

Demographic Transformation and Socio-Economic  
Development 4

Marc-Antoine Pérouse de Montclos  
Elizabeth Minor  
Samrat Sinha *Editors*

# Violence, Statistics, and the Politics of Accounting for the Dead

 Springer

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Volume 4

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Marc-Antoine Pérouse de Montclos  
Elizabeth Minor • Samrat Sinha  
Editors

# Violence, Statistics, and the Politics of Accounting for the Dead

 Springer

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# Foreword

It should go without saying that numbers cannot properly represent human lives. Numbers more or less perfectly occupy the domain of the measurable and quantifiable, of interchangeable units – money and credit, bales of cotton and bushels of wheat. Even some of these we only consider unitary for convenience: in reality each individual grain of wheat in every silo in the world is unique; it is just that replacing one grain with another of the same variety makes no meaningful difference.

Human lives are not so interchangeable, and it is here that – for our species, anyway – the words “irreplaceable” and “unique” find their most profound meaning. So when we document human lives lost to armed violence and conflict, it can never be enough to record how *many* have died, but *who* has died: only a record of *individuals* killed can hope to represent their loss adequately.

If the circumstances and means available to casualty recording practitioners allow it, this normally means a list of names. Under the best circumstances, it can mean extended biographies and recollections of the dead by those who knew and loved them. Such meticulous casualty recording in no way precludes an analytical and statistical approach to the information it uncovers: rather, it enhances the ability to acquire meaningful understanding from the details that are known about individuals, including their demographics, and the circumstances under which they were killed.

All too often, especially in poorer countries, the casualties of armed violence, most of them civilian, are only recorded as statistics, as numbers alone. A weakness of this state of affairs is that mere numbers are much easier to dispute and argue over and, as is evidently appealing to some, can draw attention away from the victims to quarrels over whose methods are the best. The experiences of today’s casualty recorders, most of them working in the civil society, and the obstacles they face as presented in this (it is fair to say) uniquely practitioner-informed book provide ample evidence that while progress is being made, perhaps the bulk of it is ahead of us.

We should also take note that no matter how fully a human life is memorialised, it cannot truly represent that life, any more than their name, alone, really indicates who the living, breathing human being was. But what the recording of the

dead – including their unequal recording across the world, particularly in official efforts – does very accurately depict is how much value we place on their loss. In that respect, the work of casualty recorders probably says as much about our society as it does about the dead.

Iraq Body Count  
Every Casualty Worldwide  
London, UK

Hamit Dardagan

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# Chapter 1

## General Introduction: Armed Conflicts and the Body Count: An Issue for Population Studies and Development

Marc-Antoine Pérouse de Montclos

*To be sure, adding up corpses and comparing the tallies across different times and places can seem callous, as if it minimized the tragedy of the victims in less violent decades and regions. But a quantitative mindset is in fact the morally enlightened one. It treats every human life as having equal value, rather than privileging the people who are closest to us or most photogenic. And it holds out the hope that we might identify the causes of violence and thereby implement the measures that are most likely to reduce it.*

(Pinker and Mack 2014)

Mortality is an important indicator of development and population change. Statistically, it serves many purposes, for instance in determining life expectancy and calculating the human development index. In times of crisis, more precisely, excess mortality is a key indicator to assess both the impact of a disaster and basic needs for reconstruction. In case of war, it can help alert the international community to the necessity to provide relief and, sometimes, send troops to enforce peace. Humanitarian workers also use the statistics of excess mortality to evaluate their performance. Meanwhile, the military and jurists rely on the body count of victims to declare “war” or “peace”. And policy makers and aid practitioners who link development to human security need to know how many people died in order to know how many still live.

When it comes to mass violence, however, population studies are often deficient. The encyclopaedia of Demeny and McNicoll (2003), for example, has only one entry on the demographic consequences of war. It deals with famine, genocide, and ethnic cleansing, but does not address the long-standing issue of assessing excess

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mortality in the context of armed conflicts. Demography and geopolitics are two academic fields that live apart and work is needed to bring them together. This is not to say that the impact of war on development and population changes has not been investigated. Researchers have shown that armed conflicts kill ‘human resources’, lead to forced migration, exacerbate capital flight, destroy infrastructures, hinder economic growth, harm the social fabric, damage industry, disrupt agricultural production, and sometimes result in reducing life expectancy.

However, the academic debate has usually focused on whether development can occur without security, or security without development (Martin and Owen 2014). Many aid practitioners thus claim that there cannot be growth without ‘human security’, a term coined by the UNDP (United Nations Development Program) in 1994. In other words, access to capital, education, and health is not enough to foster development. Political stability, good governance, the quality of institutions and the capacity to regulate conflicts are also key issues.

Of course, the high profile of crises and wars should not obscure broader population and development questions. Mortality is both a determinant and a consequence of poverty (Pool 2007, p. 22). The usefulness of casualty records and statistics is that they not only expose the impact of armed conflicts and the challenges for reconstruction, but also potentially the mechanisms that led to the confrontation. Economists and geographers may attempt to analyse this by, for example, examining if poorer regions are more prone to violence: a very controversial assumption indeed. Jurists are concerned too, since systematic patterns of victimization according to age, gender, ethnicity, religion, wealth, citizenship, etc. can reveal avenues for legal investigation into the conduct of hostilities. Accurate casualty statistics are, furthermore, important to compare the intensity and the nature of different armed conflicts against the current claim that developing countries are more impacted by civil wars today.

Undoubtedly, the study of excess mortality in times of crisis helps to analyse the link between poverty and violence. Yet there is no general rule. The synthesis given in Chap. 2 of this book does not provide enough evidence to speculate further on the reproduction of a similar pattern over continents and centuries. Internal and international armed conflicts obviously affect development and population changes, and vice-versa. The impact is usually negative but wars sometimes improve the standards of living for the people who do not fight.<sup>1</sup> Moreover, statistics and averages can be misleading: for instance, killings and the exodus of refugees reduce population density and so artificially produce a rise in the gross domestic product per capita.

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<sup>1</sup> In the UK during World War One, for instance, better welfare for pregnant women and the increasing use of dried milk, which was less likely to carry the tubercle bacillus, reduced infant mortality while stricter controls on liquor availability decreased the incidence of alcoholism (Winter 1977).

## The Objectives of the Book

The originality of the following chapters, in this regard, is to investigate excess mortality as a key indicator of the impact of war on development and social changes. To do so, the analysis focuses on the body count of victims, more than rates, the population denominator and the construction of an index. The main objective is not to investigate further the link between development and security, or to disaggregate the determinants of war. Neither is it to know if poverty begets conflict, or if violence generates poverty. Rather, it is to show that the numerator of excess mortality is an important indicator for development and population studies, yet a difficult one to assess because it is prone to political manipulation. The objective of the book is also to explain how the issue of conflict casualties contributes to frame the narratives of insecurity, the poverty trap and the ‘curse’ of failed states in comparison to developed countries.

The following chapters thus deal with populations at risk in situations of mass violence that are alternatively qualified as war, terrorism or crime. It raises methodological issues and studies the political implications of recording or estimating the number of deaths from conflict. It shows that aid organizations involved in development and reconstruction can use such data to monitor violence, assess needs, adapt coping mechanisms and, in some cases, argue for a military intervention to save lives and/or arrest war criminals. It also reveals that the statistics of excess mortality pertain to strategic issues regarding war propaganda and legal evidence. Their political manipulation can thus affect development and reconstruction policies.

Indeed, the way to assess the numerator of excess mortality is not standardized. The body count is not a comprehensive indicator and it is often criticized as unreliable. Indeed, accurate information is difficult to obtain, a challenge that affects more generally the measurement of poverty, especially in war-torn countries. Discrepancies can produce massive variation in the analysis of armed conflicts. In the period 1960–1999, for instance, Jonathan Di John (2007, p. 977) observed that the four main datasets used by academics gave very different results, with 111 civil wars for Nils Gleditsch et al. (2002), 78 for Collier and Hoeffler (2002), 97 for Fearon and Laitin (2003), and 108 for Elbadawi and Sambanbis (2002).

Moreover, there are many disagreements regarding the definition of ‘direct’ or ‘indirect’ war victims, ‘casualties’, a word with a broader meaning than just ‘fatalities’, and the ‘battle-deaths’ of political ‘armed conflicts’ as compared to the ‘homicides’ of criminal acts. This book does not investigate if excess deaths result from intentional violence or ‘collateral damage’. But it addresses the controversial issue of including indirect victims of war to assess excess mortality. Thus the academic debate on the levels, fluctuations and causes of violence in developing countries is very much centred on questioning methodologies to estimate rates. Clearly the absolute number of the body count has its limitations (see [Box](#)). In his seminal work, for example, Steven Pinker (2011) focuses on homicides and war fatalities to prove the decline of violence in history. But he seldom investigates non-lethal violence and tends to treat each country as one, at the risk of comparing Vanuatu to

China without considering their size. Methodological problems also plague opposite assessments. Ziad Obermeyer et al. (2008), for instance, claim that deaths caused by armed conflicts did not decline since the end of the cold war. But they ignore war-trend data before 1955 and after 1994, extrapolate from a biased convenience sample of only 13 countries, and base their conclusions on estimates that are not statistically significant (see Spagat et al. 2009). Moreover, they tend to confuse direct battle deaths and war deaths in general, as they didn't try to add "non-state" actors and "one-sided violence" to their database.

### **Box: Rates and Absolute Numbers**

To avoid a statistical bias toward most populated countries, rates are more important than absolute numbers when attempting to compare levels of violence and the impact of war on development and population change. Yet the accuracy and the reliability of the assessment of conflict mortality depend on its numerator, the body count. Lack of international standards and obligations do not help in this regard. Moreover, the manipulation of statistics as well as perceptions can affect the decisions of development practitioners. National averages, for instance, are misleading if they obscure the lethal impact of violence in a specific region, as with the Indian case of Manipur studied in Chap. 6 of this book. Likewise, a local rebellion can obscure improvements elsewhere. In Nigeria, the national body count of victims of armed conflicts is on the rise because of the insurgency of the Boko Haram sect in the North-East. But the other regions of the Federation confirm a worldwide trend, that is, a general decline of lethal violence (Nigeria Watch 2014, p. 11). In this regard, it is important to break down averages to identify conflict zones within a country. The relationship to the density of population is also a key issue, hence the necessity of rates.

## **Methodologies and the Battle of Indicators**

In general, methodological areas of contest pertain primarily to the civilian status of victims, their direct or indirect relationship to violence, and the difficulty of establishing a credible baseline of "normal" mortality to assess excess mortality. On one hand, some researchers and advocacy NGOs may be less concerned with details, mixing all causes of deaths to produce rough figures that alert the public to the devastating impact of armed conflicts. Michel Adam, for instance, does not refer to any source or timeframe to claim that wars killed directly or indirectly ten million people in sub-Saharan Africa, probably between 1970 and 2000 (Adam 2002). On the other hand, quantitative studies of armed conflicts pay a lot of attention to the way that statistics are collated and produced. They often rely on the number of 'battle deaths' as defined and recorded by the databases of PRIO (Peace Research Institute

in Oslo) and the Uppsala Conflict Data Programme (UCDP). Using this indicator alone disregards ‘one-sided violence’ where only one of the stakeholders kills and perpetrates massacres, as with the Rwandese genocide in 1994. In addition, the introduction by SIPRI (Stockholm International Peace Research Institute) of a threshold of 1,000 battle deaths per year to define a war results in ignoring small conflicts and countries that record too few fatalities to pass the test of a war (Singer and Small 1972, p. 418). Last but not least, battle deaths exclude people who die indirectly because of the extensive collateral damages of the fighting —though the main bulk of excess mortality due to war is usually caused by a lack of access to food and health services.

Mark Gersovitz and Norma Kriger also wonder how to count ‘battle deaths’ in civil wars where there are no battlefields (2013, p. 9). Six years after the American military intervention of 2003, for instance, SIPRI reported only 15,000–20,000 battle deaths in Iraq, as against 100,000 civilian fatalities according to the Iraq Body Count and three to four times more according to controversial surveys. Consequently, Keith Krause (2013) has argued that the battle deaths indicator was not relevant and certainly not reliable enough to conclude that the intensity and the frequency of armed conflicts increased or decreased since the mid-1990s (2013, p. 268 and 273). In civil wars, he explained, it was often not possible to distinguish homicides and deaths resulting from battles between at least two armed groups. Moreover, many countries that were officially at peace had higher death rates due to crime than those of conflict zones.

Distinguishing a homicide from a conflict death often requires careful and detailed case-by-case police investigation, which may be close to impossible to achieve during most civil wars, as in Syria or the Central African Republic today. Furthermore, the link between criminal and political violence is complex: many academics criticized Paul Collier for simplistic reduction to an opposition between greed and grievance.<sup>2</sup> Current narratives on contemporary wars in developing countries usually insist on the criminalization of political struggles. Hence we should expect higher crime rates during the hostilities because of social disorganisation and the opportunities offered by rationing, scarcities, blackouts, or the evacuation of unguarded properties. Conscription and forced displacement disrupt families and facilitate juvenile delinquency. As it substitutes public violence for private violence, war also legitimizes killing and destruction that customary law normally prohibits. According to this model, one would then expect crime rates to decrease after the end of the fighting, when law and order is restored, commodity shortages are reduced and young men return home to reunite with their family. This is very likely since young men are overrepresented in many crime rates in peacetime... and are the first to be killed during armed conflicts.<sup>3</sup> However, the opposite model could be true as well.

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<sup>2</sup>See for instance Marchal and Messiant (2002, pp. 13–23) and Pérouse de Montclos (2006, pp. 151–7).

<sup>3</sup>See for instance Héran (2014, pp. 1–4).



Archer and Gartner (1976) show that there are as many factors that could lead to a rise or, on the contrary, a decrease of crime during and after wars. Armed conflicts can foster social solidarity and discipline, a phenomenon that is known to reduce suicide rates. While there is less to steal because many commodities are unavailable, conscription of young men helps to control the category of population that usually commits crimes and is overrepresented in many offense rates, including convicts who are prematurely released to enlist in the armed forces. In the same vein, criminals on parole find it easier to get a job because of labour shortage created by wars. Sometimes, wartime employers also prefer to pay fines incurred by their workers rather than lose them to imprisonment. Meanwhile, a lack of prosecutors and policemen leads to a lower number of arrests and convictions.

One would then expect crime rates to increase at the end of the fighting, when law enforcement agencies can restore normal manpower levels. However, post-war increases in crime may not only be due to a renewed capacity of prosecutors and policemen. According to the data of Dane Archer and Rosemary Gartner, sanctioned killing during wars has a residual effect on the level of homicide in peacetime, as in Nigeria after the end of the Biafra secession or in the United States when veterans returned from Vietnam in the 1970s. In general, post-war homicides tend to increase, whether economies improve or worsen. Moreover, they allegedly increase more frequently in victorious nations with large combat losses, rather than in defeated countries that suffered fewer battle deaths.

Yet the findings of Dane Archer and Rosemary Gartner do not tell us how to sort out criminal and political violence during wartime. The relationship between overall mortality and armed conflict is not always easy to decipher either. In a war-torn country like the Central African Republic in 2011, for example, a study by Médecins sans frontières found higher mortality in areas where there was no fighting and no humanitarian aid, suggesting that the lack of state and basic health services was more determinant (MSF 2011, p. 15). The same conclusion applied to the Democratic Republic of Congo, where the corruption of the Mobutu regime and the decay of health infrastructures in the 1980s were probably more important to reducing overall life expectancy than on-going massacres in the 1990s and 2000s (Pérouse de Montclos 2010). Estimations of excess mortality caused by war depend a lot on methodology and assumptions in this regard, and can produce very different results. Thus in Timor Leste, a Truth Commission was set up to investigate deliberate killings committed during the period between the Indonesian occupation in 1975 and independence in 1999, while a retrospective mortality survey mainly reported indirect deaths caused by hunger or illness (Krüger et al. 2013, pp. 258-9).

Different results and framing of deaths can also lead to different expectations and policies. Incidence of indirect deaths is often used to appeal for humanitarian aid, while direct deaths, especially of civilians, may be used to demand military intervention from the international community. Yet these distinctions and advocacy may not recognize the complexity of the different types of war victims and the causes of their deaths. A “military death” does not always result directly from fighting, since combatants with or without uniforms can also starve. Likewise, a “civilian fatality” does not automatically refer to an “indirect death” linked to hunger or health prob-

lems. Non-combatants can be deliberately targeted, or be victims of “collateral damage”. In other words, categories are easy to confuse. As a result, they can blur the analysis of the impact of wars and will not help to clarify policy options between the enforcement of criminal law, humanitarian aid, or military intervention.

## Combatants, Civilians, and the Status of Victims

Narratives of contemporary armed conflicts tend to focus very much on the suffering of civilians. Many casualty-recording organisations also attempt to distinguish civilian and military deaths. This distinction was formalized quite recently, however. Before the end of the nineteenth century, embryonic International Humanitarian Law dealt with basic rights of the people, the “*droit des gens*”, and not civilians specifically. For instance, the famous German jurist Georg Friedrich von Martens called belligerents to spare the life of the injured, prisoners of war, children, women, the elderly and non-combatants altogether. But he did not prohibit looting, subterfuge, kidnapping, ransom, occupation, territorial conquest, the bombing of villages or the burning of cities (Martens 1864, p. 231). In 1864, the first Geneva Convention catered for the military only. Civilians were defined as a category of non-combatant people excluded from the protection accorded to belligerents (Nabulsi 2001, pp. 9–24; Best 1979, p. 27). In Europe, the focus on the suffering of civilians came later on, together with a growing rejection of war and the development of the state as a political entity providing not only military security, but also social welfare (Sheehan 2008, p. 284).

Since then, the status of victims has become at least as important as their numbers, and sometimes even more (Andreas and Greenhill 2010, p. 272). The end of the cold war and the 9/11 terrorist attacks were important ruptures in this regard. I have argued elsewhere that these turning points transformed our paradigms and the way we understand armed conflicts, in particular in developing countries (Pérouse de Montclos 2007, p. 233). According to many American and British analysts, however, the 1990s and the 2000s marked the initiation of major changes in the conduct of hostilities, rather than just another framing of the narratives of war.<sup>4</sup> In a multipolar world, “new wars” were allegedly more disorganized, less political, more criminal, more privatized, more savage, more brutal, more lethal, and less military. Assuming that the proportion of civilian deaths is on the rise, for instance, George Kassimeris (2006) wrote a whole book about the “barbarization of warfare” — though he did not define precisely what he meant by “barbarian”, neither did he answer the crucial question raised in his introduction: “can warfare be anything other than barbaric?” (2006, p. 5)

The theoreticians of “new wars” relied on two underlying assumptions to demonstrate their position: first, they alleged, the proportion of civilian deaths was

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<sup>4</sup>See Kaplan (2000, p. 198) and Kaldor (1999, p. 192). For an economic version of this theory, see Collier (2000). For the cultural version, see Huntington (1996, p. 367).

increasing; secondly, civil wars now outnumbered interstate wars. Philippe Boulanger, for instance, argued that “despite their reduced frequency, armed conflicts became more violent towards civilians in the context of infra-state crisis” (2012, p. 91). According to Paul Collier et al., most of these new wars occurred in developing countries and “nearly 90 % of [their] casualties were civilian” (2003, p. 17). Decision makers, aid practitioners, humanitarian activists and journalists usually shared the same views, which became broadly accepted. Thus Randolph Martin 2006, a former director of operations at the International Rescue Committee (IRC), wrote that “civilian casualties of war has increased from 10 % in the nineteenth century, to 50 % in the Second World War, to anywhere between 75 and 90 % in contemporary conflicts” (Martin 2006, p. 227). In the same vein, the Special Representative of the United Nations Secretary-General for Children and Armed Conflict, Olara Otunnu, declared in 2002 that “of the four million war-related deaths since 1990, 90 % were civilians—80 % of whom were women and children who fell victim to the ‘misuse’ of small arms and light weapons” (Otunnu 2002, p. 3). He provided no source for this very bold statement. Neither did the United Nations Development Programme (UNDP) or the United Nations Children’s Fund (UNICEF) in claiming that “civilian fatalities have climbed from 5 % of war-related deaths at the turn of the century to more than 90 % in the wars of the 1990s”, or that “in recent decades, the proportion of war victims who are civilians has leaped dramatically from 5 % to over 90 %” (UNDP 1998, p. 35; Machel 1996, p. 9).

Do civil wars really kill more than interstate wars? The point is difficult to prove since population size in the countries affected is also important to consider. Historically, interstate wars mainly occurred in Europe but internal conflicts were no less deadly in other regions of the world. From 1400 to 1938, 276 internal and interstate wars were recorded in the Americas, 283 in Northern Africa and the Middle East, 586 in Africa South of the Sahara, 313 in Central and Southern Asia, and 657 in the Far East and South-Eastern Asia (Long and Brecke 2003, p. 235). All things being equal, some of them were indeed more deadly than their counterparts in Europe, especially during the War of Secession in the United States (1861–1865), the Taiping rebellion in China (1850–1864), the *Guerra de la Triple Alianza* in Paraguay (1864–1870) and the Zulu conquests of King Shaka in Southern Africa (1816–1828). But others were more deadly simply because they occurred in the most populated countries of the world. In China after the Japanese aggression of 1937, for instance, some 20 million people were killed and up to 100 million civilians were displaced by the war until 1945 (Lary and MacKinnon 2001, p. 3). A demographic analysis is important in this regard. If the incidence of civil wars has not risen since the beginning of the nineteenth century, population growth partly explained why those of the end of the twentieth century could sometimes be more severe in absolute terms (Singer and Small 1979, pp. 69–70).

Analysts should clearly focus on the issue of deaths as a proportion of population to identify whether contemporary conflicts are more brutal. According to Jeremy Weinstein, “one conservative estimate of the direct death toll from civil wars since 1945 exceeds 16 million, more than five times as many people as have died in interstate wars. In the 1990s, over 90 % of deaths caused by war occurred in internal

conflicts” (Weinstein 2007, p. 5). But this statement says nothing of the military or civilian status of the victims. It is ambiguous enough to let the reader think that on average, five people killed out of six was a civilian in internal conflicts since 1945, and that this proportion rose up to nine out of ten during the 1990s. Besides, it contradicts other findings (see below). More analysis is also needed in order to explain why interstate wars should be expected to be restricted to military casualties and be less deadly for non-combatants. Out of 9.4 million battle deaths recorded in 260 conflicts between 1946 and 2008, for instance, more than half came from five big wars: three between states—Korea, Vietnam and Iran-Iraq—and two within states—China and Afghanistan (Pinker 2011, p. 304). In any case, to claim that civil wars kill more than interstate wars might suppose that the military exercise more restraint in the use of force compared to private militias or criminal gangs. This is doubtful if we look at the two world wars and the lethal power of states.

## Clausewitz is Dead, Long Live Clausewitz

“New wars” theories appear to have a heavy reliance on European views of what a “good” war should be, that is: between states and governmental armies. The model of Carl von Clausewitz is no less deadly, but is seen as being more rational than contemporary conflicts in Africa or the Middle East. It reflects the sense of superiority of developed military civilizations where “war is a form of violence which is well organized, limited in space and time, and subject to peculiar rules that vary a lot according to the location and the historical period of the fighting” (Bouthoul 1962, p. 283, author’s translation). Such a definition is indeed very far from the dreadful experiences of contemporary Syria or Central Africa. According to Steven Pinker, the colonial conquest was brutal; yet it did bring law and order until the peaceful regulation of conflicts was challenged by the departure of competent civil servants and the coming to power of corrupt dictators (Pinker 2011, p. 307).<sup>5</sup> Thus after independence, civil wars did not accumulate because they broke out at a higher rate, but because they lasted longer and ended at a lower rate than they started (Hewitt et al. (2008), p. 24).

