Contemporary Conflict Resolution

The prevention, management and transformation of deadly conflicts

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CHAPTER 3

The Statistics of Deadly Quarrels and the Measurement of Peace

> Would it not be wise to endow the science of peace with rich and strong schools just as one has done for its elder sister, the science of war?
>
> (Raphael Dubois, writing shortly before World War I)

From the beginning the study of conflict resolution has been seen to depend upon prior analysis of conflict data. We have seen how this was clear in the original 1957 issue of the *Journal of Conflict Resolution*, where both Boulding and Wright proposed global conflict data stations to alert the international community to the early onset of situations likely to erupt into full-scale violence. In this chapter we will familiarize ourselves with the 'statistics of deadly quarrels', to borrow the title of Richardson's posthumously published seminal study (1960b) that did so much to excite the interest of the early conflict resolvers. This will serve as the basis for the conflict analysis chapter that follows. We will first establish what statistics suggest about prevalent and developing patterns of large-scale conflict and provide an account of the way in which the statistical methodologies have become more sophisticated in recent years, most significantly in the way in which means have now been developed of measuring 'peacefulness' (the positive peace dimension) as well as the absence of war and violent conflict (the negative peace dimension). The events since 11 September 2001 continue to raise questions about global terrorism, but the emergence of a new administration in the USA around the presidency of Barack Obama has changed the debate about the management of international conflict and terrorism, away from pre-emptive defence and towards a re-engagement with multilateralism. We review recent data about patterns of terrorism interpreted in this new context.

The Conflict Domain

What are to count as the relevant conflicts? Conflict resolution analysts have traditionally included all levels of conflict, from intrapersonal conflict through to international conflict, and all stages of conflict escalation and de-escalation. In this book we restrict our focus to actual or potentially violent conflicts, ranging from social conflict situations which threaten to become militarized beyond the capacity of domestic civil police to control, through to full-scale interstate war. However, we also note here how datasets are now being developed which measure peacefulness as well as violence and conflict,

and this development suggests the potential in conflict resolution to use data to measure and support the positive dimensions of peace practice such as the applied peacebuilding programmes as noted in chapter 5 and exemplified in chapter 9.

At the very beginning of the conflict resolution enterprise Richardson incorporated both international and domestic conflicts in his dataset of 'deadly quarrels' between 1820 and 1949. By deadly quarrel he meant 'any quarrel which caused death to humans. The term thus includes murders, banditries, mutinies, insurrections, and wars small and large' (1960b). Sorokin covered revolutions as well as wars in his study (1937). More recently we can note how contemporary datasets, such as the ECP (Barcelona) and KOSIMO (Heidleberg) annual reports (see below), measure levels of political tension and emergent conflict as well as all-out war. For example, in 2008, ECP recorded eighty 'situations of tension', defined as:

> any situation in which the pursuit of certain objectives or the failure to meet certain demands put forward by various agents involves high levels of political and social mobilisation and/or a use of violence with an intensity that does not reach the level of an armed conflict. This can include confrontations, repression, coups d'etat, bombings or other attacks. (ECP, 2009)

The Heidelberg Institute for International Conflict Research (HIIK) also charts both emergent and manifest conflict, and in 2008 identified 112 cases of crisis, marked by sporadic use of violence (HIIK, 2009).

Most studies since the 1950s in the 'classical' phase of the statistical study of international conflict, however, confined the field to interstate and related wars above a certain measurable threshold. The well-known Correlates of War (COW) Project, for example, initiated at the University of Michigan in the 1960s by Singer and Small, took its start date from 1816. It covered 'interstate wars', defined as conflicts 'involving at least one member of the interstate system on each side of the war, resulting in a total of 1,000 or more battle-deaths', and 'extra-systemic' wars (e.g. imperial war, colonial war and internationalised civil war), defined as international wars 'in which there was a member of the interstate system on only one side of the war, resulting in an average of 1000 battle deaths per year for system member participants' (Singer and Small, 1972: 381–2).[1] The COW was relocated from the University of Michigan to Penn State University in 2002, and the project continues under the direction of Paul Diehl. Its website is a rich data source, with eleven datasets and a listing of other datasets available in a wide variety of conflict research centres.

The continued development of COW conflict data illustrates the robustness and maturity of conflict research and its value, not only in terms of pure science but also in terms of its applied and policy value. For example the website also usefully contains a guide, produced by the Uppsala Conflict Data Program (see below), to the sixty major datasets available by 2005, with a commentary on how to use them in peace and conflict research. The author of the guide,

Kristine Eck, clearly defines the purpose and value of the conflict data for policy-makers. Systematically collected conflict data provide lists of ongoing conflicts and also the material to analyse the data for trends and patterns, which in turn is helpful in framing policy – for example, for early warning and preventive action – as previsaged in the original 1957 issue of the *Journal of Conflict Resolution* (Eck, 2005) (see chapter 5). Significantly also, Eck has noted that the main datasets all record a significant decline in the number of wars since the early 1990s and that, despite the diversity of datasets used and the variety of methodologies, the confirmation of this trend in the different sets of data suggests that the finding is empirically real and robust (ibid.: 6). We illustrate this trend in the decline of war fatalities below.

It is important to be aware of the conceptual parameters within which conflict is collected, however, because these vary widely. For example, whereas the COW dataset began originally from a realist state-centric starting point, others begin from entirely different conceptual bases – for example, the criteria for inclusion of the Hamburg University (AKUF) Project, initiated by Kende and developed by Gantzel (Gantzel and Schwinghammer, 2000), was not battle-related deaths because, since they did not reflect other kinds of suffering, these were seen as unreliable and unduly restrictive. Instead, AKUF 'relates the onset of war to the development of capitalist societies' and sees conflict as 'a result of the new forms of production, monetarization of the economy and the resulting dissolution of traditional forms of social integration' (Wallensteen, 2002b: 22). Different again is Wallensteen's own University of Uppsala Conflict Data Project, which uses the concept of 'armed conflict' and approaches the analysis from more of a conflict resolution perspective. Unlike COW or AKUF, which are 'satisfied once they have identified the actors and the actions', the Uppsala project 'requires that the conflict should have an issue, an incompatibility' (Wallensteen, 2002a: 24). Major armed conflicts are defined as 'prolonged combat between the military forces of two or more governments, or of one government and at least one organized armed group (thus ruling out spontaneous violence and massacres of unarmed civilians), and incurring the battle-related deaths of at least 1,000 people for the duration of the conflict' (SIPRI, 1997: 17). Major armed conflicts are then further subdivided into 'intermediate conflicts' and 'wars'. A minor armed conflict is one in which overall deaths are fewer than 1,000.

The different results obtained from the COW, AKUF and Uppsala projects can be seen to reflect the differing theoretical presuppositions upon which they are based. This shows how important it is to be clear what those presuppositions are before relying on a particular set of figures. Other datasets used in this chapter are equally divergent. The Minorities at Risk Project at the Center for International Development and Conflict Management (CIDCM) at Maryland University, for example, initiated in 1986, compares data on the political aspirations of some 250 minority communal groups worldwide and includes measures taken short of the use of armed force. Within this brief,

lists are drawn up of 'ethnonationalist peoples' who have fought 'sustained or recurrent campaigns of armed force aimed at least in part at securing national independence for a communal group, or their unification with kindred groups in adjoining states' between 1945 and the 1990s. Terrorist and guerrilla strategies are also counted (Gurr, 1995: 5; 2000). In contrast, the Humanitarianism and War Project at Brown University is concerned more with data for 'populations at risk' in 'complex humanitarian emergencies' (Weiss and Collins, 1996).

Measuring Peace and Peacefulness

As noted in the introduction to this chapter, one of the major recent innovations in the methodology of conflict data collection has been the design of datasets whose purpose is to measure indicators of peace and peacefulness. Three examples are examined here to illustrate the potential of this to guide policy in wider peacemaking and peacebuilding.

The first is the KOSIMO (Conflict Simulation Model) approach, developed at the University of Heidelberg and located within the Institute for International Conflict Research. The KOSIMO database is linked to a Conflict Barometer, which holds data for distinguishing between violent conflicts and those that are non-violently managed. The argument is that, by researching only overtly violent conflict – for example, based on levels of battle-related deaths – crucial data on conflicts that are resolved peacefully is simply missed out (see chapter 5). The inclusion of latent and emergent conflicts, and conflicts which have been successfully de-escalated through various forms of non-violent crisis management, enables a more sophisticated and nuanced analysis of strategies and policies that might sustain or rebuild peace (http://hiik.de/en/index.html; Pfetsch and Rollof, 2000).

The second example is the dataset on conflict and peacebuilding produced by the Escola de Cultura de Pau (ECP), based at the Autonomous University in Barcelona. The methodology aims to incorporate the counting, recording and tracking of peacebuilding and humanitarian activity, such as the status of peace negotiations, the work of the UN Peacebuilding Commission, the existence of arms embargoes, the status of demobilization, disarmament and re-integration (DDR) processes, and the presence of UN and other military and civilian peace missions. Like Heidelberg, ECP produces annual and periodic reports and analyses of data gathered.[2]

The third database is the Global Peace Index (GPI), produced by the Institute for Economics and Peace. The GPI first appeared in 2006 and was an attempt to develop a methodology that combined qualitative and quantitative indicators in order to measure both the negative and positive dimensions of Galtung's definition of peace. The objective of the project is to provide data for 'estimating the value of peace to the world economy, and uncovering the social structures and social attitudes that are at the core of peaceful societies'.

