uni-hamburg.de/ipw/Akuf/home.html.
17 In 2006, the new category of transnational conflicts was introduced in the
Conflict Barometer. Nevertheless, in the Conflict Barometer 2007 this ca­
category is regarded as intra­state conflict, because “(...) the structure of these
conflicts (non­state actor vs. state or another non­state actor) resembles the
structure of intrastate conflicts (...).” (HIIK 2007: 3)
18 For more precise information concerning the similarities or divergences be­tween several datasets for the period 1946­1999 see Eberwein/Chojnacki (2001).
Figure 2: Yearly number of ongoing wars by data project, 1990-2007

Figure 3: Yearly number of ongoing intra-state wars by data project, 1990-2007
to four times higher than that of HIJK. Because of the extent of the difference, we have decided to include the HIJK “high intensity level” of “severe crisis” represented by the dashed line. By offering a similar pattern at a quite higher level, the HIJK data now converge at least for the period 1990-96 with the warlist presented by AKUF, but diverge considerably thereafter. Equally interesting is the observation that AKUF and CoLoW show a very similar pattern until 1999 and subsequently increasingly converge. In contrast, UCDP/PRIO oscillates between CoLoW and AKUF until 2000, but takes a very different turn after 2001. Besides considerable differences all datasets report at least a minor or, in the case of AKUF, more of a major decline in the occurrence of wars since the beginning of the 1990s – coming, however, from different levels.

We find a slightly different overall picture of violence comparing the dominant class of ongoing intra-state wars reported by the four datasets. Here AKUF and UCDP/PRIO are closer and show a similar pattern of decline, but at different levels and with different trends since 2003. In contrast, the Consolidated List of Wars (CoLoW) indicates a more constant level of organized violence within states. Again, HIJK is a clear outlier in this group with the lowest amount of intra-state war-years and distinct annual variations in wars and severe crises (the dashed line) for the last decade.

Yet, another comparison (see Table 1) including the types of war also uncovers that looking at the bare numbers CoLoW and UCDP/PRIO show the greatest agreement, but differ along identified war types. The level of disagreement concerning sub-types of war within states, which are only presented by the AKUF Group and the Consolidated List of War, is also remarkable. Most notably, both projects report equal values for anti-regime wars, but different worlds of secessionist wars. Furthermore, AKUF’s type of miscellaneous wars is more a residual category for unclear cases. Striking, however, is that the considered cases (e.g. Somalia) overlap to some degree with the sub-state wars listed in the CoLoW project. CoLoW and AKUF also offer insights into the occurrence of military interventions independent of the type of war.

The reasons for the observable variations are manifold. A closer look at the data reveals that some of the differences are related to different starting and end dates depending on the proposed coding rules, as well as to the issue of splitting specific wars into several separate armed conflicts (e.g. Columbia which is considered as two wars by the AKUF group). Moreover, we find several war-years neither listed in UCDP nor in CoLoW. A possible explanation is that AKUF includes many periods of inactivity boosting the total amount of war-years. In the case of HIJK, several modifications of coding rules within the last years may have a negative impact on the precision of the collected data. The main reason for the divergence, however, is that qualitative projects build on vague or wider definitions of war. Like HIJK, they are listing major armed conflicts as lower levels of intensity (e.g. “severe crises”), which are considered as wars by other projects.

The attempt by the Heidelberg group to integrate different stages of conflict (latent conflict, manifest conflict, crisis, severe crisis, war) is a necessary step in the direction of uncovering the escalation and de-escalation processes of armed conflict. The lack in reproducible standards, however, limits its use for determining both stages of armed conflict and a precise timing of escalatory shifts in the different intensity levels identified. Moreover, the term “severe crisis” is somewhat misleading. It trivializes several cases that have been compiled as wars by all other projects and therefore implies a more optimistic perspective on the world of wars. As a qualitative project, AKUF offers

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20 As results of an earlier study have shown, all war types could be subject to interventionism, but with the highest risk for sub-state wars (Chojnacki 2006). Taking this into account, the interventions in Liberia, Bosnia, Iraq, and Afghanistan or in the DRC indicate an internationalization of conflict dynamics as well as the emergence of complex conflict systems.

21 Most striking in this respect are the low numbers for war onsets in the UCDP/PRIO data. These are due to a very recent change in coding rules for the version 4.2008 of the Armed Conflict Dataset, which is differentiating between startdates of conflicts and conflict episodes (Harbom et al.2008b: 7f.).