In developing countries, weak states, corrupt armies and the indiscriminate use of force certainly explain the patterns of violence. However, they do not predict that the demographic impacts of contemporary civil wars should be getting worse, or that these should be more severe than from a “classic” interstate war. As far back as 1895, the secretary general of the French Society of Anthropology reminded us of a long list of massacres and abuses perpetrated both in Europe and Africa. “Atrocities”, he wrote, “are even more appalling when civilized warriors fight against the so-called inferior races”. “War”, he continued, “can follow different patterns

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<sup>5</sup>Steven Pinker’s views on chaos in developing countries might in fact reflect the position of his main source of inspiration, the famous sociologist Norbert Elias, who taught in Ghana during two years and who, according to Jack Goody (2003), considered pre-colonial Africa as primitive.

according to the type of societies, the race and the age of combatants. But it never really changes... since it is always a return to Barbary. Only the art of war varies and gets more complex because of weapons, tactics, strategy. The killings are more or less sophisticated, scientific, and planned. Primitive tribes make war like they hunt, with ambushes and a final assault. On the contrary, civilized people try to combine all the destructive weapons they know about” (Letourneau 1895, pp. 532, 538, author’s translation).

A Clausewitz definition of armed conflict is thus restricted to European battlefields and it certainly does not help to distinguish civil wars from limited episodes of political violence led by groups that contest the monopoly of power—mutinies, coups or assassinations. In the history of humanity, most armed conflicts have occurred within an “internal” sphere, at least since there have been states and “international” borders. Today they would surely be qualified as civil wars. In the long run, interstate wars have been an exception in space and in time, mainly occurring in Europe between the seventeenth and the twentieth centuries. Despite the repression of authoritarian regimes, for instance, modern Africa, Asia and Latin America experienced few interstate wars in the classic sense of the term, with decolonization as a struggle within the internal sphere of empires.

Almost all contemporary civil wars are now internationalized, involving several states, especially neighbouring countries. Mark Gersovitz and Norma Kriger even argue that Nigeria against Biafra was the only real case of a civil war in post-independence sub-Saharan Africa, since it was primarily a contest between domestic actors despite the provision of arms and relief by foreign powers (2013, p. 9). By contrast, the fighting in Congo involved foreign troops and blue helmets as early as the 1960s. After the fall of the Mobutu regime in 1996, again, there was not simply another civil war, but a regional crisis initially imported from Rwanda and exacerbated later on by the interference of Angola, Uganda and Burundi. According to specialists, this conflict in the Democratic Republic of Congo was primarily fought by foreigners hiding behind weak internal proxy forces (Reyntjens 2009; Prunier 2009; Turner 2007).

## **The Good, the Bad, and the Ugly**

If we accept that interstate wars will not be intrinsically more or less deadly than civil wars, and perhaps not so different regarding their demographic impact on non-combatants, we should then question the thesis of a rising proportion of civilian deaths in the course of the fighting. We know that armed conflicts in developed countries were never “clean”. In Europe from 1618 to 1648, the 30 Years War was between states, yet it mainly killed civilians and was the first conflict reported to have resulted in one million battle deaths. It is estimated that one third of the population disappeared because of the fighting on the territory of what is Germany today (Parker 1997, p. 316). Contest between military groups did not limit either the

demographic impact of the conflicts that followed. Excluding prisoners of war who died in detention, Patrice Larroque estimated in 1870 that the battlefields of Europe killed six million men in 200 years: the vast majority of them during the nineteenth century and one third in France (Larroque 1870, p. 273). Meanwhile in the New World, 2 % of the population of the United States died in uniform during the War of Secession. In just 4 years between 1861 and 1865, 618,000 men passed away in the North and the South: roughly the same number as lost in all of America's other wars from the American Revolution through Korea combined (Faust 2008). Even if they were rarely targeted, some 50,000 civilians also died as a result of guerrilla violence, disease and malnutrition (McPherson 1988, p. 619).

World War One is usually understood as the typical military conflict that killed many but spared civilians. It is estimated that 9–15 million soldiers died on the battlefield. Excluding the Armenian genocide in 1915 and the Spanish flu in 1918, civilian deaths from the first world war stood somewhere around seven million individuals, half of which were within the Russian and Ottoman Empires. The UK, which recorded 722,000 military fatalities, lost approximately 100,000 civilians because of food shortages, and a thousand because of air and sea bombardments (Hersch 1925, p. 47; Greenwood 1942; Westergaard 1923). Today, historians are also investigating massacres that were not known to the public (Horne and Kramer 2011). The Germans, for instance, had experienced a guerrilla war with French *francs-tireurs* after their conventional military victory against regular-led armies at Sedan and Metz in 1870. As a result, they expected some sort of people's resistance when they invaded Belgium in 1914, and so became very vindictive against civilians (Best 1979, p. 33).

In other words, it is not true that 90 % of the fatalities of World War One were soldiers in uniform.<sup>6</sup> This myth actually reveals a double standard when it comes to assessing the impact of contemporary wars in developing countries, where many organisations amalgamate all victims into a global total including indirect deaths. In the case of World War One, the memorial focus has been on the military in Europe. Other victims were simply not counted despite the Armenian genocide in 1915, the Mexican Revolution which killed one million people between 1909 and 1916, or the Russian civil war that started in 1917 and extended to Poland until 1922, causing some 12.5 millions deaths, mainly civilians (Leitenberg 2006, p. 9). Moreover, "indirect" victims due to malnutrition were not included as they are now in Africa. If they had been, the German death toll, for example, might have doubled due to the famine that developed at the end of World War One. Using such a methodology would also show that for centuries, most soldiers in "developed countries" have died as a result of disease, and not directly because of the fighting.<sup>7</sup>

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<sup>6</sup>The percentage is probably nearer to 50 %. See Bezbakh (2014, p. 7).

<sup>7</sup>For instance, it is estimated that 400,000 soldiers of Napoleon died because of the winter and typhus during their retreat from Russia. Likewise, most of the 618,000 military victims of the secession war in the United States died because they fell sick. See Talty (2009) and Vinovskis (1989).

Non-military deaths resulting from or related to World War Two are more visible because of the Holocaust and the deliberate targeting of civilians in Hiroshima, Nagasaki and Dresden to end the conflict in 1945. But it took 70 years to celebrate for the first time the civilian victims of the bombing and the landing of American troops in Normandy on D-Day in 1944.<sup>8</sup> Moreover, the assessment of the proportion of civilian deaths remains a difficult task in regions where the breakdown of information systems led to great uncertainty about the magnitude of mortality. The problem is even more acute in developing countries that do not have civil registration or good census data. Though we may have expected population statistics to have improved and modernized in a global world, different methodologies continue to produce different results. Based on a retrospective survey conducted in 1991, for instance, Charles Hirschman et al. (1995, p. 798) found that most of the fatalities during the American war in Vietnam from 1965 to 1975 were military. But they encountered many difficulties in assessing civilian deaths, which were estimated by Guenter Lewy (1978, p. 451) to be in the order of 354,000, very likely an undercount due to the lack of data in the communist North, where he counted only 65,000.

Despite the multiplication of information systems and developments of telecommunications in recent years, available casualty data still has many gaps. Beth Daponte (2008, p. 59) had to rely on the 1987 Iraqi census and a small survey on child mortality to find that the first Gulf War killed directly between 49,000 and 63,000 military in 1991, as against 3,500 civilians. But her ratio was very different if indirect deaths were included, with a much more approximate estimate of 111,000 civilians killed. Such proportions vary significantly from one crisis to another. The victims of genocides in Cambodia in 1975–1978 and Rwanda in 1994 were non-combatants. But we do not know the proportion of civilian and military fatalities during the Tamil uprising in Sri Lanka from 1983 until 2009. In Colombia between 1988 and 2003, combatant deaths outnumbered those of civilians (Restrepo and Spagat 2005, p. 140). To take another example, the Sarajevo-based Research and Documentation Center found that out of 97,000 deaths during the Bosnian war in 1991–1995, 41 % were civilian and 59 % military (Nettlefield 2010, p. 176).

The typical war in developing countries remains an internal conflict that mainly kills civilians and has international connections. This was already the case during the cold war. The most populated country in Africa, Nigeria, testifies to this. In 1967–1970, the secession of the Eastern Region, Biafra, resulted in killing some 30,000 soldiers out of the 300,000 troops involved on both sides (Gould 2011, p. 3). The main bulk of the victims were civilians and Ibo, the ethnic group surrounded and starved by the Federal Government. Figures presented in 2002 before the Oputa Panel, a sort of local Truth Commission, were very high indeed. According to Ohaneze Ndigbo, an ethnic lobby that claimed compensation of 8,650 billion Naira, 50,000 Ibo were killed during pogroms in the North in 1966, 10,000 in other parts of Nigeria in 1967–1970, and 600,000 within the ‘Republic of Biafra’, with 900,000 children who died because of famine (Kukah 2011).

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<sup>8</sup>The bodycount of these civilian victims was only done in the 1990s. See Hopquin (2014, p. 9).

Since then, the proportion of civilian fatalities has remained high in developing countries. The conduct of hostilities in civil wars has not changed much despite their new qualification in international law (Salamé 1996, p. 94). Many studies have in fact showed that there has been no reversal in the proportion of civilian fatalities since World War One (Goldstein 2011, p. 385; Roberts 2010; White 2012, p. 669). Even the rates of battle deaths in civil wars have decreased over the past quarter-century. In the 2000s, for instance, on-going conflicts in Iraq, Afghanistan, Chad, Sri Lanka and Sudan recorded a rate of approximately 0.5 battle death per 100,000 inhabitants per year, as against a world's average of 8.8 homicides (Pinker 2011, p. 302). This trend went together with a reduction in the intensity and frequency of armed conflicts (Mack et al. 2005, p. 158; Goldstein 2011, p. 385). Both rates and absolute numbers of fatalities have decreased. Interstate wars almost disappeared, while the frequency of civil wars has recently declined after a peak in the mid-1990s (Väyrynen 2006, p. 340; Fettweis 2006; Mueller 2009; Nazaretyan 2007; Payne 2004, p. 296).

## Barbarians and “New Wars” in Developing Countries

“New war” theories have been misleading in this regard. They first reinforced stereotypes of anarchy in the third world because developing countries now record proportionally more contemporary armed conflicts, but also contain proportionally more of the world's population. Historically, however, the deadliest wars were led and engaged by imperialist powers, especially the United States, Russia, Great Britain and France. Ideologically sustained by the European model of the nation state, “new war” theories have portrayed the Clausewitzian pattern of hostilities between governmental armies as being more respectful of civilians. By contrast, armed conflicts in the third world were savage, more brutal, and less rational. Developing countries were poor and more likely to produce violence. At the end of the cold war, they not only continued to disrespect International Humanitarian Law, but violated it more and more. Armies were not regular, soldiers were corrupt, and rebels would loot and slaughter civilians because they were only motivated by greed, instead of political grievances.

This narrative, however, was very much framed by the fall of the Berlin Wall and the breakdown of ideological conflict between the communist Eastern bloc and the liberal West. “New wars” theories took for granted the assumption that poverty was the main driver of violence and chaos. Historically, they also tended to dismiss the economic determinants of interstate wars or the colonial conquest, for instance during the scramble for Africa in the nineteenth century. To grab land and acquire wealth was always an underlying motive of genocides, expulsions and massacres, from the Herero in German South West Africa in 1905 to the people of Darfur in Western Sudan a hundred years later (Goldhagen 2009, p. 658). Such drivers of violence have never been the sole preserve of developing countries.



The debate on the relative proportion of civilian and combatant deaths from conflict is not purely academic. According to Adam Roberts (2010), the proposition that 90 % of today's war victims are civilians has three negative effects. First, it perpetuates "a misleading homogenised view of contemporary wars, when in reality each of them (and even each party to them) is unique in its character and in its consequences for civilians". Secondly, it obscures "significant achievements in civilian protection". Thirdly, it diverts "attention from substantial issues to disputes about numbers and methodologies". Constant stories of the deterioration in standards of the conduct of hostilities may risk diminishing concern for human fatalities, as the public becomes more and more desensitised to large death tolls (Olivola and Sagara 2009). As a result, reports of conflict produce cynicism and compel campaigners to use big numbers to alert the international community to the perpetration of massacres.

More generally, the analytical framing of the body count raises many issues regarding policy-making. If we are to follow Christopher Murray et al. (2002) and view armed conflict as a public health problem, it does not really matter that "for every one military death there is at least one direct civilian death" (2002, p. 348). The whole demographic impact of war should be taken as a global indicator of crisis mortality. The status of the victims and the relationship of lethality to violence are legal matters that interest jurists, human rights activists and police investigators, more than medical practitioners. For the aid industry, the main issue would be poverty considered as the trigger of war in developing countries. According to this simplistic reasoning, scarcity is indeed the structural driver of violence, so development should be the answer.

But obviously, such an economic argument does not explain why armed conflicts do not just follow poverty. Understanding wars and their human impact also requires an analysis of institutions, governance and the development of the state. The civilian or combatant status of victims and their direct or indirect relationship to political violence and crime do matter in this regard, because they help to identify the causes and patterns of population change in times of crisis. The human impact of war is not a public health problem only. Neither is healing enough. For medical doctors, bullet injuries, malnutrition, disease or epidemics involve different treatments. The same goes for development issues such as access to health, education, governance... and the regulation of conflicts.

Contributors to this book thus argue that, despite disputes on methodologies and reliability, the statistics of excess mortality and conflict death tolls are useful indicators for policy makers because they help to monitor and compare the intensity of violence. It makes no sense to deny the relevance of demographics to assessing the impact of war. It is certainly important to acknowledge the limitations of statistical analyses of excess mortality and other methods of determining death tolls. But it is also imperative to combine a quantitative and qualitative understanding of armed conflicts. Both academics and policy makers can learn a lot from the careful analysis of casualty data if they are aware of the problems of reliability and the risks of manipulation.

## The Structure of This Book

This book is divided into two sections. The first deals with development issues raised by the analysis of deaths resulting from mass violence. It questions methodologies and the political implications of casualty and excess mortality statistics, not only in contemporary wars, but also in past conflicts. In the annexes of the second section, casualty-recording practitioners share their experiences through case studies of work to document violent deaths.

In the second chapter, to begin with, Scott Gates, Håvard Hegre, Håvard Mokleiv Nygård, and Håvard Strand examine the development consequences of armed conflict. Their findings rely on indicators such as the number of battle-related deaths.

In the third chapter, Marc-Antoine Pérouse de Montclos argues that counting the bodies of war victims is not simply a statistical operation. It has military, strategic, humanitarian, and legal implications. Methodological disputes leave much room for manipulation in this regard. Different types of political exploitation of the statistics of excess mortality can emerge at different points. Memorial of past conflicts are often used to legitimize the victor and/or to investigate war criminals. Meanwhile, so-called passive surveillance can play a role in monitoring on-going conflicts, assessing their military impact, alerting the international community, estimating humanitarian needs and, possibly, engaging peacekeeping operations. In any case, the body count is a constant component of the narratives of war. Consequently, to analyse the impact on development and population change, it is necessary to examine the different factors that contribute to inflate or minimize the statistics of excess mortality in armed conflicts: emotion, the myth of a golden age, humanitarian advocacy, the political economy of the media, military propaganda, the visibility of certain battles, etc.

The proliferation of relief and human rights organisations on the battlefield has certainly contributed to improving the accuracy of body counts. In Chap. 4, however, historian Isabelle Vonèche-Cardia argues that recording the number of people killed in armed conflicts is not the priority of humanitarian institutions like the ICRC (International Committee of the Red Cross). Relief organisations take care of the living, not the dead. Consequently, the ICRC is more concerned with tracing missing persons and, consequently, only identifying the dead in the context of families' rights to know the whereabouts of their relatives. On its creation in 1863, the Red Cross was primarily concerned with states and their military personnel. Combining a legal and practical approach, it thus established card indexes and championed metal name tags for soldiers. Its concern was extended to non-combatants later on.

Faced with many methodological and political challenges, the way practitioners produce and use the statistics of excess mortality can vary considerably. The field of casualty recording – the individual or incident-based documentation of violent deaths as a specific approach – is analysed in the annexes that constitute the second part of this book. Both Henry Dodd and Robert Perkins in Chap. 5 and Samrat Sinha in Chap. 6 detail work that relies primarily on media reports to investigate and

quantify violence. Yet their objectives are different. Dodd and Perkins, of the organisation Action on Armed Violence, aim to study the impacts of particular technologies of violence. The goal is to alert the public and policy-makers to the extent of the humanitarian harm caused by weapons such as air-dropped bombs, rockets, missiles, and improvised explosive devices (IEDs). This is to encourage the development of new international standards to limit the damage of explosive weapons with wide area effects in populated areas. Samrat Sinha is spatially focused on the Manipur region of Northeastern India in 2008–2009. But his main objective is to assess the patterns of victimization at a micro-level in order to identify which demographic segments of the population are bearing the burden of the conflict. Igor Roginek of Croatian human rights organization Documenta in Chap. 7 elaborates an experience of the post-conflict documentation of casualties. The methodology relies on a large number of sources to establish a detailed database of human losses and missing persons from the war in Croatia between 1991 and 1995. In other words, it does not aim to estimate fatalities, but aims to fully document all victims and analyse a past conflict from a memorialising perspective. The project intends to help Croatian society to deal with its past.

Written by members of the Casualty Recorders Network, these different case studies show the diversity of methodologies and objectives in counting the bodies of war victims. They also underline the necessity of assessing the human impact of armed conflicts for population and development studies. It is certainly a long way from Croatia to India or to Afghanistan and Somalia. Yet differences in levels of development should not obscure the fact that excess mortality and patterns of victimization are an issue for reconstruction, welfare and beyond. Marc-Antoine Pérouse de Montclos concludes with a discussion on the diversity of case studies against general trends and the possible causes of the decline of violence. Faced with a lack of standards in counting the bodies of war victims, he argues for minimal requirements and claims that improving the indicators of excess mortality is important for policy-makers.

## **A Note on the Different Terms Used in This Book**

The authors in this volume, coming from different fields and using different approaches, use a variety of terms to refer to different ways of producing numbers of deaths related to conflict. These are summarised here for ease of reference:

### ***Accounting***

This is the general term used in this book to cover all ways of producing numbers of deaths related to conflict.

## ***Body Count***

The body count is different from an index and a rate. It is the act of counting the number of people who died as a result of accidental or intentional violence. In this book, it refers both to the number of war fatalities and the process of counting individual victims of armed conflicts. Used as a number, it is the numerator of a rate, excess mortality. As a process, it does not always report or document deaths in the manner that Truth Commissions sometimes do. Nor does it necessarily involve distinguishing between civilian and military victims of a war. “Counting” in this volume refers to counting individual deaths one by one. It is different in methodology from the estimating of excess mortality through victimisation surveys or census.

## ***Casualty Recording***

Casualty recording is the attempted comprehensive, systematic and continuous documentation of individual conflict deaths and the incidents in which these occur, with the public release of this information as soon as it is safe to do so. It incorporates approaches that can be referred to as documentation and the body count.

## ***Documentation***

Documenting casualties refers to listing individuals who have died with extra information such as demographic details and details about the incident that killed them. Numbers can be produced from easily as a result of documenting casualties.

## ***Estimation***

Estimating numbers of deaths will usually mean using statistical methods, such as sample surveys, to calculate a total number based on a group of known deaths.

## ***Excess Mortality***

In medical and demographic terms, excess mortality refers to the rate of premature deaths that occur before the average life expectancy for a person of a particular category. In war-torn countries, it includes both the direct and indirect deaths from violence. For some authors, it encompasses all exceptional deaths, including those

that are natural but should not have happened, for instance because an individual was in a refugee camp with poor facilities far from home. One issue with estimating excess mortality is that, in developing countries, scientists find it difficult to rely on a credible “normal” baseline to assess and quantify the difference with the mortality rate experienced during a conflict period. Calculating excess mortality is a form of estimation.

Additionally and finally, four further sets of terms require attention:

### ***Casualties/Fatalities***

Whilst ‘fatalities’ refers to deaths only, ‘casualties’ can refer to deaths or injuries, or to both. The lack of an international standard definition for the term ‘injury’ may mean that the scope of injuries referred to under the term ‘casualty’ by some organisations potentially includes forms of harm to individuals that go beyond physical injury, including psychological harm.

### ***Direct/Indirect Deaths***

Whilst there are no universally recognised definitions for these terms, direct conflict deaths will generally refer in this volume to deaths caused directly by injuries inflicted by a violent action or use of weapons by a participant to a conflict, during conflict events. Indirect deaths on the other hand will generally refer to deaths that were not the immediate or inevitable result of a deliberate act of armed violence that may or may not have been directed at the victim, but can be linked to such events or to the conflict more generally. For example, deaths caused by a lack of access to healthcare and/or food due to conflict events.

### ***Disappearance/Missing Person***

“Disappearance” refers to a missing person whose death has not been either confirmed or acknowledged. During wartime, the military use the term “missing in action”, a casualty classification assigned to armed services personnel and other combatants who are reported missing and who may have been killed, wounded, become a prisoner of war, or deserted. If deceased, neither their remains nor grave has been positively identified.

## ***Intentional/Unintentional Killings***

'Intentional killings' refers to any action that is taken to deliberately kill. By contrast, 'unintentional deaths' comprise those deaths that result inadvertently from conflicts, for example, civilians caught in crossfire. Contributors to this book do not have the capacity to investigate if excess mortality results from intentional violence or collateral damages. But some of them raise the issue of unintentional indirect deaths, meaning those deaths caused indirectly by an on-going conflict, mainly due to malnutrition, disease or other health problems.

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**Part I**  
**Methodologies, Development**  
**Issues and Politics**

# Chapter 2

## Development Consequences of Armed Conflict

Scott Gates, Håvard Hegre, Håvard Møkleiv Nygård, and Håvard Strand

### Introduction

In this chapter, we take a close look at the developmental consequences of conflict. We estimate statistically how conflicts lead to excess mortality and other negative consequences. The basis for our estimates are general indicators of development outcomes that have been routinely collected for a wide range of countries over extended periods. In that sense, our data are relatively independent of the political aspects of the conflicts and the manipulation of figures that often ensues – estimates of life expectancy and access to safe water are based on surveys carried out by international actors such as the UN demographic division that care about development, but tend to view processes that are more broad than what is embedded in individual conflicts. In this sense, our data are largely insulated from the manipulation of figures done by governments or NGOs that seek international attention to humanitarian disasters.

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War is a development issue. War kills, but the consequences extend far beyond these direct deaths. In addition to battlefield casualties, armed conflict often leads to forced migration, refugee flows, capital flight, and the destruction of societies' infrastructure. Social, political, and economic institutions are indelibly harmed. The consequences of war, and especially civil war, for development are profound. War creates a development gap between those countries that have experienced armed conflict and those that have not.

The effects of armed conflict are evaluated statistically with respect to achievement of the United Nation's Millennium Development Goals (MDG) as well as on economic growth. The eight MDGs are: End poverty and hunger; achieve universal education; achieve gender equality; improve child health; improve maternal health; combat HIV/AIDS; achieve environmental sustainability; build a global partnership. The MDGs represent the closest thing to a global consensus on developmental priorities, yet so far no extensive research has been done on the effect of conflict on these goals. The analysis presented below shows that civil war harms the achievement of most of these development goals.

Table 2.1 shows the number of people (in millions) affected by conflict, broken down by the MDG indicators. The developing countries of the world are categorized into four groups according to their conflict status over the 1981–2008 period: (1) countries with at least 1 year of armed conflicts causing at least 1,000 battle deaths during that period ('Conflict countries'); (2) countries that have not had any conflict in the period after 1990, but had experienced conflict at some time in the preceding 10 years ('Post-conflict'); (3) India, China and Russia as a separate category; (4) and countries that have not had any conflict in the 1981–2008 period ('Other countries').<sup>1</sup> The first line of Table 2.1 reports the total population in 2008 in each of the five categories. Just short of one billion, out of a total of 5.8 billion people in the developing world, live in conflict countries. The analysis below shows that among these one billion inhabitants, more than 20 %, or 208 million people, are estimated to be undernourished.

Some of the indicators in Table 2.1 are presented unconventionally so as to emphasize the negative. For the MDG on education (MDG 2), for instance, we present the percentage of children that are *not enrolled* in primary education. We do the same for secondary school *non-attainment*, births *non-attendance*, and *lack* of access to potable water and sanitation facilities.

We calculate the number of children that are not enrolled in primary education by first computing the total population in each age group for each conflict category and multiply with the proportions affected (for a more detailed analysis, see Gates et al. 2010).<sup>2</sup> We estimate for instance that 38 million out of about 230 million

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<sup>1</sup> For definitions and sources for the variables reported here and in Fig. 2.1, see Sect. "Methodology" below.