Using a mixture of twenty-three quantitative and qualitative indicators, the GPI produces a peace index or ranking of 144 countries. In what amounts to probably the most comprehensive of any current database on peace and conflict, the indicators are grouped into three broad categories to measure not only conflict levels, but also wider processes of democratic openness, social security and well-being, and militarization for the years 2006 to 2010. These indicators are in turn linked to quantitatively measured potential 'drivers' of peace, such as levels of democracy and transparency, international openness, demographics, education, culture and material well-being.[3] The intention is to use the GPI to strengthen the political economy and culture of peace by enabling governments 'to increase the peacefulness of their nations' (findings and methodology are described fully at http://www.visionofhumanity.org/gpi/).

While projects like the GPI have linked the measurement of peace and the statistics of conflict to expand the conflict domain by connecting the positive and negative dimensions of peace, others are constructively expanding the conflict domain by looking at the potential for emerging conflict trends and modifying the data-gathering potential for measuring conflict patterns accordingly. Perhaps the most important of these new trend projection approaches are those that are concerned to bring climate change into the conflict domain. James Lee has pointed out that, while there is now broad agreement in the scientific community on the reality of climate change, 'research on the relation to social instability and possible violent conflict has lagged far behind'. In his analysis he charts the convergence of the dynamics and interaction of conflict and climate change and looks at the likelihood of the emergence in the near future of new global tension belts determined by climate change – what he terms the equatorial tension belt and the polar tension belt. We explore this further in chapter 12. For now it is worth noting that Lee calls for more systematic understanding of the relationship between climate change and conflict. This will require an expansion of the traditional typologies of conflict research and the development of more sophisticated and interrelated methodologies to incorporate conflict research data into global climate change models, because patterns of conflict need to be understood alongside patterns of climate change (Lee, 2009).

Nevertheless, despite the variations in methodology described above, and the challenge to expand the conflict domain to anticipate future trends, there is considerable agreement in the major existing datasets about the major armed conflicts currently in progress. Table 3.1 uses data from the Center for Systemic Peace (CSP) based at George Mason University in the USA. We then compare this list with those compiled by the Uppsala Conflict Data Project (UCDP) and the Barcelona ECP Conflict and Peacebuilding database.

Table 3.1 lists twenty ongoing major armed conflicts, which meet the definition for inclusion that they involve at least 500 cumulative 'directly related' fatalities and reach a level of intensity in which political violence

Table 3.1 Countries with major armed conflicts in progress, 2008–9

Location	Inception	Conflict parties	Deaths
Burma/Myanmar	1948	Ethnic war: Karen, Shan, others	100,000
India	1952	Ethnic war: Assam separatists	25,000
Israel	1965	Arab Palestinians/PLO	21,500
Philippines	1972	Ethnic war: Moros	50,000
Colombia	1975	Civil violence, land reform, drug trafficking: left vs. right guerrilla groups (FARC vs. MAS/AUC)	55,000
Somalia	1988	Civil war	1,000,000
DRC	1996	Civil war: Hutus/Tutsi Luba/Lunde, Yeki	2,500,000
Nigeria	1997	Communal violence, Delta province: Ijaw, Itsekiri	2,500
Russia	1999	Ethnic war, Islamic separatists In Transcaucasus: Chechnya, Dagestan, Ingushetia	33,000
Afghanistan	2001	Civil war: Taliban	25,000
India	2001	Maoist insurgency: People's War Group; Maoist Communist Centre; People's Liberation Guerrilla Army	2,500
Iraq	2003	Regime change post-Saddam, sectarian violence: Sunni, Shia, Kurds, Al-Qaida	1,500,000
Yemen	2004	Followers of al-Huthi in Sadaa	3,000
Pakistan	2004	Pashtuns in federally administered tribal areas	15,000
Thailand	2004	Malay-Muslims in southern border region (Narathiwat, Pattani, Songkhla and Yala provinces)	3,500
Turkey	2004	Kurdish separatism	1,500
Chad	2005	Anti-Déby regime, FUC, UFDD and others	2,000
Mexico	2006	Governmentt offensive against drug cartels and corrupt officials in north	13,500
Ethiopia	2007	Somali (ONLF) and Oromo (OLF) militants in Ogaden	1,500
Sudan	2009	Communal violence : Lou Nuer and Murle	915

Source: Monty G. Marshall, Center for Systemic Peace, www.systemicpeace.org/warlist.htm

is both systematic and sustained (a base rate of 100 'directly related deaths per annum'). Episodes may be of any general type: interstate, intra-state or communal; they include all episodes of international, civil, ethnic, communal and genocidal violence and warfare. The full list totals 315 conflicts

between 1946 and 2009. In table 3.1, six conflicts are not listed as current because they appeared to be de-escalating significantly by late 2008: India (Kashmir), Pakistan (sectarian violence), USA (invasion of Iraq and military casualties resulting), Sudan (separatist violence in Darfur), Central African Republic (rebellions in northeast and northwest) and Chad (communal violence). Eighteen other cases had de-escalated significantly, but were in danger of returning to major armed violence: Angola, Sri Lanka, Uganda, Algeria, Burundi, Nepal, Indonesia, Côte d'Ivoire, Saudi Arabia, Haiti, Pakistan (Baluchistan), Israel (Hezbollah), Kenya, Lebanon, Georgia/Russia, Kenya (electoral violence), Nigeria (Jos, Christian Muslim conflict) and Nigeria (Muslim Boko Haram rebellion in north).

Using a lower threshold for inclusion (twenty-five battle-related deaths for the year surveyed), UCDP recorded thirty-one armed conflicts in 2008. This compares with CSP's twenty-six conflicts (2008 list), which uses a higher threshold (100 battle deaths per annum) and ECPs thirty-one conflicts (2008 list). MAR at Maryland lists twenty-six armed conflicts at the end of 2007 (Hewitt et al., 2010). It is clear that the information contained in these datasets, while scrupulously collected and checked, is not the product of an exact science. Armed conflicts and their impact are notoriously difficult to measure, and all datasets are contested in one way or another. The thresholds for inclusion (25 battle-related deaths, 500 battle-related deaths, or 1,000 battle-related deaths, for example) are arbitrary and there is no agreed universal standard or definition. Even if there were, counting fatalities in conflict, even in highly organized warfare such as in Iraq, let alone in chaotic and remote environments such as rural Sierra Leone, Rwanda and eastern DRC, is deeply contested and controversial. The Iraq Body Count project, despite the careful and transparent methodology employed, has been fiercely criticized both by those who are critics of the war and claim that their count is too low and by those who regard the war as justified and claim that the figures are too high. It is also very difficult to identify clear starting points and termination points of conflicts, as they go into periods of calm and de-escalation, only to flare up again unpredictably. However, despite these limitations, which are well recognized by the researchers who employ them, the evolution of capacity and of methodologies to develop datasets which record and track patterns and intensities has been a remarkable achievement of the conflict research field. For the future, enhancements in the conceptualization, methodology and technology are promising. Conceptually, there is the challenge to design comprehensive indices using deep indicators both for the drivers of conflict and for the measure of peacefulness, by combining the two poles of the definition of peace, the positive and the negative, or, in United Nations terminology, *Freedom from Fear* (no direct violence) and *Freedom from Want* (the positive satisfaction of human rights and needs). There are complex ethical, political and methodological problems involved in how to identify and weight indicators capable of generating such a deep measure of peace and conflict experience

Box 3.1 The USHAHIDI mapping platform

USHAHIDI, which means 'testimony' in Swahili, is a website that was initially developed to map reports of violence in Kenya after the post-election fallout at the beginning of 2008 (see case study in chapter 5). Its roots are in the collaboration of Kenyan citizen journalists during a time of crisis. The website was used to map incidents of violence and peace efforts throughout the country based on reports submitted via the web and mobile phone. With an initial deployment of 45,000 users in Kenya, it was the catalyst for realizing that there was a need for a platform based on it, which could be use by others around the world.

By May of 2008, USHAHIDI shared their code with a group in South Africa that used it to map incidents of xenophobic violence. By August 2008, seed funding from Humanity United enabled the platform to be rebuilt, and by October 2008 the alpha version was completed and deployed to the DRC for testing. In its alpha form, USHAHIDI was tested and deployed with eleven different organizations directly, among them the International Center for Transitional Justice (ICTJ), Peace Heroes and the Kenyan National Commission on Human Rights. Externally, there were four major alpha deployments, including Al Jazeera during the War on Gaza, Vote Report India (to monitor the recent local elections) and Pak Voices (to map incidents of violence in Pakistan).

The goal is to create a platform that any person or organization can use to set up in their own way to collect and visualize information. The core platform will allow for plug-in and extensions so that it can be customized for different locales and needs. The beta version platform is now available as an open source application that users can download and implement and use to bring awareness to crisis situations or other events in their own locales. It is also continually being improved and tested with various partners, primarily in Kenya.

Source: the USHAHIDI website, at www.ushahidi.com/; see also iRevolution, the website of Patrick Meier, at http://irevolution.wordpress.com/

in a quantifiable way, but the knowledge base has evolved in such a way as to make the challenge now seem feasible.[4]

In addition to all this, early examples are now emerging of systems that harness the power of the Internet and communications technologies in order to develop real-time conflict tracking. One such example is the Ushahidi Mapping Platform, which is explained in box 3.1, and which illustrates the exciting developing potential of the Internet as a technology for conflict resolution – a theme that is explored further in chapter 16.