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Table 1: Comparison of war types by total war-years (ongoing) and total number of onsets

<table>
<thead>
<tr>
<th></th>
<th>AKUF</th>
<th>CoLoW</th>
<th>HIJK</th>
<th>UCDP/PRIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ongoing</td>
<td>onset</td>
<td>ongoing</td>
<td>onset</td>
</tr>
<tr>
<td>Inter-state</td>
<td>30</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Intra-state</td>
<td>591</td>
<td>60</td>
<td>422</td>
<td>38</td>
</tr>
<tr>
<td>Anti-regime</td>
<td>301</td>
<td>31</td>
<td>309</td>
<td>28</td>
</tr>
<tr>
<td>Secessionist</td>
<td>290</td>
<td>29</td>
<td>113</td>
<td>10</td>
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<tr>
<td>Internationalized</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Extra-state/ Decolonization</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>3</td>
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<tr>
<td>Sub-state</td>
<td>-</td>
<td>-</td>
<td>91</td>
<td>13</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>33</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>656</td>
<td>73</td>
<td>529</td>
<td>58</td>
</tr>
</tbody>
</table>

1 Unfortunately there was no data available for war onsets from HIJK.
2 HIJK is differentiating between various dimensions of conflict such as territory, secession, decolonization, autonomy, system/ideology, national power, regional predominance, international power, resources, and others. For reasons of comparison, these dimensions or items cannot be regarded as distinct classes, because they are not mutually exclusive.
3 AKUF and CoLoW have no distinct category of internationalized war, but indicate whether single wars are subject to military intervention by third parties.
4. Disaggregating War

Focusing on war as a defined aggregate of violent conflict is a necessity for the scientific study of the duration, transformation, and consequences of extreme periods of violence between or within states, but it does not tell us much about the spatial and temporal dynamics of warfare. When a particular dataset identifies a country as affected by war, this does not imply that violence occurs continuously and all across its territory. Both for theoretical and practical reasons a process perspective is needed. Thus, if we assume that war results from the interaction process between at least two parties and consists of a series of discrete actions, we need data on single violent events with exact information on intensity, participants, and geographical location.

One approach allowing a more precise analysis of time-dependent variation of violence and its geographical dispersion is presented by the Event Data Project on Conflict and Security (EDACS) which collects, integrates and analyzes data on violent events (Chojnacki/Metternich 2008). The basic unit of observation in the EDACS dataset is the single event, which is defined as a violent incidence with at least one casualty resulting from the direct use of armed force. For every event the number of fatalities is given and whenever possible the dataset provides a differentiation between civilian and military casualties. This approach solves the problem of defining thresholds (Collier/Hoeffler 2001; Sambanis 2004) as we operate with continuous numbers of casualties. Following the logic of disaggregation, the dataset contains detailed information on dates, actors, intensity, and the latitude and longitude of various regions, cities and roads which are identified locations of violent events (for a similar approach see Raleigh/Hegre 2005). In order to account for different patterns of violent incidences, EDACS also collects data on two types of violence: fighting and one-sided attacks. Fighting is defined as armed interaction between two or more organized groups. In consequence, we define one-sided attacks as direct unilateral violence by organized groups aimed at civilian or military targets. Since one-sided attacks can also be directed at military targets, the definition proposed by EDACS is obviously dissimilar to UCDP’s concept of “one-sided attacks independently from who is targeted.

For operational procedures and the entire list of variable see the coding manual at http://www.sfb-governance.de/teilprojekte/projektbereich_c/c4/index.html

For the purposes of data collection, the information is drawn from the information management system LexisNexis including all the articles published in major newspapers (New York Times, The Guardian, Washington Post) and comprehensive news services (BBC Monitoring).

22 Both AKUF (with a yearbook and reports on ongoing wars as well as an war archive at their website) and HIHK (with the yearly published "Conflict Balance") offer interesting insights on armed actors, issues at stake, and conflict processes over time.

23 We thank Max Grömping and Michael Spiess from the EDACS team for their superb research assistance. Coding manual and replication data for this article are available at http://www.sfb-governance.de/teilprojekte/projektbereich_c/c4/data.html