<sup>2</sup> We base these estimates on data from United Nations (2007) that give countries' populations grouped in five-year intervals, e.g. 0–4 years, 5–9 years, etc. To calculate the population in primary school age, we add the 10–14 year population and 80 % of the 5–9 year population. For secondary

**Table 2.1** Millions of people affected by conflict (Gates et al. 2012)

Development indicator	Year	All countries	Conflict countries	Post-conflict countries	India/China/Russia	Other developing countries
Population	2008	5827.3	994	426.9	2664.3	1527.7
Countries	2008	146	19	17	3	85
Undernourishment	2005	909.2	207.8	98	373.8	173.9
Poverty	2003	1694.8	265.2	218.5	828.4	302.6
No primary education	2005	115.4	38	25.7	25.6	23.3
No secondary education	2008	97.3	21	11.1	32.2	27.3
Infant mortality	2008	4.8	1.1	0.9	1.6	0.9
No birth attendance	2003	1723.7	361.4	241.6	696.5	332.5
HIV positive	2007	56.2	7.1	10.7	6.5	29.4
Without water	2006	908.4	189.5	175.4	294.9	187.3
Without sanitation	2006	2594.6	393.9	265.2	1334.4	480.1

Variables used in the econometric estimation	Definition	Source
Population	Logged total population	United Nations (2007)
Undernourishment	% of population living on less than minimum recommended dietary energy consumption	World Development Indicators 2011 (WDI)
Poverty	% of population living on less than USD 1.25 (PPP adjusted) per day	WDI
Primary schooling	% of students completing primary school	WDI
Secondary schooling	Portion of population that have attained secondary education	Hegre et al. (2013)
Infant mortality	The number of infants dying before reaching 1 year of age out of 1000	Hegre et al. (2013)
Birth attendance	Percentage of births attended by skilled medical personnel	WDI
HIV positive	Percentage of the population in the 15–49 age group that are HIV positive.	WDI
Access to potable water	Percentage of population with access to an improved water source such as household connection, public standpipe or borehole	WDI
Access to sanitation	Percentage of population with access to excreta disposal facilities	WDI
Life expectancy	Years a newborn would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life	WDI
GDP per capita	Gross Domestic Product per capita, constant dollars	WDI

school enrollment, we use 60 % of the 15–19 year population. For infant mortality, we use the population in the 0–4 year category divided by 5.

children in conflict countries that should have been enrolled in a primary school are not. About 30 % of the primary school aged children that are not enrolled in primary education live in conflict-affected countries. About 1.4 billion people live in conflict and post-conflict countries – just under 25 % of the developing world. Table 2.1 shows that these countries account for 34 % of the undernourished population, 29 % of the poverty, 56 % of the population without primary education, and 35 % of the births given without the attending of health personnel.

In this chapter, we seek to assess the independent effect of conflict on the MDGs to assess the gaps shown in Table 2.1 between countries that have experienced conflict and those that have not. This assessment is tricky. Conflicts and poor development outcome may have the same causes, such as preexisting history of poverty and poor governance. We use fixed-effects regression models to control for country-specific, unobserved factors that may affect both conflict and development outcomes.

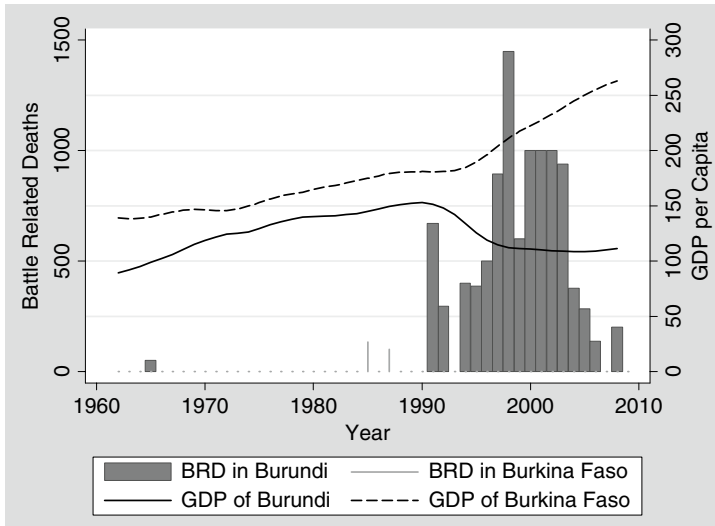
In Sect. “[How conflict affects development outcomes](#)” we discuss the causal mechanisms and review relevant empirical studies. In Sect. “[Methodology](#)”, we summarize our methodological choices and present our conflict data. Section “[Results](#)” summarizes the results of our analysis. Section “[Discussion and conclusion](#)” concludes and discusses policy implications.

## How Conflict Affects Development Outcomes

### *Is the Gap Caused by Conflict?*

To what extent is the gap between conflict countries and other countries a result of the conflicts themselves, and not to factors that are associated with both a high risk of internal conflict as well as poor performance on poverty indicators? Several studies indicate a causal effect. Ghobarah et al. (2003) argue that civil wars have long-term effects on civilian suffering. Analyzing the World Health Organization’s measure of Disability Adjusted Life Years (DALYs), they stipulate that 8.01 million DALYs were lost in the year 1999 from civil wars which occurred during the period 1991–97. In Ghobarah et al. (2004) they argue that the additional burden of death and disability caused by the lingering effects of civil wars is nearly double the immediate and direct effect of these wars. Civil war, they argue, “directly effects all the major contributors to health: exposure to disease, medical care, public health interventions, and overall socio-economic conditions” (Ghobarah et al. 2004, 871).

To best understand the development gap caused by armed conflict, we need to assess the counter-factual. In an experimental sense a treated case is compared to a control. In a quasi-experimental setting, we can either compare similar countries through matching or to simulate the effects of conflict for a given country. Figure 2.1 compares two relatively similar countries over time – Burundi and



**Fig. 2.1** Conflict and growth in Burundi and Burkina Faso (Gates et al. 2012)

Burkina Faso.<sup>3</sup> The two countries followed a similar growth trajectory up to 1990 (shown with solid and dashed lines). Conflicts are shown in the figure in the form of bars with heights proportional to the number of battle-related deaths (BRD). Both countries had short, minor conflicts during this period with no visible effect on the economy. In the 1990s, however, the paths diverge. The civil war in Burundi swiftly destroys three decades of growth, while Burkina Faso takes part in the strong global growth of the post-Cold War area. By 2008, Burkina Faso’s average income is more than twice the size of Burundi’s.

## *Mechanisms*

Civil wars wreak havoc on economies. According to Collier (1999) this happens through five mechanisms: destruction of resources, disruption of social order, diversion of public expenditure, “dis-saving”, and the shifting of assets out of the country. In *Breaking the Conflict Trap*, Collier et al. (2003, 17) consequently describe civil war as development in reverse – “after a typical civil war of 7 years duration, incomes would be around 15 % lower than had the war not happened”.

Ghobarah et al. (2003, 191–192) develop a theoretical framework for analyzing the effect of conflict on the development outcomes summarized in the MDGs.

<sup>3</sup>This pair of countries is found using a method called Coarsened Exact Matching (Blackwell et al. 2009). We took the list of countries with major conflict and used this method to pair each country in the conflict category with the most similar without major conflict.

They note that “health conditions are shaped by the interplay of exposure to conditions that create varying risks of death and disease for different groups in society and the ability of groups in society to gain access to health care and receive the full range of benefits produced by the health-care system”. They list four sources of differences in health outcomes: (1) the extent to which populations are exposed to conditions that increase the risk of death, disease, and disability; (2) the financial and human resources available for addressing the public health needs of populations; (3) the level of resources actually allocated to public health needs by the private and public sectors; (4) the degree to which resources actually allocated to public health are efficiently utilized.

The first item mainly affects the health-related MDGs (MDG 1, 4, 5, and 6), whereas the three other items are equally relevant to the other outcomes we have analyzed. Civil wars directly expose populations to conditions that increase mortality and disability. The most obvious source is battle deaths. Fighting directly increases mortality and decreases life expectancy, if battle casualties are high enough.

The indirect effects of conflict are likely to be much greater than the direct effects. Civil wars displace large populations, and their temporary accommodation often exposes them to new risk factors. As noted by Ghobarah et al. (2003, 192), “epidemic diseases – tuberculosis, measles, pneumonia, cholera, typhoid, paratyphoid, and dysentery – are likely to emerge from crowding, bad water, and poor sanitation in camps, while malnutrition and stress compromise people’s immune systems”.

Epidemiological research shows that disease, and especially diarrhea, has a greater effect on mortality rates than direct battle deaths. Degomme and Guha-Sapir (2010, 297) study Darfur and argue that “more than 80 % of excess deaths were not a result of [the] violence”. Such excess deaths are the result of an increased spread of disease, which in turn drive up infant mortality rates. The increased spread may be caused by the inability or unwillingness of states to provide health services for their population during war time, or to conditions in refugee camps that increases the transmission of disease.

Widespread violence and physical destruction disrupts transportation, cutting rural populations off from health and education facilities. Military expenditures invariably increase during war, reducing funds available to promote public health, education, poverty alleviation, etc. (Gleditsch et al. 1996; Knight et al. 1996). Local economies may be disrupted, partly because of disincentives to invest at all, partly due to capital flight (Collier 1999). The net effect is to reduce public spending.

Finally, conflict reduces the efficiency of the public health resources that are allocated. “Wartime destruction and disruption of the transportation infrastructure (roads, bridges, railroad systems, communications and electricity) weakens the ability to distribute clean water, food, medicine, and relief supplies, both to refugees and to others who stay in place” (Ghobarah et al. 2003, 193). Medical personnel tend to leave conflict zones if they can, leaving the poorest and most immobile behind.

Two methodological issues affecting this analysis deserve discussion. Firstly, it is clear from Table 2.1 that conflict countries perform worse than the other countries



for most of the MDG indicators. Conflict countries are larger than non-conflict countries on average, and conflicts are often partly local and rarely directly affect the entire population in large countries (Buhaug and Gates 2002; Buhaug and Rød 2006; Raleigh et al. 2010). Measuring the effect of conflict using country-level indicators will therefore in many cases underestimate the local effect of conflict, and overestimate the effect on the median citizen.

The second issue regards endogeneity. Underdevelopment facilitates both the occurrence of conflict and undernourishment. Most conflict studies confirm that development as measured by GDP per capita or energy consumption per capita is among the most robust predictors of civil war (Hibbs 1973; Hegre et al. 2001; Fearon and Laitin 2003; Collier et al. 2003; Hegre and Sambanis 2006). It is thus necessary to account for these factors to avoid attributing development effects to factors that tend to cause conflicts in the first place.

### *Effects of Conflict on Poverty and Hunger*

Several studies confirm the popular perception that conflicts exacerbate poverty and hunger. Messer and Cohen (2004, 3) argue that “conflict causes food insecurity” and that civil conflicts in Africa since the mid-1960s until 2000 cost the region more than “\$120 billion worth of agricultural production”. Country studies carried out in post-conflict countries also find a marked increase in poverty and hunger during war. For Angola, Guha-Sapir and Gomez (2006, 13) find that malnutrition rates were severely affected by conflict, but that “one year after the cease-fire, Angola had been able to leave behind the high rates of crude mortality and malnutrition that field surveys had recorded during conflict”. For Mozambique, Brück (2006, 33) finds a more lasting effect of conflict. In the northern part of the country in 1997, 5 years after the civil war ended, “39 % of all children under 3 years of age [were] moderately or severely underweight”. Mozambique had a prevalence of undernourishment among the population of 52 % in 1997. In comparison, in Burkina Faso, which has similar GDP per capita but have largely avoided conflict, undernourishment affected only 12 % of the population. According to the World Bank Sub-Saharan Africa “alone remains seriously off-track to achieve the poverty reduction MDG” (World Bank 2007, 17).

We are not aware of any cross-national studies of conflict’s effect on undernourishment beyond those reported here, or any systematic cross-national studies of the relationship between conflict and the poverty headcount variables. Poverty and undernourishment, however, are to a large extent determined by economic development broadly defined and captured by the GDP measure (Collier and Dollar 2002). In this regard a substantial literature on the effect of conflict on economic factors exists, dealing both directly on issues such as GDP growth, but also on the composition of a country’s economy and on the effect on e.g. military expenditure.<sup>4</sup>

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<sup>4</sup>See Collier et al. (2003) and Chen et al. (2008) for reviews.

Collier (1999, 175) finds that during “civil war the annual [GDP] growth rate is reduced by 2.2 %”. These results are confirmed by the results we present below. Collier finds a difference between long and short wars. While short wars “cause continued post-war [GDP] decline, [...] sufficiently long wars give rise to a phase of rapid growth” (Collier 1999, 175–176) – a ‘Phoenix effect’ (Organski and Kugler 1980). The continued decline in GDP after short wars Collier attributes to post-war environments being less capital-friendly than a country’s pre-war capital environment.<sup>5</sup>

Chen et al. (2008, 71) find that the “average level of per capita GDP is significantly lower after the war than before it”, and this they argue is “undoubtedly a direct reflection of the cost of war”. They too find that after “the destruction from war, recovery is achieved through above average growth”, but this growth follows the pattern of “an inverted U, with the strongest results achieved in the fourth or fifth year after the onset of peace” (Chen et al. 2008, 72–79).

The effects of civil wars also tend to spill over into neighboring countries (Buhaug and Gleditsch 2008; Gleditsch and Ward 2000; Salehyan and Gleditsch 2006). The effect on neighbors manifest in two ways: increased risk of civil war and lower economic growth rates (Murdoch and Sandler 2002, 2004)

### *Effects of Conflict on Education*

Lai and Thyne (2007, 282) find that during civil war a state “reduces its educational expenditures by 3.1 % to 3.6 % each year”. Perhaps more significantly the authors find that this reduction in spending is not due to a “guns for butter” tradeoff but that civil wars disrupt a state’s “general ability to provide social services like education to its citizenry” (Lai and Thyne 2007, 284). They also find that conflict reduces education enrollment. This is perhaps more disturbing since such an effect is likely to linger on long after the conflict has ended.

### *Effects of Conflict on Child Mortality*

Infant mortality rates (IMR) are defined as the probability of dying between birth and 1 year, expressed as the number of infant deaths per 1000 live births. The measure is often employed as a proxy for a state’s general socio-economic development as an independent variable (Abouharb and Kimball 2007) since the data coverage for infant mortality is good in every region of the world.

Davis and Kuritsky (2002), Ammons (1996), and Stewart et al. (1997) all find that conflict increases infant mortality. For Sub-Saharan Africa, Davis and Kuritsky (2002, 9) find that countries that experienced conflict had average infant mortality

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<sup>5</sup> See Davies (2008) for a detailed study of post-conflict capital flight.

rates 10 % higher than those without any conflict experience. Iqbal (2010) finds that infant mortality is increased by conflict. Her finding, however, is not very robust. She attributes this to “the possibility that during protracted conflicts, populations adjust to societal conditions and appropriately guard against infant mortality” (Iqbal 2010, 88).

## *Effects of Conflict on Access to Water and Sanitation*

The literature on the effect of conflict on access to adequate water and sanitation facilities is at best scarce. The percentage of the population that lacks access to adequate water and sanitation facilities has declined in every region of the world, but the shortfall between the MDG target and what has actually been achieved is greatest in the region with the most conflict, Sub-Saharan Africa (World Bank 2007). According to the same report, less than 20 % of less developed countries are on track to reach the goal in access to water, and less than 35 % the goal in access to sanitation. Similar findings are reported by the United Nations (2009, 45–46).

## **Methodology**

### *Data*

We combine two datasets for our analysis. Since most of the outcome indicators are measured in five-year intervals, most analyses are based on a dataset containing one observation for each country for each five-year period. For the growth models, however, we use a country-year design with one observation for each country for each year. As outcome variables we use the variables listed in Table 2.1.

We exclude the industrialized countries, and thereby avoid including low-growth rich and stable countries.<sup>6</sup> In most of our analysis we link conflict to improvements in development indicators. Many of the indicators, however, have a natural maximum. Primary education enrollment cannot exceed 100 %, for instance. Many industrialized countries have reached the maximum values for many indicators, and rarely have armed conflicts.

The conflict data come from the Uppsala Conflict Data Program (UCDP), the most comprehensive, accurate and widely-used data source on global armed conflicts (Gleditsch et al. 2002; Harbom and Wallensteen 2009). UCDP defines an armed conflict as a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the

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<sup>6</sup>We exclude most countries classified as industrialized in World Bank (1978): Austria, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States.

government of a state, results in at least 25 battle-related deaths. A civil (or intra-state) conflict occurs between a government and a non-governmental party.

Our conflict measure is ‘Battle-related deaths’, which is measured as the log of the count of battle-related deaths due to fighting in the 5 years preceding the observation period (Lacina and Gleditsch 2005). About 20 % of the country-periods in our dataset have conflicts. The median conflict incurred 2,500 battle deaths. The most destructive conflict periods (in Afghanistan and Cambodia) caused over 200,000 deaths each.

### *Model Specification*

We use fixed-effects regression models. These models remove between-countries differences in the outcome variables and concentrate on the within-country effects. In this regard, the counter-factual is the country comparing conditions of conflict and non-conflict. If conflicts increase undernourishment, we should observe an increase relative to the country’s average levels in the indicator during the conflict or in the period following the conflict.

Fixed-effects models may over-protect against omitted-variable bias. In particular, countries that have had conflicts consistently over the entire period for which we have data will not contribute much to the estimated effect of conflict – conflict is then largely part of the ‘fixed effect’ itself. Since these countries also are likely to be the most severely affected by conflict, the fixed-effects model may yield too conservative estimates. This is accentuated by the fact that we have data only for relatively short periods. Some countries may be poor when our data series start because of the conflicts they have had up to then. Our models will also ignore this effect.

Despite this potential drawback, we produce these conservative estimates, which are more likely not to find an effect of conflict on development. In fact, we do find very substantial detrimental effects of conflict, especially when we have long time series.

Most indicators have time trends that show global improvement in the MDG indicators. Given these strong trends, conflict countries may also improve the general situation in the country. We include dummy variables for each five-year period in the fixed-effects models to account for this.

## **Results**

Table 2.1 leaves no doubt that conflict countries have less favorable scores for all MDG indicators.

## *Results from Fixed-Effects Estimation*

Table 2.2 shows results from the fixed-effects analysis of five MDG indicators. To account for global changes in the average levels for the indicators, we include dummy variables for each five-year period. We also control for the size of the country. In column 1, we estimate the effect of the log of battle deaths variable for the undernourishment outcome. The analysis indicates a strong, detrimental effect of conflict. The estimate of 0.414 implies that a conflict of median severity (2,500 deaths over 5 years) increases the undernourished proportion of population by about 3.3 percentage points.<sup>7</sup> This corresponds to about 300,000 persons in the median-sized country with about ten million inhabitants.

We have tested whether the effect of conflict is contingent on the size of the country.

In a large country, a conflict may be extremely detrimental to a particular subnational region experiencing warfare, but have little effect on the country as a whole. For undernourishment, the effect of conflict, however, is country-wide.

Figure 2.2 illustrates the estimated effect of conflict on undernourishment for a typical country estimated through simulation modeling. This country had a population of about 15 million in 1970, increasing to 35 million in 2005. The initial undernourishment proportion for the hypothetical country was about 20 % in 1970. The dotted line in the figure represents the baseline scenario without any conflicts – the counterfactual. The estimates from Table 2.2 imply that the poverty rate for the typical country is constant from 1970 to 1995, and thereafter slowly decreasing.<sup>8</sup>

The dashed line shows estimated poverty rates if this country had 5 years of minor conflict starting in 1980. The prevalence of undernourishment then increases to about 25 % during those 5 years. The solid line shows estimated poverty rates if the country had 15 years of major conflict, starting in 1975. Undernourishment then increases to 28 % for the entire 15-year period.

The result for the analysis of the relationship between conflict and poverty is presented in Column 2 in Table 2.2. We find little trace of a direct effect of conflict on poverty. Estimates are largely in the expected direction, but not statistically significant. This is partly due to data sparseness – we have three consecutive observations for only just above 50 countries, and never more than 89 countries for a given year. Data also tend to be most sparse in conflict countries – we lack for instance data for Afghanistan, DRC, Algeria and Sudan for the year 2000.

Column 3 shows that conflict variables also reduce life expectancy. The temporal dummies indicate that life expectancy has increased quite strongly over the four decades in question. The average person in a developing country can expect live

<sup>7</sup>The logarithm of 2,500 is 7.82, which multiplied by the parameter estimates 0.494 is 3.3 %.

<sup>8</sup>The specification of the model underlying Fig. 2.1 does not allow for only a partial recovery as evident for GDP per capita in Fig. 2.2. For most of the indicators we use, we have data only for every five-year period. This precludes estimating the same type of model as the one shown in Table 2.4.

**Table 2.2** Fixed-effects regression analysis of poverty, undernourishment and mortality outcome variables (Gates et al. 2012)

	Undernourishment	Poverty	Life expectancy	GDP per capita	Infant mortality
Battle-related deaths (ln)	0.414*** (0.106)	0.102 (0.192)	-0.123*** (0.0359)	-0.0215*** (0.00367)	0.0130*** (0.00284)
Neighboring conflict	-0.122 (0.108)	0.214 (0.176)	0.0164 (0.0399)	-0.00529 (0.00403)	0.00458 (0.00316)
1970–1974 (ref.cat)					
1975–1979	–	–	1.708*** (0.393)	0.168*** (0.0421)	-0.205*** (0.0316)
1980–1984	–	0.636 (4.151)	3.174*** (0.413)	0.358*** (0.0443)	-0.435*** (0.0328)
1985–1989	–	–	4.454*** (0.459)	0.418*** (0.0490)	-0.656*** (0.0365)
1990–1994	–	-0.810 (1.881)	5.209*** (0.512)	0.549*** (0.0552)	-0.840*** (0.0404)
1995–1999	–	-2.425 (2.004)	5.745*** (0.565)	0.637*** (0.0604)	-1.013*** (0.0446)
2000–2004	-0.835 (0.585)	-3.061 (2.351)	5.985*** (0.616)	0.779*** (0.0665)	-1.181*** (0.0486)
2005–2008	-2.200** (0.847)	-5.944* (2.734)	6.657*** (0.656)	0.966*** (0.0717)	-1.357*** (0.0518)
Population (ln)	-3.045 (3.767)	-9.897 (5.756)	5.293*** (0.728)	-0.662*** (0.0805)	0.382*** (0.0577)
Constant	46.31 (33.52)	123.5* (54.61)	10.36 (6.128)	12.50** (0.673)	1.191* (0.487)
<i>N</i>	395	278	1029	903	1006
Log likelihood	-941.1	-827.9	-2431.4	21.56	190.6

Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

more than 6 years longer in 2008 than in 1970. Yet a conflict with 2500 battle-related deaths is enough to remove almost 1 year from each citizen of that country.

Column 4 shows that conflict also reduces GDP per capita. This relationship is discussed in more detail below. A median-size conflict is estimated to decrease GDP per capita with 15 %.

Column 5 shows the effects with log infant mortality rates as the dependent variable. The analysis indicates that conflicts also have a clear detrimental effect on infant mortality rates. Again, we do not find the relative effect to be clearly contingent on the size of the country. The magnitude of the effect is large. 2500 battle deaths lead to a 10 % increase in IMR. Both indicators, log of infant mortality rates and log of battle deaths, are in log form. In terms of elasticities, then, a one-percent increase in battle deaths is associated with a 0.013 % increase in infant mortality



**Fig. 2.2** Estimated effect of conflict on undernourishment (Gates et al. 2012)

rates. This might not sound like a lot, but we must keep in mind that the latter figure refers to a rate. The current average mortality rate in developing countries is about 50 per 1000 born. In a median-sized country of about ten million people and 200 000 infants, this corresponds to 10,000 infants per year. A 10 % increase, then, is an excess mortality of 1,000 infants per year. Over the five-year period, a conflict with 2,500 battle-related deaths seems to be associated with twice as many dead infants.

Table 2.3 shows results from the analysis of the education and environment outcome variables. The first column shows the effect of conflict on primary education. The estimates indicate that conflicts adversely affect education rates, but are not statistically significant. The second column shows the same model for male secondary school attainment rates, measured as the percentage of the relevant age group. Again, there is no discernible effect of conflict on education levels in the country – none of the estimates are statistically significant. Conflicts in the neighborhood seem to hurt secondary education, however. A country with a neighbor that had 5 years of minor conflict in the preceding period experiences an average reduction in education attainment of an additional 1.3 %.<sup>9</sup> This roughly corresponds to losing 3–4 years of development relative to similar countries located in peaceful neighborhoods.