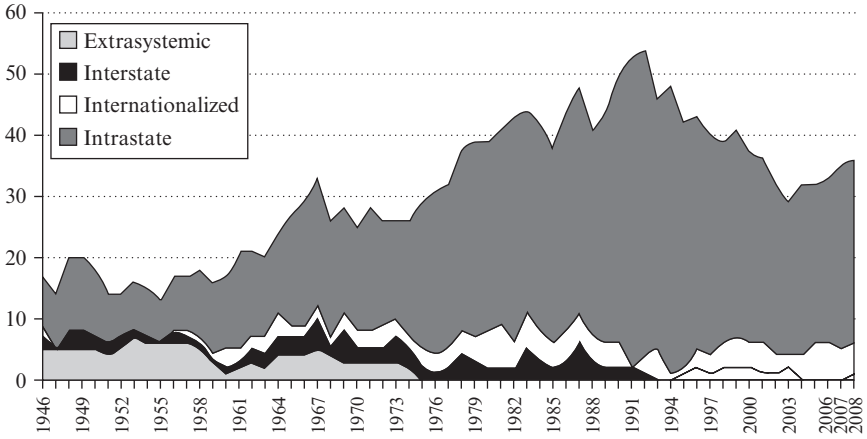
Conflict Trends

The conflict statistics collected in the majority of the datasets discussed above tend to confirm a decline in the incidence of major armed conflict. One major trend continues to be evident in most accounts, and that is a decline in the number of interstate wars. Over a longer-term time-frame, according to Holsti, comparing the 1918–41 with the 1945–95 periods, the number of interstate wars per year per state has gone down steadily over the past hundred years (1996: 24). In chapter 4 we will suggest that the key transition here came

earlier rather than at the end of the Cold War, but since 1989 the decline in the number of interstate wars has approached its limit. There were no interstate wars in 1993 and 1994, only a minor border altercation between Peru and Ecuador in 1995, and a flare-up in the long-running dispute between India and Pakistan over Kashmir in 1996 (Wallensteen and Sollenberg, 1997; SIPRI, 1997: 17). In 2002 there was only one interstate war, together with foreign interventions in Angola, Congo-Brazzaville and Afghanistan (Eriksson et al., 2003: 594–5). In 2003 came the invasion of Iraq. No interstate wars were recorded between 2004 and 2008, when a conflict between Djibouti and Eritrea broke out to end this four-year interlude, the longest period recorded in the UCDP with no interstate conflict (Harbom and Wallensteen, 2009). We should no doubt hesitate before celebrating 'the end of interstate war' – for example, with war between Russia and Georgia, instability in Kashmir, continuing tension between China and Taiwan, Israel and Hezbollah in Lebanon as well as Iran, and in the relationship between the USA and Iran and North Korea. Nevertheless, given the data to hand, the main thrust in this book must clearly be to discuss conflict resolution in relation to non-interstate rather than to interstate war.

While international (interstate) war is on the decline, the Uppsala data, consistent with all other datasets, reported a 'new pattern of conflict' in the 1990s in which the prime emphasis was on 'challenges to existing state authority', including secessionist movements which threaten the territorial integrity of the state (former Yugoslavia, Chechnya) and challenges to central control, which may also end in fragmentation with no one actor in overall command (Liberia, Somalia) (Wallensteen and Axell, 1995: 345). In the latest available annual survey from Uppsala, in 2008, despite a numerical increase from 2003 to 2008, the number of conflicts remains at only two-thirds of the 1992 level. Only five of the thirty-six conflicts listed crossed the highest intensity threshold of 1,000 or more battle-related deaths in the year. This is a historically low figure. When compared to the peak years of 1988 and 1991, the number of high-intensity armed conflicts (wars) was down by two-thirds (Harbom and Wallensteen, 2009) (see figure 3.1).[5]

Despite strong evidence of a trend to long-term decline in armed conflict, however, the picture is nevertheless not straightforward. For example, Ted Gurr and his team at the Center for International Development and Conflict Management at the University of Maryland started to report and analyse conflict trends systematically in 2001. Like Uppsala and others, they reported a significant decline in global conflict trends from the 1991 peak, but they warned that more recent evidence (also confirmed in UCDP) points to a resurgence of armed conflict from 2007. They identify a 'conflict syndrome' and a marked trend towards the resurgence of conflict in areas where it had been dormant. Thus, of thirty-nine conflicts active in the past ten years, only eight were new conflicts, thirty-one being resurgent conflicts in areas where they had been dormant for at least a year. This pattern clearly points to the



Source: Harbom and Wallensteen, 2009 Armed conflict 1948–2009, Journal of Peace Research 46(4) 577–587

Figure 3.1 *Number of armed conflicts by type, 1946–2008*

importance of developing durable support for post-conflict reconstruction and peacebuilding, which are the subjects of chapters 8 and 9 of this book (Hewitt et al., 2010: 1).

Care must therefore be exercised in interpreting conflict statistics, and especially in extrapolating from them, although the overall weight of evidence does indicate a downward trend. This gives some reason for cautious optimism that advances in knowledge about the causes of conflict and the causes of peace, combined with what has been termed 'international activism', have been in part at least a reason for the decline in the incidence in armed conflict. It is true that some recent research has questioned the validity of the data on which the claim for declining war incidence has been based. Obermeyer, Murray and Gakidu, for example, citing a study published in 2005 by the Peace Research Institute Oslo (PRIO), which showed that battle deaths globally have been reduced by 90 per cent between 1946 and 2002, have claimed that war deaths have been seriously underestimated and that optimistic extrapolations from conflict data are misguided and unjustified (Obermeyer et al., 2008). But the authors of the PRIO survey (which used data consistent with UCDP) have in turn refuted the research of Obermeyer and his colleagues, claiming that it has a number of methodological errors, mainly because its findings were based on a survey sample that was far too small (thirteen war-affected countries) compared with the survey of 202 countries in the PRIO dataset. While it is clearly constructive to challenge results and innovate and adapt methodologies, there is sufficient robustness and variation in existing datasets to conclude that the broad patterns and analyses of conflict patterns derived from them provides a potent resource for the continued development of policy and theory in peace and conflict research.[6]

Conflict Distribution

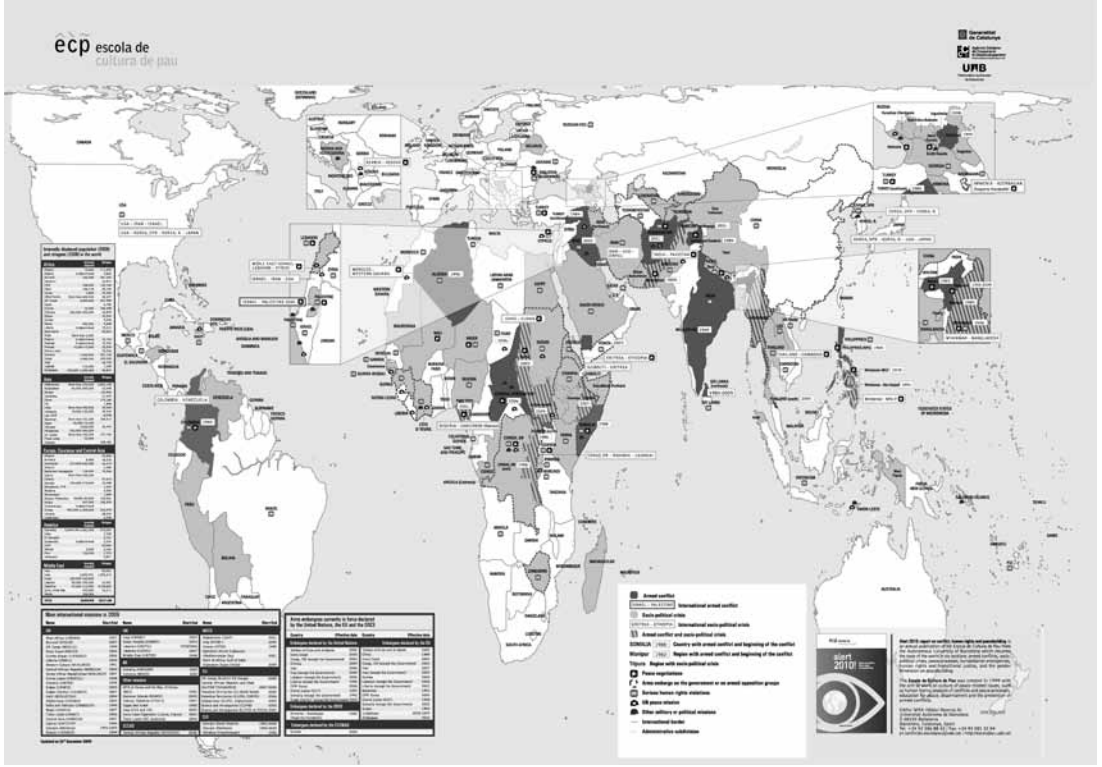
Many commentators agree that, with the ending of the Cold War, regional patterns of conflict have become all the more significant. There have, therefore, been efforts to compare characteristics of conflict from region to region.[7] At the heart of such studies lies the attempt to provide a reliable statistical basis for distinctions such as those between 'zones of peace' and 'zones of war' (Kacowicz, 1995). There are many variations here. For example, Holsti (1996: ch. 7), following Deutsch (1954), Jervis (1982), Väyrynen (1984) and Buzan (1991), distinguishes 'pluralistic security communities' in which no serious provisions are made for war between member states such as North America, the Antipodes, Western Europe; 'zones of peace' between states such as the Caribbean and the South Pacific; 'no-war zones' such as South-East Asia and (perhaps) East Asia; and 'zones of war' such as Africa, some former Soviet republics, the Middle East, Central America, South Asia and the Balkans

It is clearly relevant to conflict resolution to understand the distinctions between regional 'security regimes' with relatively stable interstate relations, such as the Association for South-East Asian Nations (ASEAN), 'security communities' which avoid large-scale violence as in Western Europe and North America, and more volatile and conflict-prone regions. There are several quite striking regional variations here, such as the surprising absence of interstate war in South America since 1941 despite its famously turbulent past (Holsti, 1996: 150–82). The level of violent conflict in Southern Africa since the 1990s has been going down, but not in the Great Lakes region. Why is this? Setting geographical location aside, is there a quantitative and qualitative difference in the incidence and nature of armed conflict between and within developed countries in comparison with so-called Third World or postcolonial countries? And do different types of conflict predominate in different regions? See map 3.1.