Figure 4: Number of deaths per year for Somalia by data project, 1990-2007

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violence” (Eck/Hultman 2007). The idea behind this decision is to keep the type of target and the type of violence separate. In the following we take the EDACS data to open the black box of war. For an introduction of first empirical results we use the case of Somalia, which is a controversial case across different datasets as well as a striking example for armed conflict between mostly non-state armed groups. Somalia has been without a functional government since January 1991. Most of the fighting and one-sided violence since then occurred between rivalling militias and did not involve government forces. As a result it has been qualified as a sub-state war by CoLoW. Economic decline as well as the collapse of the education and health systems, which already began during the 1980s, caused grievances among the most disadvantaged groups and deepened interclan animosities (Menkhau 2007b: 80). The creation of armed militias in turn led to a huge proliferation of small arms and the decline of the state monopoly on the use of force. Only since 2000 (Transitional National Government – TNG) alternatively since 2004 (Transitional Federal Government – TFG) something resembling a state actor exists as a possible war participant. This poses a challenge for data projects like AKUF or UCDP/PRIO, which by definition are only dealing with wars where the government of a state is one of the conflict parties. Nevertheless, AKUF as well as UCDP/PRIO are listing Somalia for most or all of the years in their datasets. The AKUF group classifies Somalia as a “miscellaneous intra-state war” with direct foreign involvement starting 1988. For UCDP/PRIO it is an internal armed conflict (episode start years: 1978, 1982, 1986, 2001, 2006) with varying conflict parties and several years missing for the period 1990-2007 (not included: 1997-2000, 2003-2005), and an internationalized armed conflict in 2006 and 2007. This is also reflected in Figure 4, which compares the annual deaths reported, by UCDP and EDACS. Surprisingly, UCDP reports an extreme peak for 1991 (at least 10,000 battle related deaths), but a relatively small amount of yearly deaths in the following years as compared to EDACS. Also striking is the observation that the number of annual deaths reported by EDACS (fighting only) remains on a relatively high level (between at least 200 and 1,250 deaths per year and with an yearly average of over 600 deaths) even in the years that are missing in the UCDP dataset. A possible explanation for these discrepancies is the use of different news sources (and in case of UCDP a change of sources over time). However, the escalation process 2006-07 including foreign military interventions by Ethiopia shows a similar pattern in both datasets. By disaggregating warfare in Somalia, EDACS contains a sum total of 1.829 violent events for Somalia with a minimum of 22,322 fatalities in a vector (point) format. Figure 5 maps all reported violent events for the period 1990-2007. Obviously, violence is not distributed across the entire territory, but very often takes place close to strategically valuable locations such as

27 For the intensity level of war HIJK just takes account of the years 2006-2007 and the TFG as a conflict party. For lesser intensity levels HIJK lists five more conflicts. But of these just two are conflicts with only non-state actors as conflict parties (Puntland vs. Somaliland, 1998-2007; Maakhir vs. Puntland, 2007).

28 The annual deaths compiled by EDACS will in the future also be used for the Consolidated List of War.

29 The actual proportion of total events and deaths due to direct violence is probably higher than that reported in the selected articles by LexisNexis. We estimate, however, that the results are reliable and add to the overall picture. Conceptually, EDACS collects both “minimum” and “maximum” values for fatalities. For the purpose of this analysis we have decided to use the “minimum” of fatalities. In the future we will offer a best estimate measure.
cities, harbors, roads, or junctions. Mogadishu, Kismayo and Baidoa in Southern Somalia are most affected by violence during the entire period, whereas the central and northern parts experience fighting and one-sided violence to a lesser extent. Especially the capital remains to be of considerable importance even in times of complete state collapse. But the distribution of violent events also indicates that Somalia in the course of war decayed into small zones that were controlled by clan-based militias and warlords.

EDACS not only points to a great variance in the values of events and deaths over time and in space, but also to a continuing trend of fragmentation, i.e. factional splitting of non-state actors. As Figure 6 shows, warfare in Somalia is characterized by a large number of mostly non-state actors, which were active in all years of the period under observation. It is noticeable that armed actors appear to be on the increase after 1992 when territorial control vanished and more and more non-state parties fought over scarce resources and political power. Even political autonomy and the establishment of relatively stable structures of governance in Northern Somalia (Somaliland, Puntland) are no guarantee for a decrease in numbers of violent actors and events (for ongoing violence at the borders of Somaliland and Puntland see Figure 7). The dramatic upturn in South-Central Somalia and in Mogadishu as well as the increase in local violent events 1999 reflect a more fragmented security environment (Menkhaus 2007a) with warlords losing control and local militias gaining importance. The following decline 2002-05 can be explained due to the regression of inter-clan fighting.