Columns 3 and 4 show the results for the environmental impact variables. The analyses indicate no clear relationship between conflict and access to sanitation, but there is a significant detrimental effect of conflict on access to potable water.

<sup>9</sup>We code a dummy variable that takes on the value of 1 for a given country-year if any of that country's neighboring countries are coded as having a civil conflict. A neighbor is defined as any country within 500 km of the country's border.

**Table 2.3** Fixed-effects regression analysis of education and environment outcome variables (Gates et al. 2012)

	Primary schooling	Secondary schooling	Access to Sanitation	Access to water
Battle-related deaths (ln)	-0.137 (0.226)	-0.000141 (0.000745)	-0.0804 (0.0918)	-0.231* (0.0943)
Neighboring conflict	0.215 (0.217)	-0.00246** (0.000811)	-0.0466 (0.0966)	0.0791 (0.0987)
1970–1974 (ref.cat)				
1975–1979	–	0.0424*** (0.00808)	–	–
1980–1984	–	0.0803*** (0.00842)	–	–
1985–1989	–	0.122*** (0.00929)	–	–
1990–1994	–	0.151*** (0.0103)	–	–
1995–1999	–	0.175*** (0.0112)	2.200*** (0.619)	2.030** (0.638)
2000–2004	-0.193 (1.212)	0.195*** (0.0121)	4.359*** (0.798)	4.090*** (0.825)
2005–2008	0.632 (1.773)	0.214*** (0.0128)	6.168*** (1.009)	6.255*** (1.043)
Population (ln)	35.31*** (7.797)	0.0636*** (0.0140)	2.998 (2.881)	5.122 (2.992)
Constant	-232.0*** (67.97)	-0.160 (0.119)	29.35 (25.51)	28.03 (26.41)
<i>N</i>	348	1035	485	500
Log likelihood	-1019.1	1562.0	-1269.8	-1331.2

Standard errors in parentheses \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

The median conflict is estimated to cut off access to potable water for about 1.8 % of the population. It is not unlikely that the increased infant mortality reported earlier is in part caused by lack of potable water.

### *Time to Recovery from Conflict*

Figure 2.2 indicates that countries immediately return to the pre-war level of undernourishment when the conflict is over. This is to some extent an artifact of our modeling. With data only for five-year periods, we are not able to obtain statistically significant estimates for an adverse effect of conflict after the war. While these models represent a valid identification of the immediate consequence of conflict, predictions based on these results omit the case-specific history. Thus, after a given period,



the post-conflict lag variables will no longer ‘remember’ the case-specific conflict, and the predicted levels of economic development will be exactly equal to a similar case with no pre-occurring conflict.

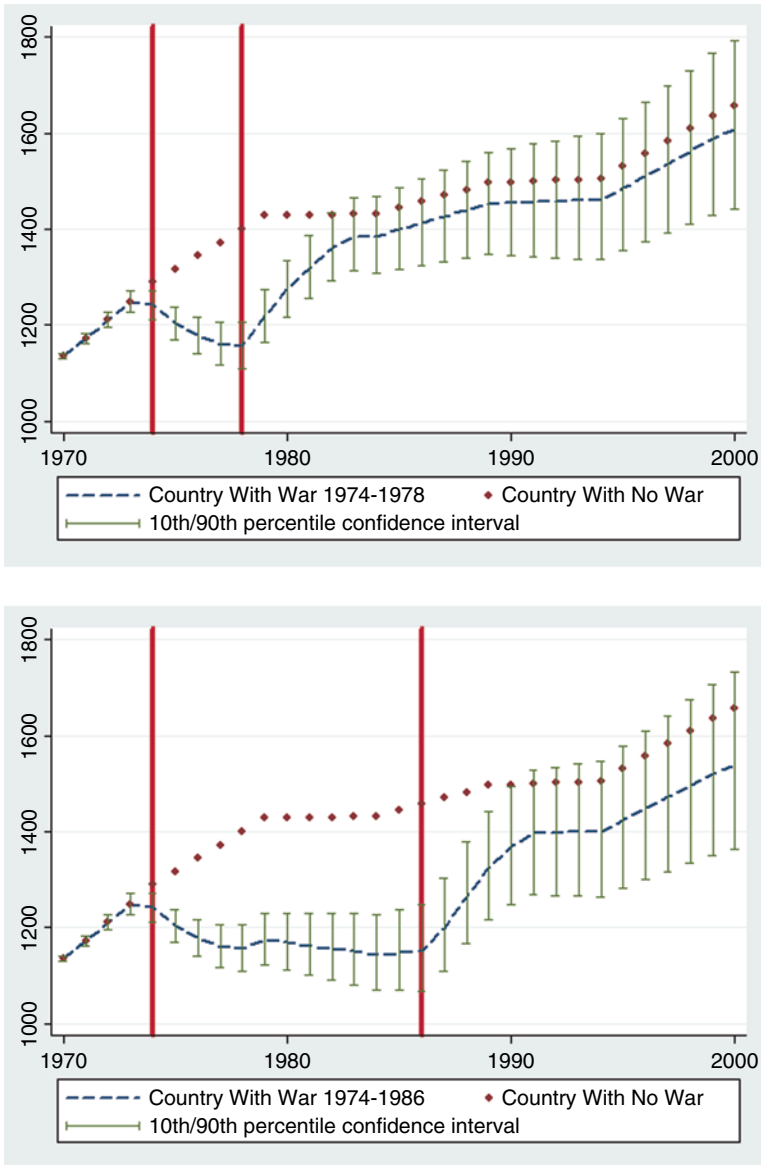
For GDP per capita, we have annual observations and are better able to capture any delayed effects of conflict. To account for this, we estimate a population-averaged model with annual growth as dependent variable. The models incorporate an AR1 correction for the error terms within each country. This model also accounts for the fact that subsequent observations for the same country may be dependent on each other.

We run a number of simulations based on these results to visualize the consequences of conflict. The dependent variable in these models is  $X - X_{t-1}$ , with  $X_{t-1}$  included as a control variable. By setting the initial level of for instance GDP/capita to \$700 in 1969, we can use the estimated conflict dependent growth level to calculate the level of GDP/capita in 1970. The estimated level for 1970 can in turn be used to estimate 1971, and this routine can be iterated all the way up until today. By holding all other covariates fixed, we can then compare the estimated levels for different conflict scenarios.

Following King et al. (2000) we draw 1000 sets of coefficients from a multi-normal distribution based on the variance/covariance matrix produced by the regression model. Each of these draws is used to simulate the change from period to period for a scenario with conflict and a scenario without conflict. The result is 1000 different estimation of the corresponding level of interest at each period, and it is this set that is the basis for our figures.

For GDP per capita, we estimate the extent to which the detrimental effects linger beyond the end of the war. Given the strong correlation between economic production and most of the MDG outcomes, this should give an indication of the extent to which the effect of conflict becomes permanent.

Figure 2.3 shows simulated GDP per capita levels for the 1970–2000 period for a country that started out at 1100 dollar per capita, about the level of Algeria in 1970. The dotted lines in the two sub-figures show the average growth trajectory for a non-conflict developing country. This is our simulated counter-factual. By means of regression models we have estimated the difference in growth rates from this average for countries that were at conflict at  $t, t-1, t-2$ , etc. The results from the regression model are given in Table 2.4. The dashed lines indicate the growth trajectory for the same countries if they experience conflict. The left panel shows expected GDP per capita for a country with war (more than 1000 battle deaths per year) that broke out in 1974 and lasted for 5 years until 1978, with peace thereafter. The figure shows that the growth loss over the first 5 years of the conflict is very large – about 20 % relative to the non-conflict country. The estimates indicate that countries see an immediate pick-up growth after conflicts of this duration. The right panel simulates a country that had an outbreak of war in 1974 that lasted for 13 years up to 1986. After 10 years of conflict there is some signs of conflict countries recovering parts of the war losses. This continues in the first 5 years of the post-conflict period. Five years after the conflict ended we cannot discern further pick-up growth in neither of the scenarios. The aggregate pick-up growth up to then is on average not



**Fig. 2.3** Simulated change in GDP per capita 1970–2000, for conflict and non–conflict country, short war (1974–1978) and long war (1974–1986) (Gates et al. 2012)

sufficient to close the gap caused by the conflict. The median conflict country is almost 10 % under the trajectory it would have followed without the conflict. There are some uncertainties in these estimates – the probability that the conflict country closes the gap to the non-conflict country is larger than 10 %. But the probability that the aggregate growth loss is as large as 20 % is also larger than 10 %.

**Table 2.4** Effect of conflict on annual growth in GDP per capita (PPP, logged) (Gates et al. 2012)

	(1)
	Growth
GDP per capita, t-1 (ln)	-0.00267* (0.00109)
Conflict	-0.0192*** (0.00270)
Conflict, t-1	-0.00685* (0.00321)
Conflict, t-2	0.00502 (0.00325)
Conflict, t-3	0.00191 (0.00329)
Conflict, t-4	0.00691* (0.00325)
Conflict, t-5	0.00902*** (0.00273)
1970-1975	-0.0113*** (0.00325)
1978-1980	-0.0316*** (0.00321)
1980-1985	-0.0227*** (0.00323)
1985-1990	-0.0304*** (0.00326)
1990-1995	-0.0148*** (0.00329)
1995-2000	-0.0187*** (0.00334)
2000-2005	-0.00586 (0.00356)
East Central Asia	0.0139 (0.00969)
Latin American & Caribbean	-0.0197*** (0.00344)
Middle East & North Africa	-0.0164*** (0.00382)
OECD	-0.0155*** (0.00413)
South Asia	-0.00861 (0.00487)
Sub-Saharan Africa	-0.0229*** (0.00363)
Ethnic fractionalization	-0.0161*** (0.00367)
Secondary education rates	0.0215*** (0.00571)
Population (ln)	0.00138* (0.000575)
Constant	0.0542*** (0.0103)
Observations	4401
Log likelihood	6860.6

Standard errors in parentheses \*  $p < 0.05$ ,  
 \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## Discussion and Conclusion

The costs of war are paid by civilians. Our findings underscore why it is important that the international community remains focused on conflict resolution and peace-keeping. While the direct consequences of conflict are bad, the indirect consequences are much worse. Conflict is “development in reverse” (Collier et al. 2003). The first and most basic policy recommendation from this article is therefore that sustainable development must take the risk of war into account.

Table 2.5 lists the MDGs as well as the various indicators we analyze to gauge the *causal effect* of conflict on the attainment of these goals. As the table shows, we find clear detrimental effects of conflict on the reduction of poverty and hunger, on

**Table 2.5** Summary of regression results, Millennium Development Goals (Gates et al. 2012)

MDG	Label	Indicator	Effect of conflict
MDG 1	Ending poverty and hunger	Undernourishment	Detrimental
		Poverty headcount	Detrimental
		Life expectancy	Detrimental
		GDP per capita	Detrimental
MDG 2	Universal education	Primary school enrollment	Unclear
		Secondary school attainment	Unclear
MDG 4	Child Mortality	Infant mortality	Detrimental
MDG 5	Maternal Mort.	Birth attendance	Unclear
MDG 7	Environmental sustainability	Access to water	Detrimental
		Access to sanitation	Unclear

primary education, on the reduction of child mortality, and on access to water. As discussed above, these effects are quite strong. Five years of sustained conflict with only a moderate amount of direct fatalities on average push 3–4 % of the population into undernourishment. The long-term effects of undernourishment are grim (Ivanovic et al. 2000), which underscores the importance of early intervention. Conflicts generate a surplus infant mortality at the same level as direct deaths – for every soldier killed in battle, one infant dies that would otherwise have survived through the indirect effects of conflict.

We find some evidence of a catch-up effect, where post-conflict countries exhibit faster economic growth than normal to regain the average income level expected in the absence of conflict within a decade after the end of the conflict. While this is good news, one should keep in mind the overall economic performance will differ across sectors. A likely cause for this recovery is international assistance. If this is the case, we warn against assuming that post-conflict reconstruction is likely to be the case no matter what we do. More research is needed to understand the post-conflict economic recovery across sectors.

We find very limited evidence that conflict affects gender parity measured as the female-to-male life expectancy ratio. Internal conflicts seem to harm males and females in equal measures. We also find no effect of conflict on access to sanitation facilities. Yet, these findings should not be cited as evidence for the lack of such effects. We have deliberately used a conservative estimator, which we expect to moderate our results.

The *Human Security Report 2009/2010* highlights the decreasing costs of conflict. The report emphasizes trends in continued improvement in such indicators as infant mortality rates and maternal mortality even in countries engulfed in conflict. Our analysis also shows these general trends with respect to the MDGs. Nevertheless, we find that conflict affects MDG achievement during conflict and after. We find a clear gap between countries in conflict and those not experiencing conflict. We also find that the effect of war lingers. More intensive fighting leads to much longer recovery times. While key economic indicators might paint a rosy picture, the

consequences of conflict on development remain immediate and persistent. Armed conflicts are an important obstacle to fulfilling the Millennium Developmental Goals.

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## Chapter 3

# Numbers Count: Dead Bodies, Statistics, and the Politics of Armed Conflicts

Marc-Antoine Pérouse de Montclos

*They exaggerate. The city of Balak was not reduced to ashes in a few hours but in a few days. They claim that 200 villages were burnt and there were only 99. What you call plague is only typhus. And no, it's not true that all women were raped and girls sold as slaves; some of them could escape. Prisoners were not only emasculated, but also beheaded, so the situation is not that bad. The child who was allegedly impaled was actually hit by a bayonet. When there is one, you see two, you always double, etc. etc.*

*This way to dispute horror and indignation is a shame. Nothing is worst than mollifying atrocities. It is subtlety pleading for Barbary.*

Victor Hugo advocating an international intervention to save the Serbs from being massacred by the Turks (Hugo 1926, p. 5 author's translation)

War has a negative impact on development and population, but in what proportion? To answer this question, researchers need to rely on indicators such as excess mortality and its numerator, the number of victims of armed conflicts. The problem is that counting bodies is not simply a statistical operation. Estimating excess mortality during wartime raises many issues regarding the measurement of violence, its treatment by the media, humanitarian organisations, governments and the military, and its legal and political implications. The number of victims, for instance, tells us a lot about the conduct of hostilities, from victory to defeat. A key element in military propaganda, body counts also helps to assess human needs and track possible violations of International Humanitarian Law. Furthermore, such data can be used to test early warning systems and evaluate the success or the failure of relief and peace operations. In other words, recording war casualties is not only a military affair. It has policy implications for decision makers.

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Hence, this strategic analysis of body counts addresses three main domains: military, humanitarian, and judicial. It also examines narratives that contribute to inflating or minimizing the statistics of mortality in armed conflicts. Emotion, the myth of a golden age, humanitarian advocacy, the political economy of the media, military propaganda, the visibility of certain battles, and methodological issues all play an important role in this regard. Many factors can push journalists and relief workers to choose the highest estimates of excess mortality. The problem is that inflated figures can desensitize the public to mass atrocities, lead to the need for high casualty numbers to justify action, and challenge the credibility of population studies and advocacy groups. They can eventually raise suspicion, become a hoax, and produce a sort of “Timisoara syndrome”, named for the city of Timisoara where the 4,500 deaths initially reported during the Romanian Revolution of 1989 became less than 100 after further investigations.<sup>1</sup>

## The Methodological Complexity of Recording War Casualties

The methodological complexity of estimating numbers of war casualties leaves much room for manipulation and controversy. Basically, estimates can rely on four main sources: censuses before and after a conflict to calculate retrospective mortality; ex-post victimization surveys; on-going press reports on violence; and investigations of individual deaths. None of these methods are fully reliable and exhaustive. Thus in the very same book, a statistician argues that “unlike newspaper reports, random sample surveys are considered unbiased and truly reflective of the experiences of the population”, while an ethnographer replies that “the science of quantitative measurement of mortality cannot eliminate biases that may result from responses that are untrue in systematic and unpredictable ways” (Seybolt et al. 2013, p. 9 and 139). Jule Krüger et al. even claim that “it is impossible to produce a statistically valid and reliable measure of violence from a single casualty dataset”. According to them, bias is the rule, rather than the exception, and databases only “reflect *reporting* patterns, not patterns of violence” (2013, p. 248–9). For instance, generally underreported events include those that occur in rural remote areas, involve few victims, and/or happened in the past.

Comparing censuses, to start with, raises a number of issues. First comes the consistency of official statistics. The training of census takers and the low capacity of weak states to gather data are not always the key problems in developing countries. In some cases, we know that governments deliberately inflate their number of citizens in order to reduce their revenue per capita and obtain cheaper loans from international financial institutions. The opacity and the dysfunction of authoritarian regimes do not help either if population figures are not—or cannot—be fully published. Changing methods of counting also cause problems. Comparing the 1948

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<sup>1</sup> Timisoara is no exception. In Bulgaria in 1876, 150,000 Christians were reported to have been killed by Muslims with the complicity of the Ottoman authorities. Historians now put the real figure at around 3,000. See Saab (1991, p. 24).

and 1962 censuses of Kenya for example, Caroline Elkins estimated that almost 300,000 Kikuyu died during the Mau Mau Emergency (Elkins 2005, p. 366). She failed, however, to take into account the changes in the tribal classifications. Moreover, it is very possible that the defeated Kikuyu, who constituted the main bulk of the rebels, were afraid, or recalcitrant to participate to the 1962 census, the last to be carried out by the colonial government. As a result, they may have deliberately under-enumerated their numbers. John Blacker found a different result of approximately 50,000 excess deaths by using data from the 1969 census to reconstruct the levels and patterns of mortality in the 1950s. This is still much more than the official figure of 11,000 Mau Mau killed in action and 1,000 executed, notwithstanding unrecorded deaths in detention camps (Blacker 2007).

Indeed, the difference between two censuses before and after a conflict is not enough to estimate the number of casualties as simply a subtraction of population figures. Higher fertility and lower infant mortality can compensate losses. Moreover, refugee migrations can increase the number of missing persons who are very much alive, but live abroad. Consequently, it is extremely difficult to appraise the lethality of wars by calculating “excess deaths” from what a “normal” mortality should have been. Some researchers thus prefer to combine census data and victimisation surveys. To estimate the number of deaths resulting from the conflict in Kosovo, for instance, Spiegel and Salama (2000) compared a 1991 Yugoslav census and a regional survey done at the end of 1999. As for Charles Hirschman and his colleagues (1995), they used a 1991 survey and the 1979 and 1987 census information of communist Vietnam to assess the impact of the American war from 1965 until 1975—which they found to be between 882,000 and 1,050,000 fatalities, civilians and combatants altogether.

Though, victimization surveys and epidemiological studies raise similar problems to those of censuses, as emigration and the variation of fertility affect the baseline of “normal” mortality and the possibilities to estimate “excess deaths”. Unlike other methods, surveys produce both the numerator and the denominator. It is thus assumed that the same margin of error in the numbers of people and casualties should minimize the probability of a wrong finding. The problem is that victimization surveys are often extrapolated to estimate excess mortality. Moreover, their samples can be biased. Hence their reliability depends on two distinct key issues: the conduct of surveys in places which are difficult to access, and the assessment of a plausible pre-war baseline mortality rate, which does not always exist.

This last point is particularly problematic in countries where there are no population and public health statistics. As a result, some humanitarian organisations try to do without this data when conducting surveys. Amongst Rwandan refugees in Eastern Zaire in 1996, for instance, the French NGO Médecins sans Frontières anticipated an increase in mortality rates because of the false perception that more food and medical supplies had to be injected to keep the population alive, while in fact aid was being diverted by local militias and thus driving the need for greater supplies (Checchi and Roberts 2005, p. 28). The construction of samples amongst displaced people can also be misleading, whether because the persons interviewed are more exposed to conflicts and declare mortality rates above average, or on the contrary because they escaped to safe havens and live in better conditions than those

who stayed behind, near the battlefields (Johnson et al. 2008). In addition, a focus on kinship survivors might miss families in which all members died. Finally, victims and interviewers can deliberately manipulate answers to exaggerate or minimise the gravity of the situation, depending on their political bias.

Surveys done in Iraq before and after the fall of Saddam Hussein demonstrate how such methodological flaws can place body counts at the centre of controversy. Casualty figures in Iraq were manipulated for a variety of reasons: in order to ask for humanitarian aid, a military intervention from the international community, or the end of economic sanctions. Yet the findings of the surveys undertaken were not robust. Sarah Zaidi, who first estimated that 567,000 children died because of the sanctions of the international community in the mid-1990s, eventually withdrew her conclusions after revisiting households and failing to replicate the original findings (Zaidi 1997, p. 1105; Zaidi and Smith 1995, p. 1485). In 1999, a UNICEF survey was later to find a total of 400,000–500,000 excess deaths of children (Ali and Shah 2000; Ali et al. 2003). But according to Tim Dyson, the data were deliberately manipulated and inflated by the then government of Iraq (Dyson 2009). After the US-led invasion of 2003, Gilbert Burnham and his colleagues estimated that 601,000 Iraqis died because of the fighting: almost four times the 151,000 violent deaths reported by another survey assisted by the WHO in a similar period of time (Burnham et al. 2006; Iraq Family Health Survey Study Group 2008). In 2009, Gilbert Burnham was censured by a professional body because he violated the researchers' code of ethics.

While it is clear that there are many challenges to using census and victimization surveys, one can certainly argue that the third method discussed here can also generate biased casualty data. Sometimes referred to as “passive surveillance”, this method relies on the on-going collation of secondary sources (such as press reports) to estimate the number of fatalities. The original collection of the data is however far from passive, as journalists and human rights defenders do fieldwork and undertake interviews to investigate violence. Their bias, in this regard, can be deliberate or unintentional. During the cold war, for example, Amnesty International was often accused of leftist leanings because it tended to focus on the crimes of right-wing dictatorships allied to the US in Latin America or South-East Asia, yet did not—or could not—investigate the gulag and mass murders in the Soviet Union or Maoist China. As for journalists, they may be embedded in an army, or banned from reporting in conflict zones by states party to the conflict (Urlacher 2009). Press reporters tend to be based in towns and cities and may, for reason's geographical or other, ignore rural violence (Kalyvas 2004). Last but not least, they rarely investigate indirect war deaths caused by diseases that kill during peacetime too. In addition, journalists often under-report or ignore small incidents associated with only one or two deaths.

The political economy of the media impacts on the way violence is presented and narrated. Some wars “sell” better, especially when Western troops are involved. Moreover, gross figures of the total death toll speak more to a media audience, including the general public and donors, so journalists, politicians and humanitarian fundraisers prefer hard numbers. In contrast scientists and epidemiologists may find

estimated mortality rates to be more relevant to assess risk and morbidity. Different studies suggest that documentation efforts based on press sources tend to produce lower casualty figures. According to Davenport and Ball (2002), for instance, the media failed to record the worst atrocities committed by the state during the civil war in Guatemala, and they revealed an inverse relationship with the violence reported by local NGOs. In Iraq, journalists only captured between 24 and 32 % of total deaths through their interviews with the locals (Sieglar et al. 2008). Gilbert Burnham and his colleagues even claimed that “aside from Bosnia... no conflict situation where passive surveillance recorded more than 20 % of the deaths measured by population-based methods” exists (Burnham et al. 2006, p. 1426). Yet their own survey on Iraq was highly criticized for overestimating excess mortality.

Consequently it is very difficult to prove that documentation efforts based on press sources are more—or less—reliable than surveys. José Barranco and Dominique Wisler found that biases in local and national papers were fairly constant over the years (Barranco and Wisler 1999). This means that it is possible to correct errors. In their study of collective violence and coups in sub-Saharan Africa, for instance, Robert Jackman and William Boyd noted that selection and source coverage had no impact on their estimates once they controlled for variations across data sets in event definitions (Jackman and Boyd 1979). Differences in coding methods also constitute a major problem that affects the accuracy of victimization surveys. When considering selection bias, Jennifer Earl et al. thus argued that newspaper data compared favourably given nonresponses in surveys (Earl et al. 2004, p. 77).