Local variations in conflict are also important and are now being studied using GIS data. Conflict events are geo-referenced to precise places and dates and then related to local geographical factors (mountains, rivers, forests, etc.). This enables analysts to capture regional and micro-level dynamics, which offers fresh and more nuanced perspectives for conflict research (Buhaug and Gates, 2002; Kalyvas, 2006).

Conflict Types

This leads to one of the most testing questions in conflict analysis. Are there different types of conflict that need to be distinguished from each other if effective and discriminate conflict resolution is to be undertaken? While there has been a proliferation of datasets which use different criteria for inclusion, and different typologies, we have, based on a comparison of some of the better-known studies, ventured to offer our own composite working typology in table 3.2.



Source: ECP, 2009

Map 3.1 *Armed conflict and peacebuilding, 2008*

Box 3.2 Conflict typologies: a comparison

Singer's conflict typology (1996: 43–7) is based on the political status of conflict parties. He retains his original distinction between (a) interstate wars and (b) extra-systemic (mainly colonial) wars, but here adds two further classes of non-interstate conflict: (c) 'civil' conflicts, in which, unlike (b), one protagonist may be 'an insurgent or revolutionary group within the recognised territorial boundaries of the state', and (d) the 'increasingly complex intra-state wars' in former colonial states, where the challenge may come from 'culturally defined groups whose members identify with one another and with the group on the basis of shared racial, ethnic, linguistic, religious, or kinship characteristics'. Holsti (1996: 21) has also adapted his typology. He earlier categorized international (interstate) conflict up to 1989 in terms of twenty-four issues, grouped into five composite sets: conflict over territory, economics, nation-state creation, ideology and 'human sympathy' (i.e. ethnicity/religion). He concluded that the incidence of the first two had been declining, but that of the last three if anything increasing (1991: 306–34). He later focuses on non-interstate war and bases his typology on 'types of actors and/or objectives', ending up with four categories of conflict: (a) 'standard state versus state wars (e.g., China and India in 1962) and armed interventions involving significant loss of life (the United States in Vietnam, the Soviet Union in Afghanistan)'; (b) 'decolonizing wars of "national liberation"'; (c) 'internal wars based on ideological goals' (e.g., the Senderoso Luminoso in Peru, the Monteneros in Uruguay); and (d) 'state-nation wars including armed resistance by ethnic, language and/or religious groups, often with the purpose of secession or separation from the state' (e.g., the Tamils in Sri Lanka, the Ibos in Nigeria).

First, it may be helpful to think more in terms of historically and geographically based 'generations' of conflict than in terms of blanket typologies. After all, the roots of all major conflicts reach back into the historical past – often several centuries back. Superimposed on this are clusters of 'enduring rivalries', many still unresolved, going back respectively to the time of the break-up of the Russian, Austro-Hungarian and Ottoman empires at the end of the First World War (we might add Northern Ireland to this list); the political settlements at the end of the Second World War; the period of decolonization (1950s, 1960s); the postcolonial period (1970s, 1980s); and, finally, the break-up of the Soviet bloc (1990s). Perhaps a new generation of terrorist and anti-terrorist conflicts has now been superimposed.

Second, we would do well to heed Singer's advice that a classificatory system should 'remain as atheoretical as possible' lest, 'by accepting conventional labels of certain armed conflicts, we buy into simplistic interpretations, and ultimately embrace disastrous reactions and responses' – although it is unlikely that we will succeed in finding a typology which is 'logically exhaustive, mutually exclusive, operationally explicit, semantically consistent, and substantively comparable' (1996: 40, 48). Box 3.2 compares Singer's conflict typology with that of Holsti (1996). The two seem more or less to coincide. Omitting Singer's 'extra-systemic wars' and Holsti's 'decolonizing wars' on the grounds that the era of decolonization is all but over, there seems to be rough agreement about a distinction between *interstate conflict* and two types

of non-interstate conflict – *revolution/ideology* conflict (Singer's and Holsti's type (c)), and *identity/secession* conflict (Singer's and Holsti's type (d)). This is also partially mirrored in the Uppsala typology mentioned above (SIPRI, 1997: 23), which is based on 'conflict causes' and sees major armed conflict as caused by 'two types of incompatibilities': 'government conflicts', which are contested incompatibilities concerning 'government (type of political system, a change of central government or in its composition)', and 'territory conflicts', which are contested incompatibilities concerning 'control of territory (interstate conflict), secession or autonomy'. These two types of conflict again coincide quite closely with our revolution/ideology and identity/secession conflicts – except that interstate conflict and non-interstate identity/secession conflict are conflated in the Uppsala typology under the heading 'territory conflict'. A number of other conflict resolution analysts also recognize the distinction between revolution/ideology and identity/secession conflicts.[8]

Finally, we are also tempted to distinguish revolution/ideology and identity/secession conflicts in turn from a third class of non-interstate conflict – *factional conflict* – in which the fighting is not about revolutionary-ideological or identity-secessionist issues, but solely about the competing interests or power struggles of political or criminal factions. This may be seen to coincide with a category of 'economic opportunity' conflicts (Collier and Hoeffler, 2001). Holsti implicitly acknowledges a sub-category of factional conflict, inasmuch as the shorthand designation for his type (c) conflicts is 'internal factional/ideological' conflict.

This line of enquiry, therefore, suggests that provisional distinctions may usefully be made between three types of predominantly non-interstate conflict. The term 'non-interstate conflict' should not be misunderstood. All it means is that these are not classic wars between two states. It does not imply that states are not involved, either overtly or covertly, or that 'internal wars' do not spill across state borders or draw other states in. The term 'factional conflict' covers *coups d'état*, intra-elite power struggles, brigandage, criminality and warlordism, where the aim is to usurp, seize or retain state power merely to further economic and other interests. The term 'revolution/ideology conflict' includes the more ambitious aim of changing the nature of government in a state – for example, by (a) changing the system from capitalist to socialist, (b) changing the form of government from dictatorship to democracy, or (c) changing the religious orientation of the state from secular to Islamic. In the post-Cold War world it is possible to discern a decline in the incidence of (a) but not in the incidence of (b), and particularly not in that of (c). The term 'identity/secession conflict' involves the relative status of communities or 'communal groups', however defined, in relation to the state. Depending upon the nature of the group and the contextual situation, this includes struggles for access, for autonomy, for secession or for control (Gurr, 1995: 3–5).[9] In brief, a factional conflict is merely a struggle to control the state or part of the state, a revolution-ideology conflict is in addition a struggle to

Table 3.2 A working conflict typology

Conflict type	Example
Interstate	Gulf War 1991
Non-interstate	
revolution/ideology	Algeria
identity/secession	Sri Lanka
factional	Liberia

change the nature of the state, and an identity-secession conflict may well be a threat to the integrity of the state (see table 3.2). We might be tempted to see this as roughly coinciding with Zartman's distinction between greed, creed and need conflicts (Zartman, 2000a).

Needless to say, specific conflicts elude neat pigeon-holing of this kind on closer inspection. Scholars disagree about categorization, as seen, for example, in the elaborate attempts by Marxist analysts in the 1960s and 1970s to interpret ethnic conflict as class conflict (Munck, 1986), in contrast to the reverse trend on the part of many analysts in the 1990s. More recently we have seen attempts to classify most non-interstate conflicts as economically motivated 'greed' conflicts (Collier and Hoeffler, 2001). Moreover, the conflicts themselves often change character over time, are interpreted in different ways by the conflict parties, and can always be captured and manipulated by unscrupulous power-brokers who subsequently justify their depredations by appeal to principle. For example, the conflict in Afghanistan in the mid-1990s could be interpreted as a revolution/ideology conflict to the extent that it was identified with the Taliban's drive to create an Islamic state; as an identity/secession conflict to the extent that it was seen as a struggle between Pashtuns (Taliban), Uzbeks (Dostum) and Tajiks (Masood); as a merely factional conflict if the fighting was seen to be perpetuated simply by the interests of rival warlords and their clients; or even as an interstate conflict by proxy if the war was seen to be little more than the playing out on Afghan soil of what were essentially rivalries between outside states such as Pakistan, Uzbekistan and Iran. For this reason we advise that conflict typologies, essential though they are for effective conflict analysis, should be understood as being permanently under review. Combining conflict distribution and conflict typology is also instructive (see table 3.3).