Finally, Figure 7 disaggregates the Somali war one step further and presents the violent events on an annual basis. Two empirical findings are noteworthy: the annual statistics support time-dependent and regional variations in warfare and violent events diffuse over time which is going hand in hand with the factional splitting of armed groups at the end of the 1990s. Figure 7 also provides evidence that temporal effects and spatial dynamics of fighting might be highly dependent on third party intervention. As we know from qualitative studies and our data, the U.S. intervention and the United Nations Operation in Somalia (UNOSOM) in the 1990s intensified informational asymmetries and threatened the interest of a number of military leaders. As a consequence, fighting as well as one-sided violence increased in the period 1993-1995. In contrast, the time between 1995 and 2000 was characterized by a lack of external support and is best understood as a period of „armed peace“ which was used by local armed groups to consolidate power. In some circumstances these actors even introduced elements of security governance (rudimentary taxation systems, territorial limited orders of violence). In the following years, neither the forming of the Transitional National Government in 2000 nor the Transitional Federal Government in 2004 fundamentally changed the nature of Somalia’s war (see Figure 7). Violence escalated again vertically and horizontally with the rise of the Union of Islamic Courts (UIC)30. Serious armed clashes between well equipped Islamist militias and the inter-clan “Alliance for Restoration of Peace and Counter-Terrorism” in January and February 2006 led to the capture of Mogadishu and the expansion of territorial control. Feeling threatened by the UIC uprising, Ethiopia officially declared war in December 2006 and defeated the UIC by January 2007 with a massive military presence.31 Quite interesting is the observation from our data that violence in the context of the Ethiopian intervention has

30 The UIC became politically and militarily active in 1999.
31 Since March 2007 the African Union Mission to Somalia (AMISOM) with approval of the U.N. is mandated to support transitional governmental structures and a national security plan.

Figure 6: Number of violent actors in Somalia by year and aggregated region, 1990-2007

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Figure 7: EDACS Somalia Violent Events on an annual basis, 1990-2007
become more diffused compared to the UN-operation, because local warlords have decided to build alliances with the Ethiopian forces (see also Menkhaus 2007b). Thus until today, for both local non-state parties and regional actors the logic of violence seems to be more promising than the road to peace.

5. Conclusion

At the beginning of this article we argued that the scientific study of war has come a long way, but still has a way to go. A closer look at the world of war reveals, first, that violence at the highest level of armed conflict is still a way of enforcing decisions and allocating values. Secondly, the proposed integration of a sub-state war category underlines that the chameleon of war is once again changing its appearance and draws our attention to similarities and dissimilarities across different classes of war. The Consolidated List of Wars, thereby, suggests an improved perspective for the analysis of their correlates and etiologies. From a perspective of policy implications, the modifications in the typology of war are also crucial for contributing to the objective of conflict prevention. Given the complex amalgam of political, economic, identity and security dynamics in areas of limited or even absent statehood, sub-state wars require the invention and selection of appropriate preventive strategies to resolve them. Thirdly, the world of violence is what researchers and their operational definitions of war make of it. The identified discrepancies remind practitioners to carefully reflect on theoretical assumptions and operational procedures. Finally, the analysis with disaggregated data presented by EDACS underlines the benefits provided by opening the black box of war. The disaggregated data offer the opportunity to deal with categorizational difficulties by differentiating between conflict dyads and myriads on a lower level of aggregation and thus assist in coping with the evolution of specific types of behavior over time.

In order to contribute to conflict prevention the scientific study of war requires the ability to trace the steps to war by distinguishing phases of violent conflict. Methodologically, this necessitates relying much more on research strategies in the face of changes in the structural dimensions and process dynamics of organized violence. We need both concepts and micro-analytical strategies that help us to study the conditions of escalation and to understand the inherent behavioral logic of violence in different war settings. AKUF, HIJK, and UCDP/PRIO provide some information in this regard. But either the criteria for escalation are not sufficiently reproducible (as in the case of HIJK) or the concepts are limited to only two stages of armed conflict (as in the case of AKUF and UCDP/PRIO). The quantitative oriented strategy of disaggregating armed conflict and war into single violent events provides additional and well-defined criteria for the analysis of escalation processes: an increase in the number of conflict parties, a spread of violent events (to new regions/across borders), or a pursuit of new conflict strategies (e.g. violence against civilians). The great variance in the number of violent actors in Somalia, for example, in the value of events and deaths over time as well as in space would be lost using data on a higher level of aggregation. And because of the event character of the data, given their sufficient validity, it offers the possibility to construct thresholds of armed conflict beneath the level of war – and to study not just mere correlates of war.

In a first comparison of data on violent conflicts Eberwein and Chojnacki (2001) concluded that “we can still do – and must do – better”. Today we would add: quantitative research has learned several lessons from its critics and is getting better in contributing to the analysis of micro-foundations and dynamics of armed conflict. In this regard, EDACS is a good example that quantitative and qualitative approaches stand in a complementary relation and should not per se be regarded as competing or mutually exclusive scientific orientations.

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