Documentation efforts based on press sources have two main advantages.<sup>2</sup> First, they allow for the monitoring of the conflict situation on a daily basis as their sources provide continuous on-going information, contrary to retrospective victimization surveys. Secondly, they can improve their reliability by crosschecking various and contradictory sources of information, unlike single surveys based on controversial samples. One data set on the civil war in Colombia, for instance, uses human rights reports and some 20 daily national and regional newspapers (Restrepo et al. 2004). In the same manner, NigeriaWatch relies on ten national newspapers, adding information from human rights organisations or private security firms whenever they are available.<sup>3</sup> And in India, a research project on conflict dynamics in the state of Manipur uses three regional newspapers as well as public official press releases.<sup>4</sup>

Of course, a better option would be to identify personally each victim of armed violence. But except for the military dead of regular armies, who are required to record casualties as stipulated by the Geneva Conventions, this is seldom undertaken for civilians in on-going conflict situations. Such problems also affect instances of low-intensity political violence, terrorism or assassinations. For example, after the attacks on New York’s World Trade Center in 2001, the compilation of various lists of people reported missing peaked at 6,453 at the end of September.

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<sup>2</sup>On the necessity to rely on press reports to understand the narratives of violence, the perceptions of insecurity and the patterns of homicides even in developed countries, see also Roth (2009).

<sup>3</sup>[www.nigeriawatch.org](http://www.nigeriawatch.org)

<sup>4</sup>See Chap. 6 in this volume by Samrat Sinha.

The official number of fatalities fell to 2,801 when the authorities discovered duplicate names, found missing persons to be alive, and identified fraudulent reports from people hoping to collect survivors' benefits (Best 2004, p. 110). The personal identification of victims is a cumbersome process in this regard. While it may avoid the problem of extrapolation associated with surveys, it faces a number of other challenges.

First, it is usually after the end of wars that memorials, criminal investigations or Truth and Reconciliation Commissions attempt to establish accurate records of past conflicts (Hayner 2011). In other words, the personal identification of victims often comes too late to alert the international community and help monitoring the situation. Moreover, these efforts can hardly be exhaustive and tend to give minimal estimates of the total number of fatalities—the Yad Vashem Museum in Jerusalem, for instance, generated over three million names of Holocaust victims, compared to the “sacred” number of six million deaths.<sup>5</sup> Investigating political assassinations and massacres between 1980 and 2000, the Peruvian Truth and Reconciliation Commission found a much lower number of deaths (24,000) than the figures released by human rights organisations (69,000). Likewise, the Sarajevo-based Research and Documentation Center and the Office of the Prosecutor of the International Criminal Tribunal for the former Yugoslavia found respectively that 97,000 and 102,000 people died during the war in Bosnia, as against a total of 167,000 for a survey conducted by the WHO on 1,028 households (Nettlefield 2010).

## **An Element of Military Propaganda**

Such discrepancies leave much room for contestation and falsification in the political arena. The military have obvious incentives to manipulate the number of violent deaths in a conflict. During World War One, for example, the British publicly reported lower casualty figures in order to maintain the morale of the troops and the general public (Knightley 2004, p. 116–7). In the same vein, the United States minimized the risk to demonstrate the military's safety during recruitment efforts. At the beginning of the twentieth century, the Navy argued that the death rate in its ranks was “only” nine per one thousand during the Spanish-American War in Cuba and the Philippines, almost twice less than the mortality rate of New York City. Yet, it did not point out the reasons why these two groups are not comparable: while the Navy is mainly made up of young men in good health, a civilian population includes the ill and the old, who have of course a higher death rate (Huff 1954, p. 83). Statistics were thus misused for propaganda purposes, becoming of crucial importance during times of war. Hence in Vietnam, where the US officially lost 56,000 soldiers, a former employee of the CIA acknowledged that the White House deliberately concealed the strength of the enemy and exaggerated enemy losses (Adams

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<sup>5</sup>[http://www.yadvashem.org/wps/portal/IY\\_HON\\_Welcome](http://www.yadvashem.org/wps/portal/IY_HON_Welcome)

1994, p. 96–7). In Washington, the Department of Defence claimed that the American Army killed 950,765 communist forces from 1965 to 1974, a figure which, according to Guenter Lewy (1978, p. 450), was inflated by 30 %, a third of whom might have been civilians.

Interestingly enough, the number of fatalities is not always a good indicator of who is winning a war. Carl von Clausewitz (1982, p. 309) recognized himself that “the losses in physical forces in the course of a battle seldom present a great difference between victor and vanquished respectively, often not at all, sometimes even one bearing an inverse relation to the result, and that the most decisive losses on the side of the vanquished commence only with retreat”. Thus during the two world wars, France, the United Kingdom, Russia and the USA suffered many more military deaths than Germany and Japan, yet won (Ferguson 2006, p. 128). In this regard, the demographic strength of a population might be more relevant for propagandists. As early as 1753, for example, the British Parliament refused to approve a census that could have revealed to the enemy how small the Army’s reserves were (Spirer 1998, p. 230). During World War One, the French boosted the morale of their troops with the myth of the “force noire”, an inexhaustible and unlimited supply of black soldiers from the African colonies.

In military propaganda that focuses on casualty statistics, however, the rule is not always to minimize ones own losses. In 1947, for instance, the French governor of Madagascar exaggerated the extent of a peasants’ uprising to alarm Paris and obtain an expedition of colonial troops (Couturier 2006). Cultural and religious factors can also play a role in the manipulation of casualty figures. During its war against Iraq from 1980 to 1988, the Islamic Republic of Iran did not try to hide its victims. On the contrary, it inflated their numbers, showed the corpses of the martyrs, followed Shia rituals to praise their sacrifice, gave compensation to their families, and displayed the bodies in military cemeteries open to the public, all in order to incite volunteers to go to the battlefield and compensate for the fact that the Army never officially called up the youth (Ladier-Fouladi 2003). Most recently, the government of the Arab Republic of Syria inflated the number of security forces killed by “rebels”, this time for strategic reasons: in 2011, the objective was to prove that the opposition was armed, in order to justify the use of force against peaceful demonstrators, and to balance media reports which insisted that only civilians had been killed (Stephan 2011).

At this juncture, it is important to note that casualty statistics continue to be relevant after the end of a war, not only during the fighting. First of all, such figures can help the military to improve its performance and organisation after the cessation of conflict. At a time when most soldiers died as a result of disease, for instance, the French lost more combatants (30 %) than the British (23 %) during the Crimea War of 1854–1856, illuminating a possible failure in the provision of healthcare. The statistics collated in a report published 10 years later forced the French Army to reform its health services and give officer rank to its doctors (Fredj 2010).

The issue of casualty figures also continues to remain a political one after the cessation of conflict. After a war, winners can build legitimacy based on the numbers killed. In France, following World War Two, the communist party gained

strong popular support thanks to its role in the Resistance and its claim to be the “parti des 100,000 fusillés”, a slogan referring to the number of militants allegedly shot by the Germans. In their own way, the Israeli and Rwandese governments have built up their own legitimacy on the basis of the numbers killed in their respective genocides. Libya is another typical example in this regard. In Tripoli, the president of the new government, Mustapha Abdeljalil, claimed that the 2011 uprising had resulted in a total of 25,000 fatalities by the end of September; yet NATO experts estimated the correct figure to be in the range of 15,000 (Jeune Afrique 2011). The official death toll was based on the assumption that there were 30,000 prisoners before the fall of Muammar el-Qaddafi, and 9,000 were found alive. But the ICRC listed only 2,350 missing persons in Tripoli and Benghazi, mainly migrant workers. Moreover, some of the detainees probably vanished within the country, or abroad. So it is very possible that Libya simply counted “more martyrs than bodies” (Nordland 2011). Such controversies show how casualty statistics are a very political affair.

## A Penal Issue

Recording casualties is not only an issue for military and political propaganda. It also has legal implications because it can provide details on the types of violence that occurred and can assist in the investigation and prosecution of war crimes. Casualty figures are necessary when defining what qualifies as armed conflicts, massacres, and “mass” violence (Levene and Roberts 1999). Indeed as states often undertake war without declaring it officially, while others declare it without undertaking it (as in Latin America against Germany during the Second World War), fatalities that result from armed conflicts between at least two states help to define the actual occurrence of international wars.<sup>6</sup> The Stockholm International Peace Research Institute (SIPRI), for instance, established a threshold of 5,000 battle deaths in this regard, or 1,000 per year. In the same vein, the end of hostilities and a reduction of excess mortality are important because they lead the United Nations to proclaim the cessation of refugee protection and legalize the repatriation of displaced people to their homeland.

When it comes to one-sided violence, however, jurists are usually not comfortable with thresholds to qualify massive massacres as genocides. Not without reason: here again, politics interferes in casualty statistics. Rhetorical battles on using the ‘G’ word of “genocide” are not only an affair of states. Local activists and interna-

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<sup>6</sup>Against this position, jurist Tristan Ferraro argues that a certain threshold of intensity contributes to define a civil war but not an international armed conflict. According to him, the mere capture of a soldier, or minor skirmishes between the forces of two or more states, are enough to lead to the applicability of the Geneva Conventions, insofar as such acts evidence a genuine belligerent intent. See Ferraro, Tristan [2014], “The applicability and application of international humanitarian law to multinational forces”, *International Review of the Red Cross* pp. 15–6.

tional NGOs also play an important role. Advocates of a Free Tibet, for instance, claim that Chinese government forces killed one million Tibetans in 1956, while other estimates place the figure at 200,000 (Leitenberg 2006, p. 4). No region is spared such controversies. In the Niger Delta of Nigeria, the Ogoni and Ijaw people have become used to denouncing genocides by various perpetrators, whether by Biafran rebels in 1968 or by the Army in a small village called Odi in 1999 (Saro-Wiwa 1992, p. 103). In the Middle East, in order to prove that American attacks against Iraq constituted a genocide, activists Edward Herman and David Peterson claimed that the economic sanctions of the 1990s and, later on, the US military invasion of 2003 killed respectively 800,000 and one million people. Even the highest manipulated estimates do not reach these figures.<sup>7</sup>

States are of course part of the numbers games. The French secret services, for instance, propagated the word “genocide” to activate international support for Biafra in 1968 (Guisnel 2007). The US has promoted and denounced the use of the term according to which position best served its own national interest. In 1994, they denied the scale and the systematic pattern of ethnic cleansing in Rwanda to avoid being compelled to send troops to Kigali after the failure of their Operation “Restore Hope” in Somalia. But in the (Islamist) Republic of the Sudan after the New York terrorist attacks of 2001, Washington quickly denounced massacres committed in Darfur by governmental militias as genocide. In refugee camps, the State Department funded victimization survey in 2004, which, according to John Hagan and Rymond-Richmond Wenona, was the first organised attempt to prove an on-going genocide with statistics. Later on, however, the US government was to reduce its assessment of the number of war victims in Darfur when Washington decided to work with Khartoum in its fight against Islamist terrorist groups (Hagan and Wenona 2010, p. 197 and 206). African scholars were quite vocal in criticizing these double standards. Using mortality statistics, Mahmood Mamdani (2011, pp. 130–1) argued that from 2003, the counterinsurgency operations of the Americans in Iraq were much more deadly than those of the Sudanese military in Darfur, so there was no reason to apply the word “genocide” to one case and not the other.

Most jurists have a different point of view. For them, there are no fixed thresholds in the numbers of deaths needed to prove a criminal pattern in mass killings. Qualitative elements such as the intention to exterminate a whole group of people are more important. In other words, a vast number of fatalities is not sufficient evidence to show a crime against humanity, especially if deaths resulted from collateral damage indirectly caused by belligerents without a genocidal intent. When analysed according to race, ethnicity, sex, or religion, raw numbers of victims can however help to prove systematic and discriminatory targeting in mass killings. An example is the International Criminal Tribunal for the former Yugoslavia (ICTY). It was

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<sup>7</sup>Edward Herman and David Peterson were clearly biased. In their book, they did not mention controversies about the death toll in Iraq. However they did contest the estimation of 200,000 Muslim deaths during the Bosnian war, an exaggeration which, according to them, was used as a pretext to prove the risk of genocide and justify a foreign military intervention against the Serbian socialist regime. See Herman and Peterson (2010, pp. 34–5).



established to prosecute persons who committed or ordered “grave” breaches of the Geneva Conventions of 12 August 1949. It relied on numbers and proportions to qualify the massacres of Srebrenica as a genocidal act, which resulted in the killing of more than 7,000 civilians in 1995. To prove intent, the Tribunal demonstrated that a substantial part of the Bosniaks of the city were eliminated by the Serbs, using statistics of missing persons to document the proportion of the targeted group who were killed (Spicer and Seltzer 2008, p. 221; Jeangène Vilmer 2012, p. 362).

The difficulty, for jurists, is that numbers make them vulnerable to accusations of double standards. Edward Herman and David Peterson did not miss the contradictions in this regard (Herman and Peterson 2010). According to them, the Prosecutor of the International Criminal Court (ICC), Luis Moreno-Ocampo, claimed that the atrocities of the American Army in Iraq failed to meet the same threshold of gravity as the situations in Eastern Congo, Darfur or Northern Uganda, where intentional violence killed thousands and displaced millions. Hence he decided not to proceed. Likewise in Kosovo, the Chief Prosecutor of the ICTY, Carla del Ponte, argued that the 495 Serbs killed by NATO bombings were not sufficient for charges of crimes against humanity. But her predecessor Louise Arbour had decided that, prior to and during the NATO military operations, 344 dead Kosovo Albanians comprised a sufficient basis to request the indictment of Yugoslav President Slobodan Milosevic.

## Humanitarian Alert and Assessment

In comparison, humanitarian and human rights NGOs are not as reluctant as jurists to employ casualty statistics in the pursuit of their aims. Numbers play other functions in this regard. In El Salvador after the civil war, for example, researchers matched the testimonies of victims with the posting of military officers in each region of the country to track the frequency of human rights violations and identify their perpetrators (Nettlefield 2010, p. 185). Relief organisations also use the statistics of excess mortality to assess basic needs, define emergency situations, alert the international community, request aid, raise funds and evaluate their performance. A reduction of the crude death rate is often understood as a success by aid workers, whatever its causes, which might not be directly related to a humanitarian intervention. Thus international relief organisations in Somalia estimated that they saved 50,000 lives during the famine of 1991–1992. This figure was calculated, however, according to the number of people reached through their assistance; they did not subtract those who would not have died anyway, whether they had received aid or not (Hansch et al. 1994, p. 25 and 30). The statistical use of excess mortality is indeed prone to manipulation when it aims at assessing a performance and raising funds by proving the efficiency of humanitarian organisations.

This issue may also oppose relief workers and jurist who argue that the ICC does not impede peace when it orders the arrest of war criminals. The debate is still going on. Many humanitarian organisations want to be exempted from testifying before judges because they would lose their neutrality if they contributed to investigations

on crimes against humanity. In Darfur, for example, they were expelled when the International Criminal Court indicted the Sudan's head of state. As a result, they couldn't access the victims and save lives anymore. In Northern Uganda and the Democratic Republic of the Congo (DRC), they also claimed that the ICC incited perpetrators of war crimes to resume the fighting instead of negotiating their demobilisation in exchange of an amnesty. In their views, justice compromised the possibilities of peace and prolonged the suffering of the population. On the contrary, jurist Bertrand Ramcharan claimed that excess mortality declined in Northern Uganda and the DRC after the indictment of some local warlords (Ramcharan 2010, p. 120).

Indeed the technical debate about assessing casualty statistics is not only an issue of measuring performance. For aid practitioners, it is also a matter of defining a crisis to alert the international community, as with the epidemiologists of Médecins sans Frontières (MSF) regarding Afghan refugees in Pakistan in 1989, or Somali famine victims in 1992 (Binet et al. 2013, p. 66). Statistics help demonstrate the seriousness of a disaster or a famine.<sup>8</sup> Today, it is generally assumed that there is an emergency when the crude death rates and the under-five mortality rates double and reach respectively one and two deaths per 10,000 per day or more (Toole and Waldman 1990). Yet specialists and practitioners dispute the reliability of these indicators. Demographers often criticize crude death rates because they are affected by the age structure of a population and do not accurately represent mortality (Daponte 2007, p. 950). As for relief organisations, some of them have tried to establish different guidelines with the so-called Sphere Project, which suggests the emergencies be declared when the pre-crisis crude death rate double. This proposal has raised ethical issues because baselines are generally much lower in developed countries. Proportionally, poor countries would have needed more deaths to expect a humanitarian intervention. The threshold suggested by the Sphere Project would have exacerbated aid differentials to the detriment of Africa and was not acceptable for humanitarians who considered that every human life deserved to be saved (Checchi and Roberts 2005, p. 7).

But the debate on death statistics goes far beyond technical issues. For advocacy NGOs, studies on excess mortality support political arguments, confirming famines or massacres that are denied by authoritarian regimes like those in North Korea, Myanmar or Sudan. They are a way to name and shame governments, as well as a warning signal and a tool to alert the international community and force it to react. Confronted with the statistics of excess mortality, rich states cannot pretend that they did nothing because they did not know the gravity of the situation. In this regard, it can happen that for humanitarian organisations the end (international intervention) may justify the means (exaggerating statistics), and politics prevails over scientific rigor. Humanitarian lobbies often prefer to emphasize, or even exaggerate the impact of a crisis in order to raise funds and denounce the exactions of a

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<sup>8</sup>To rally public opinion, combat political manipulations and prove the existence of a famine in post-war Germany in 1919, the founder of Save the Children thus needed figures regarding the number of persons in need of aid. See Mulley (2009, p. 236).

government. Republican politician, former vice-president of World Vision and later administrator of USAID, Andrew Natsios (2001), for instance, extrapolated from a small sample to claim that three million North Koreans died of famine in the early 1990s. Many NGOs also used inflated figures in the case of Biafra in 1968, the Sahel in the 1970s or Ethiopia in 1984 (Pérouse de Montclos 2009, 2012).

When such statistics are politicized, one of the crucial technical issues concern the responsibility of states for deaths that do not result directly from repression or war, but from famine, epidemics, and a higher vulnerability to diseases. We know that armed conflicts and malnutrition are closely interconnected, as in Cambodia under Pol Pot, where the Khmers Rouges killed some 100,000 people while one million or so also died of starvation because of the policies carried out by the communists (Leitenberg 2006, p. 5). This relationship can work in both directions: scarcity of food can provoke conflicts, and wars can cause famines. Hunger is too often used as a weapon to starve the enemy, like in the Jewish Ghetto of Warsaw in 1943, the Biafran enclave in 1968 or the Luwero Triangle in Uganda in 1983. But in many cases, the link between famine and disease is not that clear. In 1918, for instance, the Spanish flu killed more than 40 million people, compared to 15–18 million deaths during the fighting of World War One. Certainly, the virus would not have been so virulent if it had not been incubated in soldiers' trenches and spread by military boats. Nevertheless, can we assert that these 40 million deaths were directly caused by the conflict and should be counted like the 15 million war victims?

Two views arise on the technical debate on this issue. A first school of thought, propagated by John Hagan and others, considers that excess mortality in times of war should encompass all exceptional deaths, including those that are natural but shouldn't have happened, for instance in a refugee camp, far from home (Hagan and Wenona 2010, p. 194). Hazem Ghobarah et al. even suggest to calculate disability years lost due to civil wars (2003). The problem is that such estimations are very uncertain. Specialised organisations such as SIPRI or the Human Security Center prefer to assess the impact of armed conflicts by collating information on their direct victims, the so-called "battle-deaths". This is a significant decision in war-torn developing countries where most deaths are not caused by the strength of the state and its repression, but on the contrary by its weakness and the failure of basic health services – consequently such an approach will not fully document the burden of violence.

In the Central African Republic in 2011, a study by Médecins sans Frontières found higher mortality rates in areas where there were no conflicts and no humanitarian aid (MSF 2011). In this regard, it is interesting to note that the various purposes of death statistics can contradict each other when numbers are used to assess the performance of relief organisations or, on the contrary, to alert the international community for advocacy groups. In Darfur, for instance, a study showed that mortality rates dropped strongly between 2004 and 2008: a success that did not fit well with the genocide thesis, yet resulted not only from a decrease of violence, but also, most probably, from a massive injection of humanitarian aid to displaced people, resulting in a lower mortality rate than the Sudanese national average (Degomme and Guha-Sapir 2010). Likewise in the DRC, a Demographic Health Survey con-

ducted in 2007 disclosed a decrease in child mortality rates following the fall of the regime of Mobutu Sese Seko in 1996, even though the civil war became more devastating after 1999 (Ministère du Plan 2008).<sup>9</sup> Such a trend can be explained by the impact of humanitarian aid in improving basic health services, which had become non-existent because of the corruption and the failure of the Congolese state at the end the 1980s. This narrative is contradicted by the claims of the International Rescue Committee (IRC), which tried to raise the alarm and attract aid by claiming that the death toll in Congo could be compared to a World War.

The case of the DRC illustrates well the difficulties in distinguishing which deaths are directly or indirectly caused by an armed conflict. Like in many African civil wars, most victims did not die because of the fighting but because of a higher vulnerability to diseases in a situation which complicated access to food and medicine. After a survey conducted in November 2002, IRC researchers admitted that war accounted for a very minor part of violent deaths in the DRC, and for none at all in some regions, where the crude mortality rate actually decreased. They also acknowledged that “data from past surveys conducted by IRC might not be comparable because different methods were used to select health zones” (Roberts et al. 2003). Later on, another study conducted by the NGO even found that deaths from violence declined after 2004 (Coghlan et al. 2009). Yet IRC researchers thought that they underestimated mortality because of empty households and security conditions which impeded access to the worst areas. Consequently, they extrapolated findings from war zones to the whole of the country, speaking about the “First African World War”, a conflict which, according to the NGO, claimed 5.4 million victims in 10 years (1998–2008), 8 % of the total population of the DRC (Coghlan et al. 2006).<sup>10</sup>

However, these figures were not validated by scientists and demographers. IRC researchers never published a confidence interval for their estimates and one of them, Les Roberts, was involved in controversies about falsification of mortality surveys during the war in Iraq.<sup>11</sup> Moreover, the American NGO found child mortality rates which were about twice as high as those of different and credible estimates. Taking another proposed baseline, others showed that the IRC estimates were so imprecise that they had little meaning and could not even reject the hypothesis of negative excess death (Spagat 2012).<sup>12</sup> Belgian demographers who based their study on an administrative census of 2005 found a much lower result —200,000 violent deaths in 1998–2004 (Lambert and Lohlé-Tart 2009). In any case, the DRC was definitely not a forgotten crisis. For the period 2001–2010, the country was always among the top ten recipients of international assistance, and its ranking was even higher when considering the number of inhabitants and aid per capita. Likewise, the DRC’s share of requirements met in regular consolidated appeals in 2007–2011 was

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<sup>9</sup>I thank my colleague Michel Garenne for this information.

<sup>10</sup>See also: <http://www.theirc.org/special-report/congo-forgotten-crisis.html>

<sup>11</sup>For the studies, see Roberts et al. (2004) and Burnham et al. (2006). For a critique, see Spagat (2010).

<sup>12</sup>See also Pérouse de Montclos (2010).

higher than many other African countries, not to mention Palestine, one of the oldest recipient of international aid (Development Initiatives 2012, p. 68 and 95).

## **Killing to Save Lives?**

Nevertheless, the (mis)use of excess mortality statistics is not limited to advocacy and humanitarian NGOs: the findings of relief organisations can also be exploited by states. Hence in 1992, an MSF survey on the death rates of famine victims in five villages of Southern Somalia was extrapolated and used by the UN and the US to decide on a (disastrous) peace enforcement operation (Baron 2009, p. 46 and Binet et al. 2013, p. 93). In this regard, studies on excess mortality play a different role, from raising the alarm to defining an emergency and, possibly, justifying a military “humanitarian” intervention as in Kosovo in 1999 (Foley 2008, p. 82). In the same vein, statistical results can become a policy recommendation. In the beginning of the 2000s, for instance, economist Paul Collier argued that, on average, countries after a civil war faced a 50 % risk of renewed conflict during the next 5 years (Collier and Hoeffler 2002, p. 17; Collier et al. 2003, p. 83). Although this conclusion was challenged by other scientists,<sup>13</sup> it became a given fact and was used to alert the international aid community on the need for stronger peace building efforts with a military component.