Table 3.3 records major armed conflicts as defined by UCDP, where there are over 1,000 battle-related deaths in the conflict in the calendar year. Asia is the region with the highest total figure over the ten-year period (seven in 2006), followed by Africa (three in 2006), the Americas (three in 2006), the Middle East (three in 2006) and Europe (one in 2006). Conflict over control of government predominates in Africa and the Americas, whereas conflicts over control of territory (secession and autonomy) predominate in Asia, Europe and the

Table 3.3 Regional distribution of major armed conflicts by type, 1998–2008

Year	1998	2000	2002	2004	2006	2008
Region	**G–T**	**G–T**	**G–T**	**G–T**	**G–T**	**G–T**
Africa	9–2	7–2	6–1	5–1	3–0	3–0
Americas	2–0	2–0	3–0	3–0	3–0	3–0
Asia	3–5	2–5	2–5	2–5	3–4	3–4
Europe	0–1	0–1	0–1	0–1	0–1	0–0
Middle East	2–2	2–2	0–2	1–2	1–2	1–2
Total	16–10	13–10	11–9	11–9	10–7	10–6
Total	**26**	**23**	**20**	**20**	**17**	**16**

Notes: G = Government and T = Territory, the two types of incompatibility
Conflicts included are those with a cumulative total of 1,000 combat deaths.
Sub-conflicts involving the same actors are not counted separately.

Source: derived from Uppsala data (Gleditsch et al., 2002, and UCDP and SIPRI data in Harbom and Wallensteen, 2009)

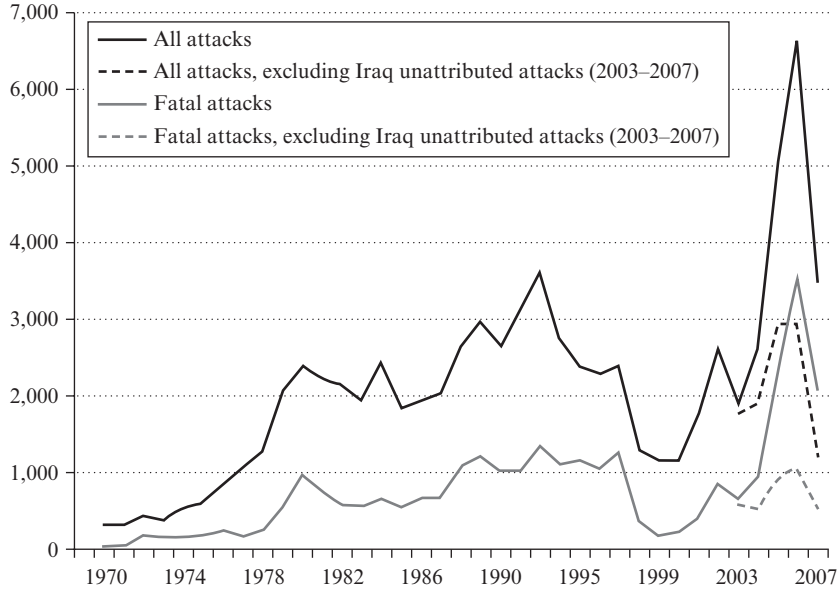
Middle East. On balance, ECP calculates that two-thirds of armed conflicts are identity-secession related, while one-third are related to the control and/or nature of government. This plays a significant role in the determination of the most appropriate conflict resolution responses. For 2008, the latest period for which data is available, ECP lists thirty-one – nine of them major armed conflicts following UCDP thresholds, three in Asia, four in Africa, and two in the Middle East, so that by 2008 the downward trend in major armed conflict is confirmed. However there are twenty-one conflicts below the 1,000 threshold, showing an overall increase in armed conflict from 2008.

There are other significant regional variations in the ECP data. For example, of the nine conflicts listed in Africa for 2008, seven were internal conflicts that have spilled over borders and become internationalized and that have destabilizing impacts regionally. Measurements suggest that the average duration is ten years, shorter than the world average of seventeen years – a statistic that is interpreted by ECP analysts to suggest that 'it is probable that their short duration is linked, among other issues, with the many peace initiatives in the last few years carried out by organisations from civil society and some organisations from the international community' (ECP, 2009: 25). ECP use a scale of 1 to 3 to measure (by fatality in the conflict) the intensity of the conflict. On this scale, for all conflicts in Africa above twenty-five battle deaths in 2008, the average is 2.3, reflecting the fact that the most intense high-casualty conflicts now occur in Africa – that is, the conflicts in Chad, DRC, Somalia and Sudan (ibid.). In 2008, ECP recorded eighty situations of tension, defined as 'any situation in which the pursuit of certain objectives or the failure to meet certain

demands put forward by various agents involves high levels of political and social mobilisation and/or a use of violence with an intensity that does not reach the level of an armed conflict. This can include confrontations, repression, coups d'etat, bombings or other attacks.' Following the predominant distribution pattern of manifest armed conflicts, the majority of cases of political tension of concern in 2008 were also in Africa (27) and Asia (25).

Terrorism and Conflict

As with conflict data in general, there has been significant progress in the development of databases that record and track the development of terrorist attacks over time. In the wake of 9/11 and its profound impact, which encouraged a process of rethinking about the nature of terrorist violence, what had previously been separate datasets, namely armed conflict one the one hand and terrorism on the other, were merged. For example, LaFree, Dugan and Cragin have produced the chart reproduced in figure 3.2, recording terrorist attacks (77,000 in total around the world) between 1970 and 2007, based on an amalgamation of data from three different databases: the Global Terrorism Database (GTD), maintained by the National Consortium for the Study of Terrorism and Responses to Terrorism, for the years 1970 to 1997; the RAND-St Andrews Terrorism Chronology data; and the RAND-MIPT Terrorism Incident Data Base.



Source: LaFree et al. 2010 Trends in global terrorism. In Hewitt et al., eds., Peace and Conflict 2010, CIDM Maryland (www.cidm.umd.edu/pc/) p. 22

Figure 3.2 *Terrorism attacks, 1970–2007*

Figure 3.2 shows that total terrorist attacks increased sharply from 1970 to a peak in the early 1990s, rising sharply again from the 2001, and acutely after the invasion of Iraq, to match the 1992 levels and indeed to exceed them if incidents in Iraq are included. The most recent report on terrorist trends from the Human Security Research Project (HSRP) in Canada argues convincingly that, contrary to prevailing opinion and analysis in the intelligence, foreign policy and security communities, the threat from terrorism, including Islamic international terrorism, was declining by 2007–8. Citing a survey by the US-based think tank Intelcenter, the HSRP report showed that 'by mid-2007 the number of Islamist attacks around the world had declined by 65 percent from the high point in 2004, and that fatalities from such attacks had declined by more than 90 percent'. The decline was driven by a number of factors, among them dramatic loss of sympathy for Al-Qaida in Muslim communities worldwide. A Pew survey based on polling opinion in four Muslim countries (Lebanon, Bangladesh, Pakistan and Indonesia) revealed a drop in support of 50 per cent or more between 2002 and 2007. Surveys in a number of other Muslim countries, including Afghanistan, Saudi Arabia, and even Iraq, reported similar or even more emphatic rejection of Islamic terrorist violence (HSRP, 2007)

How do typologies of terrorism relate to the typologies of conflict discussed above? In the wake of the 11 September 2001 attacks, Peter Wallensteen and his colleagues at Uppsala retained their conflict analysis unchanged and added a section on 'terrorism and armed conflict', where they noted how terrorism 'has recently been used to cover distinct different actions, such as criminal activities and gangsterism', as well as more traditional political purposes, and 'is often directed against civilians and symbolic societal targets, as opposed to government targets' (Eriksson et al., 2003: 597–9). Four types of terrorism were distinguished according to how closely related they are to the types of armed conflict that the Uppsala project analyses. The first type is the kind of terror that is an unavoidable aspect of most armed conflicts. The second type is terrorism as a supplementary measure in asymmetric conflicts, particularly to enhance the influence of auxiliary or affiliated groups (Tamil Tigers in Sri Lanka, Hezbollah in Lebanon). These two types of terrorism were seen to be amenable to negotiation and political agreement, like normal political conflict. The third type is where terrorism is more important to some groups than other forms of more traditional armed action (for example, the Lord's Resistance Army in Uganda or the Revolutionary United Front in Sierra Leone). This type of terrorism may be associated more with economic opportunity or greed than with wider political purpose, is harder to accommodate within a peace process, and is therefore likely to require different 'police' responses. Finally, there is the fourth category of groups – notably, but not exclusively, radical Islamists such as Al-Qaida – that operate internationally and have multiple international purposes for which it is harder to mobilize large populations in order to wage guerrilla war. This

is the category of dedicated small groups not amenable to political talks or agreements, which must be combated in ways to be explored later in chapter 11. Although this type of terrorism is harder to fit into conventional conflict typologies, it is by no means unprecedented and is akin to previous generations of left-wing terrorism, such as international Bolshevism in the 1920s and 1930s, Che Guevara's strategy for radical global change in the 1960s, and the ambitions for world revolution of Lin Biao in China during the cultural revolution.

With reference to terrorism studies, we will abstract two aspects to guide us. First, however complex and inconsistent definitions of terrorism are – and notoriously subject to political manipulation – we will follow those who take terrorism to refer to particular actions and strategies rather than to specific actors or distinct political purposes. In other words, individuals, groups, movements and governments may all adopt terrorist tactics at various times in order to further their political or economic purposes – and then abandon them while still pursuing those purposes. There may be groups that employ only terrorist means and whose purpose does not reach beyond terror itself, but these are exceptional. In this book, therefore, terrorism is taken to be a set of actions or strategies adopted by groups for certain purposes, not the identity of those groups or the nature of those purposes. See box 3.3, which begins with an example of the kind of definition accepted here, then gives contrasting US and Arab/Islamic definitions to illustrate how politically loaded definitions are (which is why, despite twelve UN conventions, no formal international definition of terrorism has yet been agreed), and ends with the definition in the UK Terrorism Act 2000 and the UN High-Level Panel 2004 definition.