Excess mortality statistics can thus contribute to the triggering of armed “humanitarian” interventions to save lives. Focusing on state repression only, Robert Pape suggests implementing a standard threshold of 2,000 unarmed civilians killed in a concentrated period of time, 1–2 months, to legally compel intervention (Pape 2012, p. 53). Stephen Solarz and Michael O’Hanlon pay more attention to proportions. According to them, “the death rate from civil strife in most of the world’s conflict zones is often comparable in per capita terms to the annual murder rate in the United States of roughly 1,000 per ten million inhabitants” (Solarz and O’Hanlon 1997, p. 4). So it should be five times higher to justify a military intervention, in order to stop a large-scale humanitarian catastrophe and prevent a massive loss of life. The problem, finds Jean-Baptiste Jeangène Vilmer, is that the international community would not agree to fix a threshold to launch peace enforcement operations or criminal investigations. Moreover, counting the dead in order to decide whether there should be a “humanitarian” intervention would mean acknowledging that massacres have already happened, contrary to the preventive aim of the famous UN resolution on the responsibility to protect (Jeangène Vilmer 2012, pp. 351–2).

In any case, such a trigger would certainly exacerbate the misuse and manipulation of excess mortality statistics. In his theory of the moral hazard, Alan Kuperman has already shown how rebels can instrumentalize massacres to provoke public sup-

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<sup>13</sup>For the period 1945–1996, Barbara Walter found a much lower recidivism rate (24 %) if the study was restricted to wars involving the same issues and the same parties, not to mention the same regions. See Walter (2004, p. 376) and Suhrke and Samset (2007).

port and military intervention from the international community (2005). His analysis relied on contemporary case studies including Bosnia in 1995, Kosovo in 1999 and Darfur in 2003. Many historians have also examined this tendency throughout history. As early as 1902 in the Ottoman Empire, for example, Macedonian and Bulgarian nationalists campaigned against and drew attention to massacres of their own people to trigger a foreign intervention. According to Davide Rodogno, their “*pro-memoria lists* generated public interest... possibly more efficiently than terrorist attacks and organised upheavals” (2011, p. 208). The rebels succeeded in proving that the Turks were directly responsible or, at least, not able to contain indiscriminate massacres. In a move reminiscent of the situation in Syria today, the Ottoman government then tried to portray the Macedonian uprising as a marginal action by Bulgarian terrorists. Its propaganda strategy failed and did not prevent European powers from intervening in 1903.

More than a century later, Libya was the showcase for the political use of excess mortality rates to trigger and justify NATO bombings against Muammar el-Qaddafi. In a debate with interventionist Bernard-Henry Lévy, a former president of *Médecins sans frontières*, Rony Brauman, argued that the Libyan National Transitional Council inflated the number of victims in Benghazi so as to provoke a military reaction from the international community (Truong 2011). According to Alan Kuperman, early press accounts also exaggerated the death toll by a factor of ten because they relied on a French physician in Benghazi who extrapolated wildly from a small sample in his hospital (2013, p. 55). At the start of March 2011, the rebels talked about 6,000 fatalities, when Amnesty International and Human Rights Watch had counted only 200 or 300. In the West, interventionists also used the higher estimates and tentatively calculated the number of potential victims that would likely die if nothing were done. Jean-Baptiste Jeangène Vilmer, who mentioned between 1,000 and 10,000 victims, even dismissed the issue of the bodycount to prove that there were “massive” violations of humanitarian law (2012, p. 65).

To inflate or minimize the human impact of war is in fact part of the game. Depending on the situation, the source, and the needs of the stakeholders that participate in a conflict, death statistics serve various political objectives. In warfare, it seems that the general rule is to overemphasize the losses of the enemy, and minimize one’s own. But there are exceptions, as we have seen. Moreover, the humanitarian concerns of ensuring a “just war” have often emphasized the necessity to spare civilians (Walzer 1978). The rule of proportionality now demands that attacks on military targets must not inflict a disproportionate amount of civilian casualties. The just warrior should not use a hammer to kill a mouse, and he should not cause a greater harm than the one he is fighting. As civilians are often seen as being innocents, their casualties can thus undermine the moral basis for a conflict.

The development of International Humanitarian Law has clearly codified and sanctioned the necessity to spare civilians since the end of World War Two. Today, many militaries not only argue that they fight for peace, but also that they kill fewer civilians than their enemy. Sometimes, they even pretend to conduct “clean wars” that cause “Zero Civilian Casualties” (ZCC). With or without a UN mandate, “peacekeepers” are of a special sort in this regard, since they insist that they will

inflict fewer casualties than the on-going killings in a conflict. This was very much an issue for the Americans in Iraq from 2003, when a controversial article in *The Lancet* showed that in a few years, the US military intervention provoked more deaths than the dictatorship of Saddam Hussein (Burnham et al. 2006). In the same vein, some authors claimed that the NATO bombings in Libya in 2011 were not “humanitarian” since they killed more people than the repression of Muammar el-Qaddafi in Benghazi. Alan Kuperman, for instance, argued that the rebellion was weak. Without foreign support, it would have been contained in Eastern Libya and easily crushed. Accordingly, he estimated that the conflict would then have lasted 6 weeks, instead of 36, and killed 1,100 people, instead of 8,000–11,500. By contrast, the NATO intervention magnified the death toll about seven to ten times (Kuperman 2013, p. 118 and 123).

Jurists certainly dispute this mathematical argument about the distribution of civilian fatalities in defining precisely what constitutes an effective peace-enforcement operation that intends to save lives. While the constraints of this article do not allow us to analyse further the conditions required to decide to lead a military “humanitarian” intervention, let us just remark that the bodycount is an important indicator in evaluating a mission’s success or failure if we accept that “violence abatement and conflict containment are the primary tasks of peace operations” (Diehl and Druckman 2010, p. 35 and 53). Death statistics, moreover, are part of the debate on the impact of a military intervention on human security. For instance, Professor Ben Kiernan at Yale University, who opened the Documentation Center of Cambodia in 1995, was attacked by the *Wall Street Journal* as a Communist stooge of Hanoi because his investigations revealed the systematic crimes of the Khmers Rouges and justified the humanitarian benefits of the Vietnamese invasion of 1979 (Quinn-Judge 2011, p. 361).

## **Inflation or Deflation?**

In conclusion, it is clear that the statistical and political (mis)use of excess mortality studies follows a great variety of patterns. In some cases, governments and the military purposefully underestimate the human impact of armed conflicts in order to minimize their losses, prove their respect for humanitarian law, deny the gravity of a crisis or play down their own responsibility. Yet in other cases, decision makers, activists and advocacy NGOs exaggerate the situation and casualty figures to alert the international community, sensitize the general public, call for aid, raise funds and, ultimately, provoke a military intervention. Tentatively, it is possible to argue that since the end of the cold war, there has been a tendency towards inflation of body counts, for several reasons summarized below.

First is the multiplication of casualty recording organisations. The rise in number of reported human rights violations has gone hand in hand with the growing number of countries investigated by advocacy NGOs, from 20 in 1975 to more than 120 in 2000 (Hafner-Burton 2008, p. 690). As a result, many activists proclaim that the

worldwide humanitarian situation has gotten worse. To them, a growing number of violations simply means that government security forces and non-state belligerents pay less respect to the laws of war, especially after the terrorist attacks of 2001. In its 2004 Annual Report, for instance, Amnesty International warned that “the current framework of international law and multilateral action [was] undergoing the most sustained attack since its establishment half a century ago”.

In a global world, the media has influenced the public perception of conflict as well. The political economy of the press incites journalists to emphasize the drama of war. Armed conflicts are always “exceptionally” bloody, deadly, brutal and savage. To attract readers, they must also be “new”. Thus an issue of *Le Monde* dated 7 February 2012 mentioned a “repression without precedent” in Byelorussia. On 13 September 2012, again, it ran a headline on the bombings of Aleppo in Syria, which were qualified as a “crime without precedent”, despite the precedent of Hama in 1982. Past conflicts are not spared either. Commenting on the trial of Charles Taylor by the ICC, *Libération* of 27 April 2012 considered that Liberia and Sierra Leone suffered “two of the most atrocious civil wars of Africa in the 1990s”. Somalis, Rwandese, Congolese, Burundese, Sudanese and Angolans would certainly not share these views. But the hit parade of the worst atrocities is not fixed and applies to most African conflicts whenever they are analysed in the press. From machete to cutlass, the type of weapons employed by the perpetrators plays a crucial role in the narrative of these “savage wars”, even if the sophisticated arms of developed countries are far more deadly. Last but not least, violence in Africa must be massive to reach the headlines, compared to Palestine today or Chile in the 1980s. Hence journalists are tempted to choose the highest estimates of excess mortality. They seldom dispute such figures, which become true by repetition: a process called “number laundering” (Best 2001, p. 35).

The general public plays its own role in this dramatization. Most recent wars are usually fresh in the collective memory, and they tend to mask the atrocities of old wars, while the myths of the golden age and the peaceful savage contribute to an idealization of past conflicts compared to the criminalized fighting of today.<sup>14</sup> Westerners, in particular, lament their fall from Eden (Herman 1997). They often believe that violence goes from bad to worse (Best 2004, p. 63). In France, for instance, a feeling of growing insecurity does not correspond at all to a steady decline in homicide rates (Mucchielli 2011). On the European continent, homicide rates are actually ten to fifty times lower than the levels recorded during the Middle Ages (Eisner 2003; Muchembled 2008). In the long run, this decline has occurred similarly in democracies, monarchies, and authoritarian regimes, and was even apparent in Nazi Germany (Eisner 2008, p. 304). Only age and sex patterns in serious violent offending have not changed significantly over the centuries. Men’s kill-

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<sup>14</sup>Marylène Patou-Mathis, for instance, found little evidence of bellicose confrontations in available fossils before the Palaeolithic period. In the same vein, Ragnar Numelin claims that precolonial wars in Africa were rare and killed very little. There were no permanent armies but hunting parties and raiders. The fighting was local and did not last long. See Patou-Mathis (2013), Keeley (1996) and Numelin (1963).



ing of other men unrelated to them has declined far more rapidly than domestic violence involving women and kin (Pinker 2011, p. 328; Daly and Wilson 1988).

Meanwhile, the development of a humanitarian ethos that abhors suffering has also contributed to the dramatization of warfare. Three elements are to be distinguished in this regard: influence, emotion, and the law. The first is the role of relief organizations that shape the narratives of war because they witness atrocities, produce their own reports or help “embedded” journalists to conduct field investigation in difficult situations. As we have seen, humanitarian NGOs should logically insist on the reduction of death rates to show their performance. But in most cases, they prefer to emphasize the highest estimates of excess mortality in order to raise funds and alert the international community. Such behaviour could be assimilated to both emotional blackmail and a moral imperative to save lives—when the inflation of figures is seen as necessary for a good cause.

According to former MSF president Rony Brauman, “it is obviously difficult to revise downward estimates of excess mortality, a very emotional issue. To reduce them leads to accusations of selfishness, hostility or culpability” (Brauman 2011, p. 311). In some cases, lower estimates of excess mortality are even assimilated to a denial and a negation of the tragedy of war or genocide. Following the conflict in Bosnia, for instance, the Sarajevo-based Research and Documentation Center was attacked by nationalist politicians and human rights activists when it released a total figure of 97,000 fatalities, instead of the widely circulated number of 250,000 victims. These findings were then used by the Serbian defence team at the International Court of Justice (ICJ), to show that Belgrade was not legally responsible for the genocide in Srebrenica (Nettlefield 2010).

Still, compassion, emotion, humanitarian advocacy, the proliferation of relief organizations, and the political economy of the media are not the only factors that contribute to the dramatization of warfare. The greater visibility of contemporary conflicts also results from the development of international law and the multiplication of peace enforcement operations since the end of the Cold War. After the collapse of the Soviet Union, the UN Security Council took a new lead and the deployment of blue helmets has helped raised awareness about remote conflicts. Robert Jackson reminds us that, “the absence of humanitarian intervention during the Cold War was certainly not for lack of human suffering in countries around the world at that time” (1993, p. 588). In their own way, the UN troops helped relief and advocacy organizations to communicate on former “silent crises”. In the long run, the development of International Humanitarian Law also played an important role because it enlarged categories of protection, hence enlarging the possible violations by belligerents. The first Geneva Convention of 1864 only dealt with injured combatants and conflicts between states. Jurists had to wait until 1949 to obtain the ratification of the protection of prisoners of war and civilians in occupied territories. It was not until the Additional Protocols of 1977 that these laws were finally applied to civil wars.

In other words, the multiplication of legal obligations, possibilities for violations, and proliferation of relief organizations has helped to improve the monitoring and the tracking of atrocities. This development, which has contributed to the dramatization of wars, does not yet mean that International Humanitarian Law ade-

quately covers the issue of casualty recording. The Geneva Convention of 1906 was the first to refer to the treatment of dead bodies in wartime. In international armed conflicts, the Geneva Conventions of 1949 and the Additional Protocols of 1977 also compelled belligerents to count the dead and take all possible measures to provide information to the appropriate authorities or to members of the family regarding the deceased's identity, location and cause of death. But they focused on combatants and civilians in occupied territories. Moreover, the right to know was restricted to individual family members. There was no obligation to publish a list of victims, especially in civil wars. Hence the Geneva Conventions did not reduce the potential for a political misuse of death statistics. There is much room for improvement in this regard.

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## Chapter 4

# The International Committee of the Red Cross: Identifying the Dead and Tracing Missing Persons – A Historical Perspective

Isabelle Vonèche Cardia

Given its field of operation one would imagine that the International Committee of the Red Cross (ICRC) necessarily has approximate figures about the number of people dead as a consequence of armed conflict and other situations of violence. In reality, it does not have those figures, because it is not its role to record casualties. The ICRC is “an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance”.<sup>1</sup> It also “endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles”. Does it mean that the ICRC is not interested in the dead? A closer look at ICRC activities reveals that it is in fact interested in the dead – but in a peculiar way.

Although the ICRC was originally created to alleviate the physical suffering of military personal wounded on the battlefield, it was from the beginning also very much concerned with the moral suffering of soldiers’ families left without news. It has therefore been interested in the fate of “missing persons”, i.e. “those persons whose families are without news of them” as a result of armed conflict or other violent situations (Martin 2002, p. 724). The various situations are not all the same. To begin with, missing persons can be dead or alive. On the one hand, not all the dead are missing, but some are either missing because they were not identified before their burial, or because the bodies cannot be found due to extreme warfare. The atomic bombs used in Hiroshima and Nagasaki made victims’ bodies vanish.

Missing persons who are alive may be held by enemy forces who refuse to release information about them. In many cases enemy forces do not have the time or

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<sup>1</sup>The ICRC’s Mission Statement, viewed 27 March 2013, <http://www.icrc.org/eng/who-we-are/mandate/index.jsp>

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the means to provide information immediately after capture. Missing persons can also be free but unable – in some cases not willing – to communicate with their families because of their location behind frontlines or certain borders.

The purpose of this chapter is to describe how the ICRC has, from its creation in 1863 to the end of World War II in 1945, pursued two main courses of action – legal and practical – in connection with missing persons and the identification of dead bodies. The legal approach consisted of encouraging states to adopt resolutions and conventions that would help in the tracing of missing persons and identification of the dead. The practical approach included the adoption of extremely pragmatic measures to identify bodies like championing metal name tags or discs for soldiers, and tracing missing persons by establishing card indexes. This article also demonstrates how the legal framework and the practical approach are closely interrelated. It finally shows how both approaches first concerned only military personnel and were later extended as civilians became increasingly involved in warfare.

The chosen time frame of 1863–1945 corresponds to the historical events during which counting the war dead became an obligation of belligerent states.

## Before the Red Cross

In the nineteenth century:

After a battle the dead were hastily interred in mass graves, without any attempt being made to identify them; there was no news either of soldiers taken prisoner, or of the wounded receiving treatments in hospitals or simply being looked after by private citizens in their own homes. Any soldiers who failed to turn up for roll call were considered missing, and their families had no way of knowing whether they were dead or alive, injured or in captivity. (Bugnion 2003, p. 62)

The treatment of dead bodies in warfare began to change with the American Civil War. During this time, the state was supposed to pay for the funeral of each combatant who died on the battlefield. It was also responsible for registering the dead (Capdevila and Voldman 2002, pp. 753–4). In the United States the first military cemetery was set up in 1847 in Kentucky State. It gathered the human remains of soldiers fallen during the war against Mexico, and repatriated them at the state's expense (Capdevila and Voldman 2002, p. 755). During the Civil War, the soldiers themselves were concerned with their identification:

During the American Civil War soldiers rarely wore any sort of identifying disk. Before battle most soldiers would write their name and unit on a slip of paper and pin it to their backs. That simple battlefield expedient sometimes worked. A few soldiers bought ornate engraved pins or metal identification tags from sutlers. The tags had the soldier's name and unit and, sometimes, his hometown. Neither government issued identification disks.<sup>2</sup>

By the end of the nineteenth century most military codes had adopted general principles for identifying and counting dead soldiers. The difficulty, as we shall see

<sup>2</sup>H Wayne Elliot, 'Identification', viewed 26 March 2013, <http://www.crimesofwar.org/a-z-guide/511/>



in the case of the Franco-Prussian War, lay no longer in the adoption of principles, but in their effective application on the battlefield.

In the mid nineteenth century, concern for the missing and especially for the moral suffering of their families led to private humanitarian initiatives. During the Crimean War of 1853 a member of the Russian Legation in Vienna, Prince Demidoff, organized a relief and information agency for the prisoners of war, which enabled them to correspond with their families. Henry Dunant too was aware of the problem, which he had directly confronted. In *A Memory of Solferino*, which inspired the founding of the Red Cross, he recalled the following episode:

A young Corporal named Claudius Mazuet, some twenty years old, with gentle expressive features, had a bullet in the left side. There was no hope for him, and of this he was fully aware. When I had helped him to drink, he thanked me, and added with tears in his eyes: ‘Oh, Sir, if you could write to my father to comfort my mother!’ (Dunand 1986, p. 66).

He also described how in the Battle of Solferino the dead were buried without any effort to identify them. Dunant’s concern over the missing or dead soldiers was overshadowed by the fate of wounded soldiers. This led to the creation of the International Committee for the Relief of Wounded that would officially become the International Committee of the Red Cross (ICRC) in 1875.<sup>3</sup> The Geneva Convention, signed in 1864, addressed the amelioration of the conditions of the wounded in armies in the field. The relief of physical suffering thus preceded the relief of moral suffering, but not for long.

## The Action of the International Committee in the Nineteenth Century

The 1864 war between Denmark and Prussia was the International Committee’s first experience. It decided to send two delegates to the front, one to each side. Captain Van de Velde, who was sent to the Danish side, was deeply touched by the distress of families looking for their relatives. He offered to cross the line along with a member of the Danish parliament and collect information about the prisoners. The Danish military refused arguing that they would not allow “such communication with the enemy” (Djurovic 1986).

Despite the fact that this personal initiative had been turned down, some governments realised that the time had come to address the problem of the identification of the dead and the tracing of the missing in international arenas. They did so in 1867, during the First Conference of Relief Societies for Wounded Soldiers. Representatives of 9 European States, 16 National Societies and the International Committee met in Paris to revise the text of the Geneva Convention of 1864. The Austrian Government proposed an article to enforce the identification of all the dead, without national

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<sup>3</sup>To avoid anachronisms, we will use ‘International Committee’ when we refer to the International Committee for the Relief of Wounded. As from 1875, we will use the acronym ‘ICRC’.

distinction, as well as their burial in the best possible sanitary conditions (Commission générale des Délégués 1867, p. 90).

Eight months earlier the Austrian Government had waged war against Prussia and more than 10,000 of its military personnel went missing (Commission générale des Délégués 1867, p. 90). The Austrian proposal was adopted and drafted as an additional article for the Geneva Convention, which stated the following:

Art. 8. To the extent that circumstances permit, it is the duty of the victorious army to guard soldiers wounded on the battlefield in order to protect them from pillaging and from ill-treatment and to bury the dead in strict conformity with sanitary regulations.

The Contracting Parties will see to it that in time of war all soldiers bear standardized and obligatory insignia for identification purposes. Such insignia will indicate the individual's name, place of birth, as well as the army, regiment and company in which he serves. In the event of death, this identification is to be removed from the body before burial and handed over to the civil or military authorities of the place of birth of the deceased.

Lists of the dead, the wounded, the sick and prisoners will, as far as possible, be communicated immediately after the fighting, through diplomatic or military channels, to the commander of the enemy forces.

To the extent that the detail of this article is applicable to, and can be carried out by the navy, it will be respected by victorious naval forces. (Commission générale des Délégués 1867, p. 143)

However, this new article was never ratified by the contracting parties and therefore had no legal force.

The Second International Conference of Relief Societies for Wounded Soldiers, which took place in Berlin in 1869, 2 years after the First Conference, was more successful. The resolution it adopted regarding the missing gave an important role to the International Committee and set the foundations for a Tracing Office:

In time of war, the International Committee shall ensure that a liaison and information office is set up in a suitable chosen location, which shall facilitate, in every possible way, the exchange of communications between committees and the sending of relief supplies.<sup>4</sup>

The outbreak of the Franco-Prussian War in 1870 would be the trial by fire for this information office that would be called the International Agency for Aid to Wounded Soldiers.

### ***The Franco-Prussian War of 1870–1871: Trial by Fire***

Only 3 days after the opening of hostilities, the International Committee applied the resolution of the 1869 Conference by establishing an International Agency for Aid to Wounded Soldiers. It was set up in “a suitable chosen location” – Basel – and was to serve as the unofficial intermediary between the relief societies of the belligerent

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<sup>4</sup>Resolution IV/2. *Compte rendu des Travaux de la Conférence internationale tenue à Berlin du 22 au 27 avril 1869 par les Délégués des Gouvernements signataires de la Convention de Genève et des Sociétés et Associations de Secours aux Militaires blessés et malades*, Imprimerie J.-F. Starcke, Berlin, 1869, p. 254. Translated by Bugnion (2003, p. 33).

parties.<sup>5</sup> It would facilitate the forwarding of relief supplies and help in the exchange of information.

The disruption to postal services between the warring parties left many families without news of their relatives. According to the Geneva Convention the Basel agency would transmit mail between wounded soldiers and their families. Given the high number of prisoners – 12,000 officers and 372,000 enlisted men were held by the Germans and around 4,000 prisoners by the French (Förster and Nagle (eds.) 2002, p. 588) – the agency decided to transmit correspondence to able-bodied prisoners as well. It also received appeals to extend its relief activities to the latter, but decided not do so itself because its duty was not to assist victims other than the sick and wounded soldiers (Bugnion 2003, p. 35). It therefore created a new organism, the International Relief Committee for Prisoners of War, with which it shared its office in Basel and worked closely with.

The agency tried to get lists of dead soldiers' names; something that proved impossible for the French side. The only lists the German could transmit were those of soldiers who had died in captivity, because French soldiers were not provided with means of identification (Djurovic 1986, p. 19).

In 1870/71 soldiers of the French army did not yet wear individual identification badges. The dead were piled up and buried in mass graves together with their belongings – officers and other ranks without distinction of nationality – all thrown in together. Priority was given to clearing the combat zone where, as a result of the heavy cannon and artillery fire, there were dense heaps of corpses. (Capdevila and Voldman 2002, p. 754, author's translation)

In contrast, German soldiers did carry a small disc where the name, surname, the regiment, the battalion and the company they belonged were clearly marked (Djurovic 1986, p. 19).

### ***The Legal Framework: Always a Step Behind***

The Franco-Prussian War showed that the legal framework did not correspond to the reality of war. For the identification of the dead it was clear that all armies should adopt an identification sign for their soldiers. Although the Third International Conference of the Red Cross held in Geneva in 1884 addressed the problem, it concluded that it was the duty of each state to implement an identification system. As already noted, most armies already had rules for identifying dead bodies, but they did not apply them effectively.

As far as the transmission of information is concerned, mechanisms improved only with the Geneva Convention of 1906, which replaced the 1864 Convention, and introduced new provisions and detailed regulations:

Art. 4. As soon as possible each belligerent shall forward to the authorities of their country or army the marks or military papers of identification found upon the bodies of the dead,

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<sup>5</sup>ibid.

together with a list of names of the sick and wounded taken in charge by him. Belligerents will keep each other mutually advised of internments and transfers, together with admissions to hospitals and deaths which occur among the sick and wounded in their hands. They will collect all objects of personal use, valuables, letters, etc., which are found upon the field of battle, or have been left by the sick or wounded who have died in sanitary formations or other establishments, for transmission to persons in interest through the authorities of their own country.<sup>6</sup>

The 1907 Hague Convention adopted similar provisions for the wounded, sick and shipwrecked in naval conflict (Bugnion 2003, p. 68).