Second, consistent with Wardlow's definition, we will follow a number of terrorism analysts in recognizing a typology of terrorism that accords closely to our own typology of major armed conflict. This strongly suggests that we should correlate national/separatist terrorism with identity/secession conflict, and that we should see 'social revolutionary terrorism', 'right-wing terrorism' and 'religious fundamentalist terrorism' as three manifestations of revolution/ideology conflict (see box 3.4).

We end up, therefore, with a combined terrorism/major armed conflict typology in which types of terrorism correlate closely to the typology of non-interstate conflicts in table 3.2, so long as, with Martin (2003), we are prepared to recognize a category of 'criminal terrorism' to correlate with factional conflict (see table 3.4).[10] There are clear policy implications from this that we will pursue in chapter 11. That leaves two types of terrorism that do not fit our conflict typology.

First there is 'state terrorism', which includes internal repression as well as external acts of terror and state sponsorship of terrorism. This has historically been by far the largest form of such violence. The 2001 edition of the US State Department's *Patterns of Global Terrorism* report named Cuba, Iran, Iraq,

Box 3.3 Definitions of terrorism

In line with the approach adopted in this book, Wardlow's definition of terrorism is focused on the forms of deliberate violence threatened or used, its targets and its wider audience, not on the perpetrators' identity or political, ideological or criminal purpose:

> [Terrorism is] the use, or threat of use, of violence by an individual or a group, whether acting for or in opposition to established authority, when such an act is designed to create extreme anxiety and/or fear-inducing effects in a target group larger than the immediate victims with the purpose of coercing that group into acceding to the political demands of the perpetrators. (Wardlow, 1982: xx)

After the 9/11 attack, the US government defined terrorism more narrowly by restricting the term to 'subnational groups or clandestine agents' and confining the targets to 'noncombatants':

> The term 'terrorism' means premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience.
>
> The term 'international terrorism' means terrorism involving citizens or the territory of more than one country.
>
> The term 'terrorist group' means any group practicing, or that has significant subgroups which practice, international terrorism. (22 USC 2656f(d))

In contrast are the recurrent requests from Islamic and Arab countries (including the League of Arab States, Gulf Cooperation Council and Organization of the Islamic Conference members) for a comprehensive international agreement on 'the definition of terrorism', which clearly includes 'state terrorism' and distinguishes 'between terrorism and the legitimate struggle of nations against foreign occupation' (League of Arab States' submission to the UN Security Council Counter-Terrorism Committee, February 2003).

The UK Terrorism Act 2000 defines terrorism as the use or threat of action where 'the use or threat is designed to influence the government or to intimidate the public or a section of the public' or 'is made for the purpose of advancing a political, religious or ideological cause' and the action includes 'serious violence against a person', 'serious damage to property' or 'creating a serious risk to the health or safety of the public or a section of the public'.

In its December 2004 report, *A More Secure World*, the UN High Level Panel defined terrorism as:

> any action . . . that is intended to cause deaths or serious bodily harm to civilians or non-combatants, when the purpose of such an act, by its nature or context, is to intimidate a population or compel a government or an international organisation to do or to abstain from doing something. (p. 49)

Libya, North Korea, Sudan and Syria as state sponsors of terrorism (with Libya unexpectedly dropping off the list in 2004). More direct is the terrible toll exacted by totalitarian governments both in pursuit of ideological goals and in terrorizing opposition into submission in order to maintain their grip on power. In this sense by far the greatest number of terrorist atrocities in the past century has been perpetrated by what Walter Laqueur calls 'terrorism from above' (1999). According to some estimates, well over 160 million of their own citizens were 'intentionally killed' by repressive governments in

Box 3.4 Typologies of terrorism

Schmid and Jongman (1988) distinguish between: (a) national/separatist terrorism (such as the Provisional IRA in Ireland, the Tamil Tigers (LTTE) in Sri Lanka, or ETA in Spain); (b) social revolutionary terrorism (such as the Red Army Faction in Germany, or Sendero Luminoso and MRTA in Peru); (c) right-wing terrorism (such as neo-Nazi, racist and anti-government 'survivalist' groups); and (d) religious fundamentalist terrorism (including Jewish, Christian, Islamic and Sikh groups).

Post et al. (2002) accept the Schmid/Jongman typology, although they suggest a fifth category of 'new religion terrorism' to cover groups like the Japanese-based Aum Shinrikyo in their analysis of 'the five principal types of radical groups' most prone to adopting terrorist methods (pp. 110–12).

Martin (2003) has quite similar categories, including various forms of 'communal (e.g. ethno-nationalist) terrorism', 'the terrorist left', 'the terrorist right' and 'religious terrorism', as well as 'criminal terrorism' (pp. 112–215), but also includes 'state terrorism' (pp. 80–111) and 'international terrorism' (pp. 216–42).

Table 3.4 A conflict resolution terrorism typology

Terrorism type	Conflict type
State terrorism	
Insurgent terrorism	
Ideological	Revolution/ideology
Social revolutionary (SL, FARC)	
Right wing/survivalist	
Radical religious (GIA)	
Nationalist-separatist (LTTE, ETA, KLA)	Identity/secession
Economic/factional (RUF, LRA)	Factional
International terrorism (Al-Qaida)	

the twentieth century. Finally, we have already noted how in the Arab-Islamic world 'state terrorism' is a reference to the tactics used by the state of Israel, while western countries in general and the United States in particular are regularly accused of 'state terrorism' in particular cases (for example, the atomic bombing of Hiroshima and Nagasaki). The December 2004 UN High-Level Panel report decided not to include state terrorism in its terms of reference on the grounds that 'the legal and normative framework against state violations is far stronger than in the case of non-state actors', so that the argument was not 'compelling' (paragraph 160). (The panel also recognized the argument about 'the legitimate struggle of nations against occupation', but denied that this legitimized acts of terrorism).

Second there is 'international terrorism'. This does not refer to the international connections that link most terrorism to trans-border networks, including diaspora support constituencies, Internet communications, or criminal

Box 3.5 Groups thought to have links with Al-Qaida

This list is impressionistic, since there may be few direct operational links in many cases. Al-Qaida acts as an ideological, logistical and financial hub – often through the offering of relatively small sums of money.

AFGHANISTAN
Hizb-I-Islami

ALGERIA
Armed Islamic Group (GIA)
Salafist Group for the Call and Combat (GSPC)

CHECHNYA
Islamic International Peacekeeping Brigade
Riyadus Silikhin
Battalion of Chechen Martyrs
Special Purpose Islamic Regiment

CHINA
Eastern Turkestan Islamic Movement (ETIM)

EGYPT
Al-Gamaa al-Islamiya (IG)
Al-Jihad (Egyptian Islamic Jihad)

INDONESIA
Jemaah Islamiya (JI)

LIBYA
Libyan Islamic Fighting Group

LEBANON
Asbat al-Ansar

MOROCCO
Jemaa serat al-Mustaqin (Salafist movement)
Moroccan Islamic Combat Group (GICM)

PAKISTAN/KASHMIR
Harakat ul-Mujahidin (HUM)
Jaish-e-Mohammed (JM)
Lashkar-e-Yayyiba (LT)
Al-Badhr Mujahedin
Harakat ul-Jihad-Islami (HUJI)

PHILIPPINES
Abu Sayaff Group (ASG)

SOMALIA
Al-Ittihaad al-Islamiya (AIAI)

SOUTH-EAST ASIA
Jemaah Islamiya (JI)
Kumpulan Mujahidin Malaysia (KMM)

TUNISIA
Tunisian Combat Group (TCG)

UZBEKISTAN
Islamic Movement of Uzbekistan (IMU)

YEMEN
Islamic Army of Aden (IAA)

supply and money-laundering facilities, but to the relatively small groups of dedicated terrorists who are international in both personnel and purpose and are not rooted in nationally based organizations. In the form of 'Islamic radicalism' this has come to dominate popular perceptions of what terrorism is, often because international *jihadis* are involved in other conflicts, such as separatist struggles for national identity, as in Palestine or Chechnya, and may be disproportionately influential thanks to training, experience, media profile and funding. But we think that it is important to retain a clear grip on the different types of terrorism, despite blurred and contested boundaries, because this is essential for explicit and effective policy response as discussed in chapter 11 (see box 3.5).

Conflict Costs

Before concluding this chapter we must briefly note the human and material costs of contemporary violent conflicts. At least 28 million people have been killed in more than 150 major armed conflicts fought mainly in the Third World since 1945 (IISS, 1997); another estimate puts the total at 40 million civilian and military deaths (Leitenberg, 2003). The proportion of civilian casualties rose from only 5 per cent of total casualties in the First World War, to 50 per cent by the Second World War and to 80 to 90 per cent by the end of the century, of whom the majority were women and children (Grant, 1992: 26; Collier et al., 2003). This is a reversion to older types of warfare.

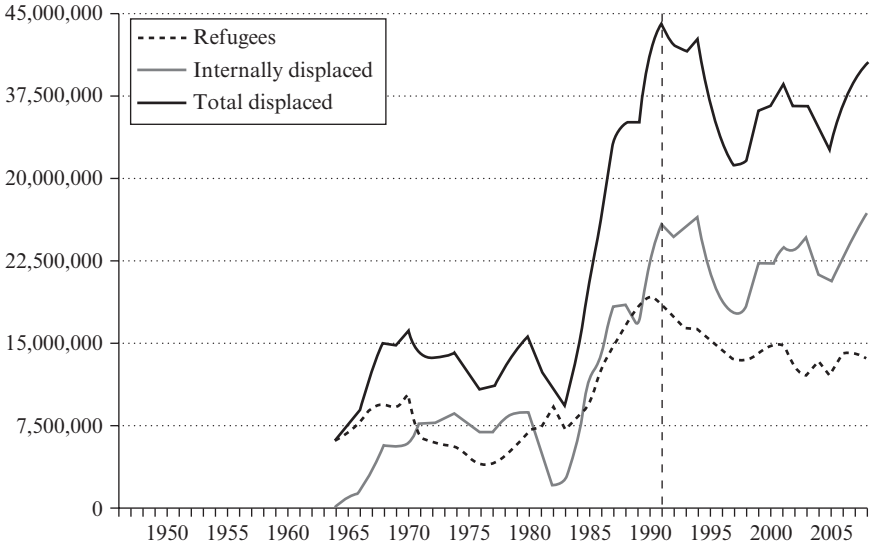
Beyond the toll of direct combat-related deaths, civil wars increase infant and adult mortality, as a result of disease, famine, displacement and the collapse of health and other services. The indirect deaths usually outweigh the direct effects of wars (Stewart and Fitzgerald, 2001). In developing countries conflicts frequently cause food shortages and famines, due to either deliberate use of hunger as a weapon or the unplanned effects of fighting on production and distribution (Messer et al., 1998). The land may be mined, the wells may be poisoned. People are forced to flee their homes and abandon their means of livelihood. At their peak in 1990, internal conflicts generated 21 million refugees and 25 million internally displaced people (IDPs). While refugee numbers dropped to 16 million by 2009, the total number of displaced people (refugees plus IDPs) remains high and appears to be rising again towards the historic high of the 1990 figure twenty years ago, showing the costs of conflict being borne by those least able to afford it (UNHCR, 2009) (see table 3.5 and figure 3.2).

In African countries like Angola, Eritrea, Liberia, Mozambique, Rwanda, Somalia and Sudan, up to half or more of the total population have been forced to flee at some point. In southern Sudan, where one in five people is estimated to have died as a result of the war, 80 per cent of the population was displaced at one time or another. All of this is compounded by the length of time that certain classes of conflict last – in some cases an average of twenty-five years (Gurr, 1995: 52). Whole generations have no other experience than war. The resultant size of the cumulative death toll is difficult to comprehend, while the overall tally of material destruction, psychological suffering and human misery – what Michael Cranna calls 'the true cost of conflict' (1994) – dwarfs any gains by particular conflict parties.

Conflict has catastrophic effects on the economic development of affected countries, generally leading to falling production, falling exports, greater indebtedness and falling social expenditure (Stewart and Fitzgerald, 2001). The typical civil war puts development into reverse, reducing pre-war incomes in directly affected countries by 15 per cent on average, and reducing growth in neighbouring countries on average by 0.5 per cent per annum (Collier et al., 2003: 2). These effects tend to persist after the fighting is over, and the

Table 3.5 Major refugee-hosting countries and major countries of origin, 2008

Major refugee hosting countries	
Pakistan	1.8 million
Syria	1.1 million
Iran	980,000
Germany	582,700
Jordan	500,400
Chad	330,500
Tanzania	321,900
Kenya	320,600
Main countries of origin	
Afghanistan	2.8 million
Iraq	1.9 million
(combined account for 45% of all UNHCR refugees)	
Somalia	561,000
Sudan	419,000
Colombia	374,000
DRC	368,000



Source: UNHCR, 2009

Figure 3.3 *Refugees and displaced populations, 1964–2008*

resulting mal-development and institutional deformation raises the risk of the conflict being renewed.

To take one example of a hard-hit country, Mozambique is estimated to have suffered 1.5 million deaths in the armed conflict that ended in 1992. Half the population were displaced at one time or another. Markets, communications, and the capital stock were all damaged and public health suffered badly. The cumulative loss of output is estimated at over US$20 billion. When the conflict came to an end, as a result of the end of the Cold War and international and local mediation (Hume, 1994), the economy began to grow again, but this growth has been uneven and Mozambique remains one of the poorest countries in Southern Africa, still heavily dependent on aid.

Among other costs are the opportunity costs involved in diversion of resources to military purposes, and indirect effects such as export of drugs and AIDS (Collier et al., 2003). There are environmental costs resulting from acts of war, such as plunder of natural resources (for example, forests) and indirect effects of fighting and forced migration. Cultural costs arise from deliberate or unintended damage to the cultural heritage, and intergenerational costs include the scars of war, abuse, flight and genocide which continue to traumatize the next generation.

Given human suffering and economic costs on this scale, why is more not done to bring conflicts to an end? Despite the widespread social costs, conflicts do have beneficiaries, for whom they can represent a source of livelihood and economic advancement. Warlords, militias, certain sections of governing elites, and rebel groups may profit from opportunities to exploit land, labour or resources, and outside arms manufacturers, traders and corporations sometimes harvest rich pickings from conflict zones (see below table 4.2). There is, as yet, insufficient effort to regulate such profiteering and to prevent aid from falling into the wrong hands (Stewart and Fitzgerald, 2001). The human and material costs do, however, provide a very strong impetus for the central aim of conflict resolution: to find means of reconciling differences and achieving social change without the use of violence.

One way to reformulate this objective in relation to the subject of this chapter, namely the statistics of conflict, is to counterpose to the statistics of deadly conflicts the statistics of peace. Those involved in the Global Peace Index project, which we noted in the section on conflict trends, have based their work on the premise that peacemaking can be incentivised by economic analysis and policy development that shows the economic advantages of peace over violence. The GPI and the Institute for Economics and Peace (IEP) have shown that there is a robust and positive statistical correlation between the existence of the peace indicators used in the GPI methodology, ranking countries by measures of peacefulness, and economic performance and growth in GDP. However, they also suggest that GDP may not be the best measure of progress to use in the future and supported an OECD call for 'communities to consider for themselves what progress means in the 21st century'. For GPI/IEP

the economic benefits of peacefulness can be better understood by association with the positive peace mode associated with conflict resolution historically:

> Factors which should be considered in measuring a country's progress, and have received only minor attention to date, include levels of debt, the well-being or happiness of the nation, the gap between rich and poor, the degree of peacefulness of the country and whether its natural resources are being depleted at an unsustainable rate.' (Vision of Humanity, GPI, and Institute for Economics and Peace website at www.economicsandpeace.org/. . ./Resources/2009–GPIDiscussionPaper.pdf).

Here conflict costs, it is proposed, should be contrasted with a positive alternative connecting economic well-being with security, development and human happiness. This approach links well with one of the core norms of conflict resolution, which is the idea of envisioning peaceful futures, and, as we shall see in later chapters, with the concept of defining peace as a hybrid manifestation of many cultural values rather than a single definition of a constant state. For example, in Buddhist thinking, economic well-being is not measured by data on financial performance but can be valued only as part of a wider awareness of human well-being or happiness. The small Himalayan Kingdom of Bhutan, for example, measures its national wealth through a Gross National Happiness Index, which includes indicators for well-being in the psychological, cultural, health, education and good governance dimensions of people's lives (see the discussion of hybrid negotiated 'peaces' in chapter 9). The proposal to incorporate measures of happiness in indicators of well-being and progress links in intriguing ways with Buddhist economics. The Nobel Prize winner for Economics Amartya Sen has also argued strongly that development is not only a product of economic growth, but is also related to the value of the freedom of humans to pursue objectives valuable to them in social networks (2009).[11]

In the welter of data and statistics about peace and conflict indicators that have become available to researchers and policy-makers in the past decade, one striking trend stands out and needs to be noted in the conclusion to this section. Even if we can take some comfort from data which show declining levels of major armed conflict in recent years, a significant proportion of the world's population do not have the choice to participate in benefits of peace and prosperity. In the case of what he has termed the 'bottom billion', Paul Collier (2008), in a masterly synthesis of his work on civil wars, has defined the conflict and poverty trap where 1 billion people live in fifty-eight countries, mostly in Africa and Central Asia, which 'co-exist with the twenty-first century, but their reality is the fourteenth century: civil war, plague, ignorance'. While most of the countries of the developing world have achieved very positive growth rates since the end of the Cold War, Paul Collier's 'bottom billion' were poorer by the turn of the millennium than they had been in the 1970s. These bottom billion people are caught in a set of traps, one of which is conflict, in which there is a clear correlation between economic growth rates and proneness to civil war. In Collier's calculation, a typical bottom billion low-income country has a risk of civil war at the level of 14 per cent in any

five-year period. Once a country slides into civil war it experiences what Collier calls 'development in reverse', where a typical seven-year civil war leaves a country 15 per cent poorer than it would otherwise have been. Conversely, each percentage point added to the growth rate takes a percentage point off the risk. The big conflict formation for Collier, in this analysis, is that by 2050 the gulf will not be between the rich 1 billion of the developed world and 5 billion in developing countries, as assumed in the UN's Millennial Development Goals, but, 'rather, it will be between the trapped one billion and the rest of humankind'. His key point is that the bottom billion in this conflict–poverty cycle or trap can only escape it by policies of international action, a finding which echoes that of those conflict researchers such as Mack and Gurr, who have attributed the global decline in armed conflict to concerted programmes of international activism. This strongly supports the 'cosmopolitan conflict resolution' approach, as developed in Part II of this book.

Conflict Mapping and Conflict Tracking

Having concentrated so far on types and patterns of conflict, we conclude the chapter with a brief note on the mapping and tracking of individual conflicts and identify some of the ways in which conflict analysis can be aided by the wealth of data now available on the Internet.