For prisoners of war the step forward taken by the Basel agency and by the International Relief Committee for Prisoners of War did not lead to new regulations. The Fourth International Conference of Red Cross Societies, held in Karlsruhe in 1887, decided that the agency should continue as previously (Central Committee of the German Associations of the Red Cross 1887, p. 90). In other words, only the wounded and sick soldiers would receive correspondence and relief. Only in 1899 – 28 years after the Franco-Prussian War – during the Hague Conference, an article specifically concerning prisoners of war was adopted:

Art 14. A bureau for information relative to prisoners of war is instituted, on the commencement of hostilities, in each of the belligerent States, and, when necessary, in the neutral countries on whose territory belligerents have been received.

This bureau is intended to answer all inquiries about prisoners of war, and is furnished by the various services concerned with all the necessary information to enable it to keep an individual return for each prisoner of war. It is kept informed of internments and changes, as well as of admissions into hospital and deaths.

It is also the duty of the information bureau to receive and collect all objects of personal use, valuables, letters, etc., found on the battlefields or left by prisoners who have died in hospital or ambulance, and to transmit them to those interested.<sup>7</sup>

By the beginning of the twentieth century basic international rules for protecting prisoners of war and identifying military personnel were in place. States could now rely on international law, and not only on national rules, as had been the case in the nineteenth century. However, implementing new rules does not insure the belligerents will follow them. The ICRC experienced this during the Balkan Wars (1912–1913). The agency it established in Belgrade faced considerable difficulties in collecting information about prisoners of war. Despite numerous demands by the Turkish Red Crescent, Ottoman authorities supplied a list with only 11 names of Serb prisoners (Djurovic 1986, p. 33). Serbia, Greece and Montenegro provided lists of captured Turkish military personnel, but Bulgaria did so only after the end of the war. The agency handled lists of 87,778 prisoners, out of an estimated total of 250,000 sick, wounded and prisoners of war (Durand 1984, p. 24).

<sup>6</sup> Article 4, *Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field*, Geneva, 6 July 1906, viewed 14 March 2013, <http://www.icrc.org/ihl.nsf/FULL/180?OpenDocument>

<sup>7</sup> 'Annex to the Convention regulations respecting the laws and customs of war on land', *Convention (II) with Respect to the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land*, The Hague, 29 July 1899, viewed 14 March 2013, <http://www.icrc.org/ihl.nsf/FULL/150>

## World War I: A Huge Transformation

For the ICRC, World War I was a first in many respects. It was the first time it had to face such a prolonged and geographically extended conflict: 44 states and their colonies were at war for four years. For the first time the International Prisoners of War Agency was set up in Geneva and managed directly by the ICRC, and for the first time it included a section concerning civilians. The agency opened on 21 August 1914, and by autumn 1914, 1,200 volunteers had been recruited to face the enormous task:

Seven million military personnel were taken prisoner. Civilians in enemy territory were interned en masse, and millions of others were subjected to military occupation or fled the area of fighting and the occupied territories. (The International Prisoners-of-War Agency 2007)

The duty of forwarding letters, parcels and money orders that had been carried out by the previous agencies soon became overwhelming, and had to be handed over to the postal administrations of neutral countries Switzerland, Denmark and Sweden. Just to give an idea of the volume of exchanges, between 1914 and 1919 the Swiss postal service alone transferred 497 million letters and cards, 115 million parcels and 10 million money orders (International Review of the Red Cross 1919).

The Danish Red Cross opened an information bureau, which was in charge of the Eastern Front. The Italian and the Austrian Red Crosses corresponded directly for the Austro-Italian front. This allowed the Geneva agency to concentrate its effort on the Western Front (Bugnion 2003, p. 34).

For military personnel, the following activities were carried out: transmitting lists of prisoners, establishing card indexes and tracing.

The agency established three types of list: one for able-bodied prisoners, another for wounded and sick prisoners and a third for prisoners who had died, with information on their burial place (Bugnion 2003, p. 86).

The agency also established a complex card index. Each card included a single name of a member of the military personnel. The card was then filed according to the person's nationality in the nationality index, and within it according to family name in an alphabetical-phonetic order. Requests for missing soldiers were recorded on cards of a different colour, but filed in the same way, so that the information could be immediately found and transmitted.

In addition to the card index by nationality, the agency invented two new types of indexes: the topographical and the regimental one. In the topographical index cards were filed according to where each recorded soldier was last seen or had died. The regimental index was based on enquiries made with members of the same regiment who had been captured during the same battle (Bugnion 2003, p. 87). These two systems proved to be very efficient for searching missing service men, because fellow soldiers turned out to be the best source of information.

The agency conducted enquiries and obtained and forwarded documents such as death certificates, powers of attorney, etc. The belligerents took the agency's role very seriously. For example, the German Government considered negative answers

from the agency to a search request as being the equivalent of a death certificate, at least for the purpose of granting a pension (Bugnion 2003, p. 88).

Despite the efforts of the agency, at the end of World War I there remained a very large number of missing soldiers. In France out of 1,400,000 soldiers killed 252,900 were reported missing or unidentified (Capdevila and Voldman 2002, p. 758). The fact that the identification tags or discs differed from one country to another as well as within the same country – Great Britain had up to nine different models – rendered the identification of the dead difficult, and contributed to explaining the huge number of missing soldiers (Capdevila and Voldman 2002, p. 757).

Besides the soldiers, World War I affected civilians in an unprecedented way. Belgium, Luxembourg and some French departments had been occupied already by the end of 1914:

Several millions of people thus became cut off, scattered or subjected to the military law of the occupying armies, unable to communicate with civilians in unoccupied territories. (Durand 1984, p. 85)

Civilians too were victims of acts of violence and atrocities, and were also deported and massacred (Becker 2012, p. 118). Requests concerning their fate poured into the International Prisoner of War Agency. Once again – as in the case of prisoners of war in 1870 – the agency had no legal ground to act on their behalf, but decided that it could not simply ignore them. It created a civilian section, which tried to perform the same tasks it was doing for the soldiers: transmitting lists and official documents, establishing card indexes, making inquiries, exchanging correspondence, as well as transmitting parcels and money.

The agency had to deal with the very disparate situations in which civilians found themselves: some lived in occupied areas, others were interned, other were taken hostage or deported. Civilians living in occupied areas were not allowed to correspond with persons outside the occupied territory. It was, therefore, very difficult to get information concerning them. However, the agency sometimes managed to get around these restrictions and received replies to its inquiries.

World War I transformed the ICRC and its agency:

From the simple organization it was at the beginning, transmitting lists and correspondence concerning prisoners of war, it became a centre to which people and organizations in all parts of the world wrote information of every kind concerning military or civilian victims of the war. (Djurovic 1986, p. 64)

Did it also transform the legal framework in which the agency carried out its mission?

## **The 1929 Geneva Convention: Codification for Prisoners of War Only**

Right after the end of the hostilities and up to 1929, the ICRC and the states worked on revising the 1906 Geneva Convention in order to codify the humanitarian practices that had evolved during the Great War. This was a success as far as prisoners

of war were concerned: 97 articles ensuring their protection were included in the Geneva Convention of 1929. This new Convention Relative to the Treatment of Prisoners of War, also called Prisoners-of-War Code, prohibited reprisals against prisoners, dealt with their capture and their evacuation, as well as with the organization of prison camps.

More relevant for our topic, four articles (art. 77–80), contained in Part VI and entitled “Bureaux of relief and information concerning prisoners of war,” codified what the ICRC and the belligerents had been doing in previous wars. Article 77 stated that the warring parties and the neutral powers would set up an official bureau to give information about the prisoners of war in their territory. It took the main dispositions of the Article 14 of the 1899 Hague Convention (see above), but added details on the identification information that had to be transmitted:

Art. 77. At the commencement of hostilities, each of the belligerent Powers and the neutral Powers who have belligerents in their care, shall institute an official bureau to give information about the prisoners of war in their territory.

Each of the belligerent Powers shall inform its Information Bureau as soon as possible of all captures of prisoners effected by its armed forces, furnishing them with all particulars of identity at its disposal to enable the families concerned to be quickly notified, and stating the official addresses to which families may write to the prisoners.

The Information Bureau shall transmit all such information immediately to the Powers concerned, on the one hand through the intermediary of the protecting Powers, and on the other through the Central Agency contemplated in Article 79.

The Information Bureau, being charged with replying to all enquiries relative to prisoners of war, shall receive from the various services concerned all particulars respecting internments and transfers, releases on parole, repatriations, escapes, stays in hospitals, and deaths, together with all other particulars necessary for establishing and keeping up to date an individual record for each prisoner of war.

The Bureau shall note in this record, as far as possible, and subject to the provisions of Article 5, the regimental number, names and surnames, date and place of birth, rank and unit of the prisoner, the surname of the father and name of the mother, the address of the person to be notified in case of accident, wounds, dates and places of capture, of internment, of wounds, of death, together with all other important particulars.

Weekly lists containing all additional particulars capable of facilitating the identification of each prisoner shall be transmitted to the interested Powers.

The individual record of a prisoner of war shall be sent after the conclusion of peace to the Power in whose service he was.

The Information Bureau shall also be required to collect all personal effects, valuables, correspondence, pay-books, identity tokens, etc., which have been left by prisoners of war who have been repatriated or released on parole, or who have escaped or died, and to transmit them to the countries concerned.

Article 79 formalized the role of the agency:

Art. 79. A Central Agency of information regarding prisoners of war shall be established in a neutral country. The International Red Cross Committee shall, if they consider it necessary, propose to the Powers concerned the organization of such an agency.

This agency shall be charged with the duty of collecting all information regarding prisoners which they may be able to obtain through official or private channels, and the agency shall transmit the information as rapidly as possible to the prisoners’ own country or the Power in whose service they have been.

These provisions shall not be interpreted as restricting the humanitarian work of the International Red Cross Committee.

Concerning the identification of the dead, articles 3 and 4 of the 1929 Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field were much more detailed than the ones of the 1906 Geneva Convention:

Art. 3. After each engagement the occupant of the field of battle shall take measures to search for the wounded and dead, and to protect them against pillage and maltreatment.

Whenever circumstances permit, a local armistice or a suspension of fire shall be arranged to permit the removal of the wounded remaining between the lines.

Art. 4. Belligerents shall communicate to each other reciprocally, as soon as possible, the names of the wounded, sick and dead, collected or discovered, together with any indications which may assist in their identification.

They shall establish and transmit to each other the certificates of death.

They shall likewise collect and transmit to each other all articles of a personal nature found on the field of battle or on the dead, especially one half of their identity discs, the other half to remain attached to the body.

They shall ensure that the burial or cremation of the dead is preceded by a careful, and if possible medical, examination of the bodies, with a view to confirming death, establishing identity and enabling a report to be made.

They shall further ensure that the dead are honourably interred, that their graves are respected and marked so that they may always be found.

To this end, at the commencement of hostilities, they shall organize officially a graves registration service, to render eventual exhumations possible, and to ensure the identification of bodies whatever may be the subsequent site of the grave.

After the cessation of hostilities they shall exchange the list of graves and of dead interred in their cemeteries and elsewhere.<sup>8</sup>

We have seen, that during World War I the variety of soldiers' tags and discs had rendered the identification of the dead very difficult. Article 4, which stipulated practical measures to facilitate this task, directly reflected the joint work of states and the ICRC to standardize identification. They came up with a resolution, fully integrated into Article 4, according to which one half of the identity disc or tag should be given to the authorities of the dead soldier's country, and the other should be left attached to the body (Capdevila and Voldman 2002, p. 758–9).

Overall, articles 3 and 4 created new obligations for states: searching for the dead, protecting their bodies, identifying them prior to their disposal, and burying them in a honourable way. As Luc Capdevila and Danièle Voldman noted, the new Convention led to the management of the dead of one camp by the enemy state (Capdevila and Voldman 2002, p. 759).

Regarding civilians, although the ICRC tried to encourage states to adopt a legal framework protecting them as well, no formal measures or articles were adopted. According to François Bugnion:

The reluctance of some countries to agree to legal protection for civilians showed only too clearly that they did not want to give up any of their freedom of action in this sphere, regardless of the risk that civilians might once more be subjected to arbitrary treatment while in captivity. (Bugnion 2003, p. 128)

Such a lack of a legal framework would become dramatic for the civilians during World War II.

<sup>8</sup> Article 4, *Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field*. Geneva, 27 July 1929, viewed 14 March 2013, <http://www.icrc.org/ihl.nsf/FULL/300?OpenDocument>



## World War II: A Contrast

As soon as war broke, the ICRC opened a Central Prisoners-of-War Agency which carried out essentially the same activities for prisoners of war that it had during the Great War: centralization and transmission of information, creation of card indexes and the pursuit of inquiries. It also invented a new instrument known as “capture cards”. At his arrival in a camp, a prisoner would fill in a capture card himself and send it directly to the central agency in Geneva. This method, much more efficient than the preparation of official prisoners lists, accelerated the transmission of information to the agency. It also proved more accurate, since it prevented spelling mistakes. Capture cards, however, did not replace the official lists each belligerent had to establish in conformity with the Geneva Convention (Djurovic 1986, p. 127).

The agency could do very little for prisoners of war who were not protected by the Geneva Conventions, notably those captured on the Eastern Front or in the Pacific. Despite its attempts to gain widespread access to prisoners of war, the ICRC was unable to help German or Soviet prisoners of war held by the other side.<sup>9</sup> In the Far East, the lists sent by the Japanese were incomplete and written in Japanese, which drastically reduced their usefulness. When interned in allied camps, Japanese prisoners refused to register their names on the lists.

For the dead, the central agency set up services for deaths, which aimed at providing information about soldiers who had fallen in action and had been buried by the enemy, or had died in captivity. As the ICRC clearly stated in its report of 1947:

The difficulty of the task of these Services will be realized, if one considers the deep importance attached by relatives to all circumstances attending a death, especially the following points: certainty as to identity; the cause of death; attendant details, such as the last hours, spiritual aid given, funeral ceremony, military honours observed, photographs of the funeral ceremony and the grave, locality and care of the grave, personal belongings, etc. (ICRC 1948, p. 48)

As far as civilians were concerned, the ICRC had a limited sphere of action, partly because of the lack of international conventions, but mainly because the belligerent parties’ reluctance.<sup>10</sup> In contrast, for civilian internees<sup>11</sup> and persons of similar status (placed in assigned residence or under supervision), the ICRC succeeded

<sup>9</sup>On August 1941, it managed to forward to the Soviet authorities a list of 300 Soviet prisoners detained by the German. Other lists of Soviet prisoners arrived from Finland, Romania and Italy; the Soviets, however, did not provide lists. The Germans then argued a lack of reciprocity, and stopped sending lists by the end of September 1941 (Bugnion 2003, p. 187).

<sup>10</sup>During World War II, the ICRC felt that publicly denouncing the deportations of Jews and other populations would not change the course of events, and could jeopardize the activities it carried out for victims concerning whom there were clear rules agreed upon in conventions. Adhering narrowly to the rules was – or so did the ICRC understand it at the time – a way of protecting its capacity to accomplish its humanitarian mission, and of contributing to preserve the relations between officially neutral Switzerland and the belligerent States. On these matters, see Vonèche Cardia (2012).

<sup>11</sup>“The term ‘civilian internees’ refers to those nationals of an enemy country who were in belligerent territory at the opening of hostilities, who had been interned and to whom the Detaining Power, acting on the proposal of the ICRC, had agreed to extend, by analogy, the application of the 1929 Prisoner of War Convention.” ICRC 1948, p. 52.

in assuming the same duties as those it carried out with prisoners of war (ICRC 1948, p. 53)

As regards other civilians, however, such as political detainees, enemy national at liberty, and civil population in general, the Agency's activities were confined to opening enquiries and forwarding messages, as the belligerent Powers exchanged no information concerning them. (ICRC 1948, p. 53)

The agency's work in World War II offered a stark contrast between its success when supported by binding humanitarian rules on the belligerents, and its failure when that support was lacking (Bugnion 2003, p. 230). Despite this limitation, during World War II the agency did a much more considerable job than during World War I. In 1918, the agency had established 7 millions cards. By June 1947 the World War II agency had generated 36 millions card indexes, of which 6 or 7 million concerned civilians (Djurovic 1986, p. 189).

As Gradimir Djurovic concludes:

The work of the ICRC in general, and of the Central Prisoners of War Agency in particular has had a profound influence on international humanitarian law, and the Diplomatic Conference which met in Geneva in 1949 to draft new Conventions expressly recognized the competence of the Agency in many of the articles of the Conventions. (Djurovic 1986, p. 190)

## Final Remarks

Two words describe ICRC activities concerning the dead and the missing from 1863 to 1945: consistency and audacity.

### *Consistency*

Humanitarian concern for the families and the victims has always driven ICRC's activities regarding the dead and missing persons. Since Henry Dunant's times, and up to the present day, the ICRC has advocated tracing missing persons and invoked the tragic consequences for the families:

Disappearances are a tragedy not just for the individual but also for families, who are left in the dark. Not knowing what has become of a husband or wife, child, father, mother, brother or sister is a source of terrible anguish for countless families affected by armed conflict or internal violence all over the world. Families and entire communities left wondering whether individual members are alive or dead are unable to move on because they cannot forget the violent events that tore through their lives. The problems they face are at once psychological, legal, administrative, social and economic. The deep wounds inflicted by disappearances continue to undermine relationships among groups and peoples, sometimes for decades, and prevent the social fabric from healing. (ICRC 2009, p. 9)

During the nineteenth and twentieth centuries, the ICRC has always promoted the development of a humanitarian law that would help in identifying the dead and trace the missing. Despite the progress of the legal framework (from the 1864 Geneva Convention to the four Geneva Conventions of 1949 and the two 1977 Additional Protocols) the ICRC has long felt that the international community is not really concerned about the problem of missing persons. In 2003, it organized a conference in Geneva, to which it invited government, humanitarian and human rights organizations, the Red Cross and Red Crescent, experts and, most importantly, missing family associations. The conference reaffirmed the right to know the fate of missing people. It also identified concrete measures belligerents should take to prevent disappearances, and the crucial role of forensics and the proper handling of human remains. It recognized the important role of networks – such as the Red Cross movement and family associations – in restoring family links.<sup>12</sup>

Following the conference, the 28th International Conference of the Red Cross and Red Crescent adopted the Agenda for Humanitarian Action, which set out clear objectives for states and the International Red Cross and Red Crescent Movement, with the aim of reaching them between 2004 and 2007. The ICRC also participated in the drafting committee that led to the International Convention for the Protection of All Persons from Enforced Disappearances adopted by the UN General Assembly in December 2006.

## *Audacity*

Beyond legal frameworks, the ICRC always tried to help victims of armed conflicts in pragmatic ways. Its main achievement was to extend its protection to a wider category of victims: from wounded soldiers to prisoners in the nineteenth century and to civilians in the twentieth century. Sometimes it succeeded, as in the Franco-Prussian War, with reaching able-bodied prisoners. Sometimes it failed partially, as in the two world wars, with civilians. In both cases, the ICRC developed creative practical measures, such as setting up a card index in World War I or inventing the “capture card” in World War II.

Nowadays the ICRC continues to carry out practical activities. It provides technical assistance in distributing identity tags or discs for combatants, and offers advice and training related to the identification of the dead. Furthermore, “as a neutral intermediary”, it is sometimes “involved in the evacuation of mortal remains from the battlefield to hospitals where families can identify and recover them, or in the transfer of mortal remains across borders or front lines to return them to the families either directly or via the authorities” (Sassòli and Tougas 2002, p. 743).

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<sup>12</sup> *Missing persons and international humanitarian law*, viewed 14 March 2013, <http://www.icrc.org/eng/war-and-law/protected-persons/missing-persons/overview-missing-persons.htm>

It also disseminates international humanitarian law by means of training sessions and handbooks targeted at specific audiences (e.g. parliamentarians) and publishes guides to best practice regarding missing people, DNA analysis and the identification of human remains.

Last but not least it publishes figures of missing people, when there is a humanitarian need. In Bosnia and Herzegovina, for example, in the absence of a central list of missing persons, the ICRC published a book of missing persons, listing the names of people unaccounted reported to them. This book is regularly updated, published on the ICRC website and distributed among the authorities and the public, in the hope of gathering further information. In February 2006, the seventh edition of the book reported that 15,275 people were still missing (ICRC 2006).

### *Counting or Not Counting?*

Coming back to the question of counting the dead, the available evidence demonstrates that between 1864 and 1945 the ICRC did not carry out such a task. Why? Probably because it did not see any humanitarian purpose in doing so. Families are concerned with their personal loss, and it therefore seemed more important to gather as much detailed information as possible regarding all circumstances attending a death than to know how many others died at the same time.

Nowadays, the ICRC still categorically refuses to record casualties and does not provide figures. Although the ICRC works tirelessly to clarify for itself and others the relationships between humanitarian action and politics by means of what is known as the ICRC doctrine, it has no specific principles explaining why it refuses to reveal the number of casualties of armed conflict and other situations of violence.

In the absence of official statements, it may be hypothesized that the reasons for such an attitude lie in the ICRC's policy of neutrality. If the ICRC gave numbers regarding the dead, it could fuel 'the war of figures' that is common among belligerents. Warring parties would inevitably try to manipulate figures, and the ICRC principle of neutrality could be jeopardized.

In contrast, in the case of natural or technological catastrophes, in which the ICRC may work to re-establish contact between victims and their families (for example, after a flood or an earthquake), the victims' situation does not result from war or other armed conflicts between rival groups. There is therefore no neutrality to observe in such circumstances, and consequently no confidentiality to enforce.

The decision to disclose figures about the death toll will depend on an assessment of the harms and benefits of communicating such information. In 2006, the ICRC together with the Pan American Health Organization, the World Health Organization and the International Federation of Red Cross and Red Crescent Societies published very clear guidelines for the management of dead bodies after disasters:

Soon after the disaster, a decision must be taken whether or not to provide information about the number of victims. The disadvantage of this is that these estimates will undoubtedly be wrong. The advantage is that official statistics may prevent exaggerated reporting by the media. (Morgan et al. (eds.) 2006, p. 24)

The difference that exists in the possibility of providing information about the number of victims of a natural or technological catastrophe, and the impossibility of providing information about the dead in armed conflict and other situations of violence, clearly indicates that the latter information is perceived as having political implications which could jeopardize the ICRC's neutrality, and therefore be counterproductive for its action in favor of the victims. That, however, is something the ICRC has not yet explicitly said, even though its record on the matter displays remarkable consistency.

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## Part II

# Annexes: Case Studies of the Experiences of Practitioners

### **Box: Recording Casualties: A Variety of Purposes and Methodologies**

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As an indicator of population change during wartime, excess mortality is important for humanitarian workers and development practitioners, in addition to the military, jurists and governments. It is an area of contest not only because it is difficult to properly assess its numerator, but also because the body count of victims serves many purposes, hence generating different methodologies. Indeed, the way the statistics of excess mortality and conflict death tolls are produced, framed and utilised depends very much on their intended purposes.

Other chapters in this volume have looked at the broad range of approaches to generating casualty figures, and have examined the methodological and political pitfalls of using different techniques. The following testimonies of casualty-recording practitioners, who focus on documenting direct deaths from violence, show a variety of case studies in this regard. Given the detailed, case-by-case information it produces, casualty recording can potentially serve a variety of purposes beyond the production of headline casualty figures generated by statistical estimation. Incidentally, the practitioners' chapters focus on their projects' objectives and methodologies more than their findings.

The literature on casualty recording as a distinct approach is small but growing. Recent contributions include case studies in the volumes *Counting Civilian Casualties* (See for example Sloboda et al. 2013) and *Sex, Drugs and Body Counts* (See for example Nettlefield 2010). Qualitative research by NGOs includes that conducted by London-based Every Casualty Worldwide, and partner organisation Action on Armed Violence, to look at the practice of

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states, NGOs and UN entities (see Minor 2012; Beswick and Minor 2014; Miceli and Olgiati 2014). The following chapters in this book make a unique contribution to the literature by presenting case studies of this work written by casualty recorders themselves. By including these primary accounts in this volume, the intention is to increase understanding of this field through providing practitioner perspectives as well as academic analysis.