Conflict mapping, in Paul Wehr's words, is 'a first step in intervening to manage a particular conflict. It gives both the intervenor and the conflict parties a clearer understanding of the origins, nature, dynamics and possibilities for resolution of the conflict' (1979: 18). It is a method of presenting a structured analysis of a particular conflict at a particular moment in time. It is used by analysts to give a quick profile of a conflict situation and is also widely used in conflict resolution workshops to elicit from participants a snapshot of their view of the conflict. Any particular map should be understood to represent the views of the author(s) and, as a schematic, to be indicative rather than comprehensive. Wehr himself (1979: 18–22) suggested that what was necessary in conflict mapping was:

1 a short summary description (one page maximum);
2 a conflict history;
3 conflict context (geographical boundaries, political structures, communications networks, etc.);
4 conflict parties (primary, secondary, interested third parties), including power relations (symmetrical or asymmetrical), main goals and potential for coalitions;
5 conflict issues (facts-based, values-based, interests-based, non-realistic);
6 conflict dynamics (precipitating events, issue emergence, polarization, spiralling, stereotyping);
7 alternative routes to a solution of the problem(s); and

8 conflict regulation or resolution potential (internal limiting factors, external limiting factors, interested or neutral third parties, techniques of conflict management).

Wehr's conflict mapping guide was to be applicable to 'the full range of conflict types from interpersonal to international levels'.

Adapting Wehr's conflict mapping guide, we suggest the steps outlined in box 3.6 for preparing an initial profile of a conflict. This can be supplemented by a diagram showing the main parties and third parties, the issues and the channels of communication and influence between them (Fisher et al., 2000). We also suggest that it is particularly helpful to chart: (a) geography (rivers, mountains, etc.), (b) state borders and (c) the distribution of peoples. This is especially illuminating in comparing conflicts.

Having mapped the structure of the conflict, the next step is to use the information in the map to identify the scope for conflict resolution, preferably with the help of the parties or embedded third parties. Such an analysis would identify changes in the context which could alter the conflict situation, including the interests and capacities of third parties to influence it; changes within and between the conflict parties, such as internal leadership struggles, varying prospects for military success, the readiness of general populations to express support

Box 3.6 A conflict mapping guide

A Background
1. Map of the area.
2. Brief description of the country.
3. Outline history of the conflict.

B The conflict parties and issues
1. Who are the core conflict parties?
   What are their internal sub-groups, on what constituencies do they depend?
2. What are the conflict issues?
   Is it possible to distinguish between positions, interests (material interests, values, relationships) and needs?
3. What are the relationships between the conflict parties?
   Are there qualitative and quantitative asymmetries?
4. What are the different perceptions of the causes and nature of the conflict among the conflict parties?
5. What is the current behaviour of the parties (is the conflict in an 'escalatory' or 'de-escalatory' phase?)?
6. Who are the leaders of the parties? At the elite/individual level, what are their objectives, policies, interests, and relative strengths and weaknesses?

C The context: global, regional and state-level factors
1. At the state level: is the nature of the state contested? How open and accessible is the state apparatus? Are there institutions or fora which could serve as legitimate channels for managing the conflict? How even is economic development and are there economic policies which can have a positive impact?
2. At the regional level: how do relations with neighbouring states and societies affect the conflict? Do the parties have external regional supporters? Which regional actors might be trusted by the parties?
3. At the global level: are there outside geopolitical interests in the conflict? What are the external factors that fuel the conflict and what could change them?

for a settlement; possible ways of redefining goals and finding alternative means of resolving differences, including suggested steps towards settlement and eventual transformation; likely constraints on these; and how these might be overcome. These issues are considered further in the chapters that follow.

A conflict map is an initial snapshot. Analysts may then want to keep updating it by regular 'conflict tracking'. This can now be done increasingly efficiently through the Internet. The revolution in communications technology that has occurred over the past ten years or so has already had an impact on conflict resolution and post-conflict peacebuilding (Reynolds Levy, 2004). In particular, high-quality data and information, both quantitative and qualitative in nature, is available on a variety of websites (see box 3.7). In addition we might begin to see measures of peaceful futures built onto the methodology

Box 3.7 Sources of information for peace and conflict tracking

Global Peace Index: www.visionofhumanity.org/

The GPI is a project of Vision of Humanity, which runs a number of interrelated initiatives, including also the Institute for Economics and Peace. The GPI was launched in 1997 by Steve Killelea, an Australian IT entrepreneur who in 2000 set up The Charitable Foundation (TCF), which is one of Australia's largest private funders supporting humanitarian, development and peace projects and initiatives. Killelea was influenced by Tibetan Buddhism and is a trustee of the World Council of Religions for Peace. The GPI has been published annually since 2007 and provides the most sophisticated methodology currently available to measure and rank the peacefulness of nations.

The Heidelberg Institute for International Conflict Research (HIIK): http://hiik.de/en/index.html

Located in the Department of Political Science at the University of Heidelberg in Germany, the HIIK gathers documentation and conducts research and analysis of national and international political conflicts. It was founded in 1991 to continue the work of the research project COSIMO (Conflict Simulation Model). COSIMO records information on political conflicts since 1945 and currently holds information on more than 500 conflicts in over 2,500 phases, according to levels of escalation and de-escalation and violent and non-violent phases. Research results are published in an annual Conflict Barometer.

Autonomous University of Barcelona, School for the Culture of Peace (Escula de Cultura de Pau), Programme on Conflict and Peacebuilding

This programme had its origins in an annual report on arms transfers which started in 1998. The Programme on Conflict and Peacebuilding started in 2001 and conducts daily monitoring and analysis of armed conflicts, situations of tension, peace processes, post-war rehabilitation, humanitarian crises, militarization and disarmament, human rights and international humanitarian law and gender and peacebuilding. The findings are published in *Semáforo* (fortnightly), *Boletín Mensual* (monthly), *Barómetro* (quarterly) and the comprehensive annual report *Alerta!*.

International Crisis Group: www.icg.org

Based in Brussels, with 100 field analysts on five continents, this organization provides analyses of current conflicts and advocates policy responses. Its *Crisiswatch* bulletin reports developments in some seventy conflict situations and assesses whether in the past month the situation has significantly improved, deteriorated or remains the same.

Box 3.7 (continued)

European Centre for Conflict Prevention: www.conflict-prevention.net

Based in The Hague in the Netherlands, this programme provides information and surveys covering prevention and peacebuilding efforts in the main violent conflicts in the world, with a primary focus on civil society actors. Presented through a searchable database, surveys of conflicts provide background information, detailed descriptions of ongoing activities to transform the conflicts, and assessments of future prospects for conflict prevention and peacebuilding. The database also has directories leading to local and international organizations working in the field of conflict prevention and peacebuilding in relation to the conflict being researched.

INCORE: www.incore.ulst.ac.uk

Based at the University of Ulster in Northern Ireland, INCORE offers a conflict data service which provides a detailed database on conflicts and conflict-related issues worldwide, offering information on conflicts in specific countries and thematic information, as well as interdisciplinary guides on how conflict affects and interacts with other issues and phenomena. There is also an online database of peace agreements from around the world. INCORE publishes an *Ethnic Conflict Research Digest*.

Minorities at Risk (MAR): www.cidcm.umd.edu/inscr/mar/

The MAR project was initiated by Ted Robert Gurr in 1986 and has been based at the University of Maryland's Center for International Development and Conflict Management (CIDCM) since 1988. MAR tracks 285 politically active ethnic groups throughout the world from 1945 to the present. It focuses specifically on ethnopolitical groups – non-state communal groups that have 'political significance' – and follows two criteria: first, the group collectively suffers, or benefits from, systematic discriminatory treatment vis-à-vis other groups in a society; second, the group is the basis for political mobilization and collective action in defence or promotion of its self-defined interests. The centrepiece of the project is a dataset that tracks groups on political, economic and cultural dimensions. MAR also maintains analytic summaries of group histories, risk assessments and group chronologies for each group in the dataset.

Uppsala Conflict Data Program (UCDP): www.pcr.uu.se/research/UCDP/

For more than twenty years, the Department of Peace and Conflict Research at the University of Uppsala in Sweden has been operating the Uppsala Conflict Data Project (UCDP). The project's dataset is one of the most accurate and well-used datasets on global intra- and interstate armed conflicts in the world. Data on armed conflict are collected on an annual basis (calendar year). Until now, comparable data on armed conflicts have been available for the post-Cold War period – i.e. from 1989 onwards. Recently, the data have been expanded to cover the full post-Second World War period, 1946–2001, as part of a collaborative project between the Uppsala Conflict Data Project and the International Peace Research Institute, Oslo. Data on armed conflicts have been published yearly in the report series *States in Armed Conflict* (Department of Peace and Conflict Research, Uppsala University) since 1987, in the *SIPRI Yearbook* (Oxford University Press) since 1988, and in the *Journal of Peace Research* since 1993. The project's website also gives profiles of individual conflicts. The UCDP has four main data services: the UCDP–PRIO armed conflict dataset from 1946, updated annually; the UCDP Conflict Termination dataset, which complements the main armed conflict dataset with additional information on conflict termination; the UCDP database, a searchable web-based resource for information on global armed conflicts since 1989; and the UCDP Non-State Conflict Data, UCDP One Sided Violence Data.

Source: All project descriptions are from the individual websites. See also Eck, 2005, which provides a detailed guide to the location, content, methodology and objectives of the main datasets available.

of conflict mapping and conflict tracking, where transformative energies and scenarios could be simulated through real-world futures workshops and computer-generated virtual alternatives negotiated via powerful ICT gaming and simulation interfaces. The open source web-mapping platform USHAHIDI, profiled above in box 3.1, is an example of the potential future development of this technology.

Recommended reading

Eck, 2005; Harbom and Wallensteen, 2009; Hewitt et al., 2010.