The first case study discusses work aimed at alerting the public and decision-makers to the devastating impact of explosive weapons. The project does not deal with one specific country and discusses some of the reasons why a body count can help reduce the incidence of armed violence. This chapter is written by Henry Dodd and Robert Perkins for London-based advocacy NGO Action on Armed Violence.

The second case study is quite different because it analyses only one region of India at a micro-level, Manipur. Written by Samrat Sinha, an academic at the Jindal School of International Affairs in Delhi, it aims at assessing the civilian consequences of the insurgency in order to help decision-makers identify which demographic segments of the population bear the burden of the conflict. The Manipur Database relies on news reports to document casualties, as does the work of Action on Armed Violence. But it does not aim at advocacy and it is much more focused on the local dynamics of one conflict.

Written by Igor Roginek for the Croatian NGO Documenta, the third case study is different again. Dealing with a former Republic of the Yugoslavian Federation, the work of Documenta does not target decision-makers with evidence-based advocacy on certain types of weapons, nor does it seek to identify the most vulnerable segments of the population during an on-going situation of armed violence. Rather, it aims at establishing factual truth about a past conflict. Documenta's goals are to facilitate inter-ethnic reconciliation, political stability and durable peace. Unlike Action on Armed Violence or the Manipur Database, their work does not rely on news reports to document casualties, but primarily on questionnaires and interviews with the relatives of the victims along with multiple documentary sources.

These three case studies thus show a variety of purposes, activities, sources and methodologies to record direct deaths, which is a part of the numerator of excess mortality in situations of armed conflicts. They share a common ground because they all attempt to document each casualty one by one and do not venture into the risky games of extrapolation. Some extend their scope to injuries and the wounded, as in Manipur, while others are restricted to deaths. Likewise, some keep individual records anonymous and just produce statistics, whereas others include key identification data in order to commemorate memorialized list of victims, as in Croatia. Their diversity shows the positive variety of approaches that are available to achieve different goals at different

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stages of conflict, but also that the lack of standards in estimating the body count and excess mortality remains a major challenge for population and development studies.

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# Chapter 5

## Recording Casualties of Explosive Violence: Evidence-Based Advocacy in Practice

Henry Dodd and Robert Perkins

### Introduction

Action on Armed Violence (AOAV) is a UK-based non-governmental organisation (NGO) working to reduce the incidence and harm of armed violence around the world (AOAV 2014). In all areas of AOAV's work gathering data and evidence is key to reducing armed violence. AOAV is a founding member of the Every Casualty Campaign (ECC 2014), the International Network on Explosive Weapons (INEW 2014a), and a member of the Casualty Recorders Network (IPN 2014).

### Why We Count Casualties

Almost every day, in some corner of the world, someone is killed or injured by an explosive weapon. Their deaths often go unrecognised and unrecorded, hastily ignored or fast forgotten. Explosive weapons include commercially manufactured ordnance such as air-dropped bombs, rockets and missiles, as well as improvised explosive devices (IEDs) like car bombs. These weapons all share the ability to affect an area with blast, heat and fragmentation. When they are used in populated areas they invariably kill and injure civilians in the vicinity.

Despite the evidence of daily news broadcasts and voices from the field, the precise likelihood of civilians being killed or injured by explosive weapons has never been sufficiently documented. Without a sense of the scale and scope of the problem, and in the absence of an existing mechanism to collect data on a global level,

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it is difficult to understand the nature of explosive violence or make a compelling case for action to be taken to address it.

Action on Armed Violence (AOAV) established the Explosive Violence Monitoring Project in October 2010 to address this glaring gap by recording incidents of explosive violence reported in English-language media. Through the data which is collected, AOA V seeks to inform the debate on this particular technology of violence and to challenge the ways in which explosive weapons are used around the world. The hope is that carrying out this work can help address the gap in systematic recording of explosive weapon casualties and serve as an example of the benefits of measuring and monitoring all forms of armed violence.

This article outlines the rationale for recording the casualties of explosive violence, provides a brief overview of AOA V's method of recording casualties, and discusses some of the reasons why casualty recording can help reduce the incidence and impact of armed violence.

## How We Count Casualties

AOAV uses English-language news reports to record information on incidents of explosive violence around the world.<sup>1</sup> During 2013, AOA V gathered data from almost 500 different news sources, including international media agencies such as Reuters, Associated Press and Xinhua, as well as a diverse range of news sources from heavily-affected countries like Iraq, Pakistan and Somalia. Information is extracted not only on the number of casualties (defined as those both killed and injured) caused in every incident, but also on the time and date of the attack, the location, the weapon and the reported user and target.<sup>2</sup> All casualties are assumed to be civilians unless otherwise stated and incidents, where possible, are crosschecked with other sources.

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<sup>1</sup>An explosive violence 'incident' refers to the use of explosive weapons that caused at least one casualty and took place in a period of under 24 h.

<sup>2</sup>Methodology: Information is gathered from English-language news sources on incidents of explosive violence with at least one reported casualty. The EVMP uses an RSS reader to scan Google news for key terms which relate to explosive weapon use: \*explosion \*grenade \*shell \*mortar \* cluster munitions \*cluster bomb \*mine \*rocket \*missile \*bombing \*bomb \*IED \*explosive \*artillery \*air strike. Information is extracted on: the date, time, and location of the incident; the number and status of people killed and injured; the weapon type; the reported user and target; the detonation method and whether displacement or damage to the location was reported. Incidents are designated as occurring in populated areas if: (a) It is stated in the source (e.g. a busy street, a crowded market etc); (b) If an incident occurs in or near a pre-defined location which is likely to contain concentrations of civilians: Commercial premises, Entertainment venues, Hospitals, Hotels, Encampments (IDPs, Refugees, Nomads), Markets, Places of worship, Police stations, Public gatherings, Public buildings, Public transport, Schools, Town centres, Urban residential neighbourhoods, Villages/ compounds. Other locations recorded include: Agricultural area, Armed Base, Road, and Transport-related infrastructure. Incidents which occurred in these locations are recorded as 'Populated area' if details of the media report state that they were located in or next to any of the locations classified as likely to be populated. If there is insufficient or unclear information, then it is recorded as 'Unclear,' and combined with the 'Not reported as populated area' category for analysis. More information can be found at [www.aoav.org.uk](http://www.aoav.org.uk)

Explosive violence is not only a global phenomenon but also a daily one, with new casualties occurring all the time. AOA is able to collect and assimilate information from a very broad range of globally comparable and readily available sources, into a central dataset in a near 'real-time' fashion, which then allows for systematic recording and analysis across hundreds of contexts.

AOA has found that of the 37,809 casualties recorded to have been killed or injured by explosive weapons in 2013, 82 % were civilians. This number rose to 93 % when explosive weapons were used in populated areas. Incidents were recorded across 58 countries and territories, with the highest numbers of recorded incidents occurring in Iraq, Syria, Pakistan, Afghanistan and Lebanon.

AOA's data shows clearly that there are certain patterns of explosive violence that have a particularly dire impact on civilians. In 2013 there was an average of 18 civilian casualties whenever an explosive weapon was used in a populated area, compared to just three in other areas. Locations where civilians are likely to be gathered, such as markets, are frequently the sites of explosive violence. There were 142 attacks in markets in 2013, in 15 different countries. AOA recorded 3,707 casualties in those attacks, 97 % of whom were civilians (data from Dodd and Perkins 2014).

AOA does not claim to capture every casualty of explosive weapon use, and instead gathers casualty data to provide an indicator of the weapons and patterns of use that are of particular concern. Media reports are a valuable resource for casualty recorders as they are often written in immediate response to an incident, and their focus on establishing the 'who, where, when and how' makes them well suited to incident-based monitoring. However, there are limitations in AOA's method of recording casualties, often relating to the source material and the lack of a mechanism to follow up reports with in-depth investigation.<sup>3</sup>

It is recognised that there are very different levels of reporting in English-language media across regions and countries, with under-reporting likely in some contexts. For example, the methodology faces challenges in larger-scale and on-going conflicts, as deaths and injuries are not always reported in the media with the necessary clarity to be recorded. This was consistently the case throughout clashes across Syria in 2013 where access for journalists was extremely limited.

Since AOA's methodology relies on reports that are filed shortly after an incident took place, there is no mechanism for systematically assessing whether people reported as wounded in the immediate aftermath of an incident subsequently died from their injuries. It is likely that the number of people killed is higher than the data suggests.

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<sup>3</sup>The physical act of counting casualties of explosive violence is also inherently challenging due to the characteristic blast and fragmentation effects of these weapons and the severe injuries they often cause, such as traumatic amputations, crush injuries, and burns, which make identification and counting of casualties difficult for first responders at the scene. Furthermore, casualty counting can be hindered by difficulties in accessing the scene of an incident due to insecurity, collapsed buildings and debris, or explosive remnants of war. In the chaos and panic of the aftermath of an explosion, conflicting casualty totals are often reported as the full scale of destruction emerges. In those cases where news sources report varying casualty figures, AOA gives preference to reports which come from closest to the incident location, provide greater details on casualties, and contain updated or revised death and injury tolls. For more information see Cann and Harrison (2011).

AOAV is also subject to the interpretation of each media report as to what level of harm qualifies as an injury. However, AOAV strongly believes it is necessary to record those who are wounded by explosive violence as well as those who are killed. Due to the characteristic blast and fragmentation effects of explosive weapons, resultant injuries can have life-long consequences, including amputation, damage to internal organs, traumatic brain injury and psychological trauma. In order to obtain a more comprehensive understanding of the extent of the harm caused by explosive weapons and develop ways of assisting victims, it is vital that the injured are also counted and acknowledged.

As well as direct casualties, explosive weapons can cause severe socio- and economic harm through loss of livelihoods, displacement, and damage to infrastructure. These impacts are not always visible in the immediate aftermath of an incident and are sometimes difficult to quantify. Consequently, it is likely that the actual numbers of people affected by explosive violence, both directly and indirectly, are significantly higher than what can be reflected by AOAV's methodology.

AOAV is only able to present an incomplete picture of the humanitarian harm from explosive violence. This recording is not a substitute for comprehensive and on-the-ground investigation and reporting. However, the data provides an important indicator and approximation of the harm caused by explosive weapons. This central resource can thus support evidence-driven calls for states and other actors to take action to protect civilians.

## Casualty Counting and Advocacy

Casualty data from AOAV has been framed and presented in a number of ways in order to engage a diverse audience and raise awareness of the impacts of this particular technology of violence. Data from the project can provide both an illustration of a simple message or support more specific arguments about the patterns of harm associated with certain types of explosive weapons.

Examples of key advocacy messages informed by AOAV's evidence base include:

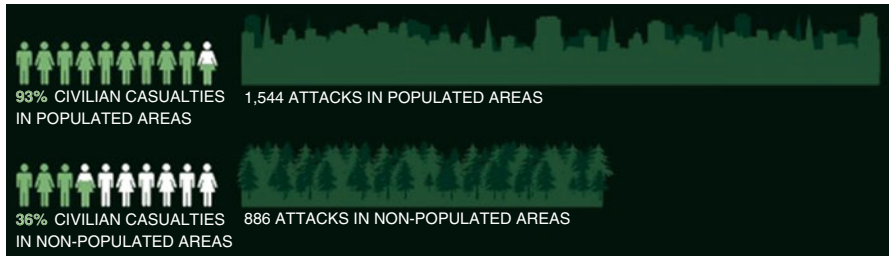
*“Users should refrain from using explosive weapons in populated areas”*

- In 2013, 93 % of casualties in populated areas were reported as civilians, compared to 36 % in other areas. (Dodd and Perkins 2014) (Fig. 5.1)

*“Explosive weapons with wide area impact are particularly harmful to civilians”*

- In 2013, ballistic missiles caused an average of 49 civilian casualties in each strike, car bombs 24 and air-dropped bombs 19. (Dodd and Perkins 2014) (Fig. 5.2)

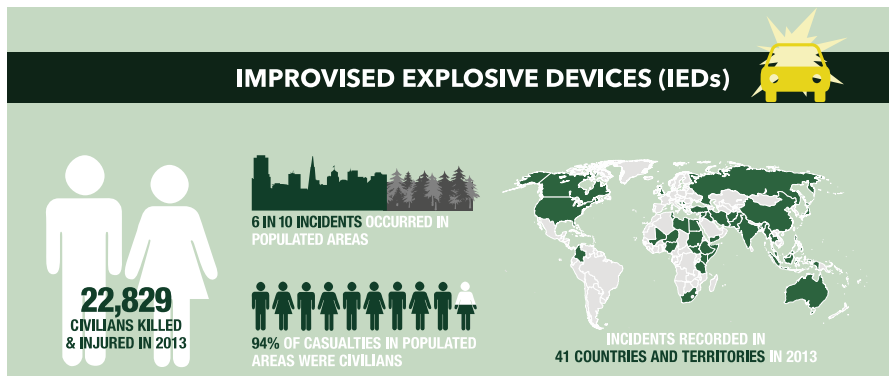
*“IEDs cause large numbers of civilian casualties and victims require a full range of support”*



**Fig. 5.1** Proportion of civilian casualties from the use of explosive weapons in populated and non-populated areas in 2013 (Dodd and Perkins 2014)



**Fig. 5.2** Average civilian casualties per incident by explosive weapon type in 2013 (Dodd and Perkins 2014)



**Fig. 5.3** Casualties from IEDs in 2013 (Dodd and Perkins 2014)

- In 2013 IEDs were responsible for 22,829 civilian casualties. 94 % of IED casualties in populated areas were civilians. (Dodd and Perkins 2014) (Fig. 5.3)

AOAV’s work has been recognised as a significant contribution to furthering the understanding of explosive weapons in populated areas, and was highlighted by the UN Secretary-General in May 2012 in his report on the protection of civilians in armed conflict, which used data collected by AOAV:

I have repeatedly expressed concern about the humanitarian impact of using explosive weapons in densely populated areas [...] in my 2010 report I called for more systematic collection of data on and analysis of this problem. I welcome the research carried out by Action on Armed Violence [...] this research underlines the gravity of the problem. (UNSC 2012)

State engagement on the issue has also increased in the last few years, with a number of strong statements being made in the Protection of Civilians debates of the UN Security Council, as well as from the EU, the UN Emergency Relief Coordinator and the ICRC.<sup>4</sup> On 8 May 2013, 107 countries endorsed a UN General Assembly resolution that explicitly and strongly condemned the use of heavy weapons, including shelling, ballistic missiles and other such weapons in population centres in Syria (UNGA 2013).

This engagement represents the beginning stages of an effort, led by the International Network on Explosive Weapons (INEW), to greatly enhance civilian protection by advocating for states to develop stronger international standards, including certain prohibitions and restrictions on the use of explosive weapons in populated areas.<sup>5</sup> In September 2013, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) convened a meeting in London that brought together experts on the impact of explosive weapons. This was the first meeting of its kind and signalled the development of a process to reduce the humanitarian harm from explosive weapons in populated areas. It laid out a roadmap for future action.

Crucially, recording and recognising casualties of explosive violence is also the first step to addressing and fulfilling the rights of victims, their families, and affected communities. Accurate casualty recording and reliable data is essential to advocacy around these issues and AOA's data is a means to contribute to the evidence base on explosive weapons with readily available and relatively limited resources. While the data collected by AOA is a useful tool to raise awareness of the issue, users of explosive weapons bear the ultimate responsibility to record and publicly acknowledge every casualty of explosive violence.

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<sup>4</sup>To see more on the states and other actors who have made public statements on the harm caused by explosive weapons in populated areas see INEW (2014b).

<sup>5</sup>This is at the heart of the civil society call established by INEW and endorsed by its founding members: The International Network on Explosive Weapons calls for immediate action to prevent human suffering from the use of explosive weapons in populated areas. States and other actors should:

Acknowledge that use of explosive weapons in populated areas tends to cause severe harm to individuals and communities and furthers suffering by damaging vital infrastructure;

Strive to avoid such harm and suffering in any situation, review and strengthen national policies and practices on use of explosive weapons and gather and make available relevant data;

Work for full realisation of the rights of victims and survivors;

Develop stronger international standards, including certain prohibitions and restrictions on the use of explosive weapons in populated areas. (INEW 2011)

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# Chapter 6

## Measuring the Burden of Conflict Through Local Newspapers: Findings from the Manipur Micro-level Insurgency Events Database of 2008–2009

Samrat Sinha

### Introduction

The state of Manipur, located in the Northeastern region of India along the Indo-Myanmar frontier, has been experiencing an extremely complex insurgency alongside several years of civil strife since the mid-1960s. While the conflict has been marked by several phases, currently the situation is characterized by the presence of approximately 35 active armed groups. These groups are either confronting the state through armed action or are functioning under specific ceasefire arrangements with the federal and state governments.<sup>1</sup> While armed violence in the region is an everyday occurrence, there are very few attempts that seek to empirically measure the direction and intensity of this violence. The absence of reliable data on the dynamics of these localized insurgencies has meant that the societal burdens arising from the conflict have been underestimated, and have not been adequately addressed by literature on the region. Even more problematic is the fact that official sources tend to provide only aggregate numbers of fatalities, and provide no data on injuries, abductions or missing people.

A micro-level event-centered approach to understanding conflict implies the “decomposition of a conflict into discrete political and violent events” and an “examination of the mechanisms through which they affect behavior, and consideration of differential risks within the population” (Williams et al. 2012: 1). It also

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<sup>1</sup> Ceasefire arrangements in the state are in essence agreements between the security forces (federal and provincial) with select armed groups that both sides will refrain from using force against one another. These are renewed on a yearly basis. Since 2008 a number of groups have agreed to relocate themselves in “designated camps” or cantonments, following which the cadres become eligible for a state-funded rehabilitation programme.

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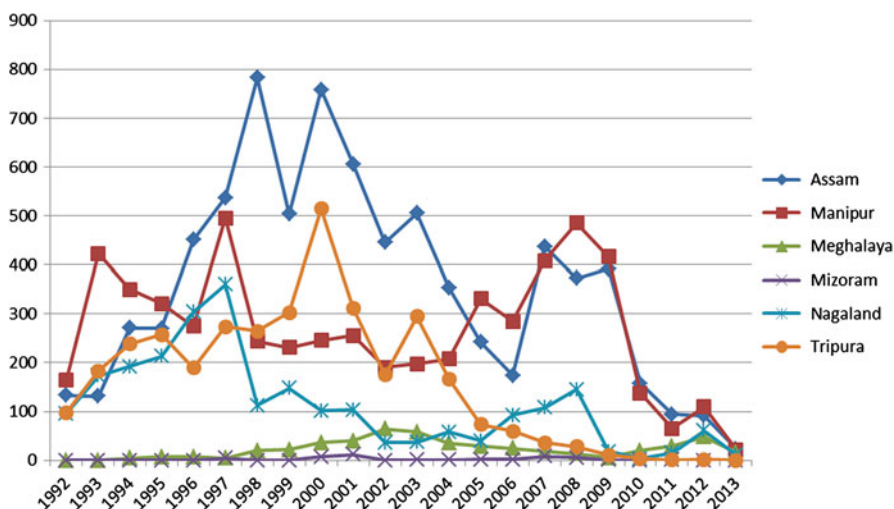
provides an intellectual basis for understanding internal conflicts (Kalyvas 2006; Weinstein 2007), and has generated rich analyses of individual country case studies (Bundervoet 2009; Restrepo et al. 2006; Verwimp 2006).

Micro-level analysis encompasses an assortment of innovative methodological techniques that allow for disaggregating conflict processes, but does not provide a standardized approach that goes beyond particular studies' specific contexts. Because of the localized nature of the violence in internal armed conflicts, the methods most suited to these conflicts are those that take into consideration the imperfections in data gathering that are endogenous to the specific region of study. It is precisely because of this that the construction of a comprehensive database on incidences of insurgency related violence was seen as a methodological solution that would provide objective and reliable insights on the actual characteristics of violence in Manipur.

The Northeastern region of India (of which Manipur is a part), despite its vast constellation of armed movements and violent micro-histories, has received very little systematic attention, especially in terms of measuring the mechanisms of violence. A recent large-N quantitative study aimed at explaining the motivations of youth in the region to join insurgencies provided significant insights (Vadlamanatti 2011). Unfortunately the study did not refer to research conducted by scholars located in the region itself and whose works shed light on the inner workings of the various conflicts (Fernandes and Pereira 2005; Jeyaseelan 2008; Mangattuthazhe 2008). This lack of contextual engagement was combined with the predisposition of the study to generalize across the various states of Northeastern India, despite the fact that each state (and conflict-affected district) has distinct historical trajectories, political institutions, and distributions of ethno-linguistic groups. Indeed, the variation in the intensity of conflict across the states in the region can only be seen when insurgent violence in the region is reviewed state-by-state (see Fig. 6.1 and Table 6.1). Contrasted with this approach, deriving the micro-foundations of conflict requires the incorporation of sources of information that are most proximate to the conflict situation. These sources can report events that would have normally gone unreported and reveal patterns (especially in relation to demographic information on victimization) that have not been studied before.

The Manipur Micro-Level Insurgency Events Database 2008–2009 (MMID 2008–2009) was created by recording more than 2000 insurgency-related events reported in newspapers published in Manipur over a two-year period. The major finding indicated by the data is that non-combatants bear a disproportionate burden of the armed conflict in the state of Manipur, especially in terms of violence induced injuries, and that a majority of civilian casualties (fatalities and injuries) occur as a result of deliberate actions by “unknown” perpetrators. This leads to further questions, especially with regard to the motivations of the perpetrators as well as existing systems of accountability. For instance, the targeting of civilians by non-state armed actors is missing from reports published by human rights organizations (who focus mainly on violence perpetrated by the security forces). Moreover the societal burden of conflict is further accentuated by attacks on health institutions (Sinha et al. 2013), closure of schools, abductions and disappearances, and mass detention by security forces.

The systematic monitoring of all available local newspapers is thus an extremely important tool in the larger monitoring of conflict events in protracted insurgencies.



**Fig. 6.1** Distribution of fatalities in Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura 1992–2013 (Total of 20,046 fatalities with injuries unknown) (SATP 2013)

**Table 6.1** Overall distribution of fatalities in insurgency-related violence in six states of Northeastern India 1992–2013 (SATP 2013)

State	Civilians	Security forces	Non-state actors
Assam	4034	813	2884
Manipur	2197	971	2694
Meghalaya	185	95	219
Mizoram	13	22	9
Nagaland	772	246	1408
Tripura	2509	455	520
Total Fatalities	9710	2602	7734

Databases utilizing local newspapers as data sources have contributed significantly to the understanding of conflicts in the international context, as for example seen in the evidence-based research generated from the Iraq Body Count method (Hicks et al. 2011). However, there have been very few research studies in India that have utilized provincial newspapers to determine victimization, despite the extensive internal violence that has been part of nation's post-independence experience.

## An Overview of Conflict in the Northeastern Region of India

The Northeastern region of India, comprising of the states of Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, has witnessed a significant number of casualties as a consequence of armed conflict. These casualties are distinct from those that have occurred as a result of inter-ethnic tensions, which manifest

themselves in the forms of riots and which also lead to significant internally displaced populations.

Four major characteristics of conflict processes in the Northeastern region, which can be extended to understanding the situation in Manipur as well, must be mentioned:

- The presence of ethnically constituted armed groups that are not only fighting against the state for secession or autonomy, but are also engaging in armed clashes with other groups, over territorial control and economic resources.
- The transnational nature of these groups, whereby they are able to create sanctuaries in neighboring countries. This is especially facilitated by the porosity of the borders, the presence of co-ethnics and the remoteness of these regions.
- The increasing engagement of armed groups in criminality, especially extortion<sup>2</sup> and targeted killings.
- The distinctiveness of the process of armed insurrection and its interconnectedness with structural causes of conflict. These structural drivers include the attempt to impose modern land tenure systems on traditional forms of land tenure, the inequities of development processes in areas populated by ethnic minorities.

Since 1992 fatality figures for the states of Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura have been compiled by the South Asia Terrorism Portal (SATP), which uses news sources and official figures published by the Ministry of Home Affairs. The SATP data indicate that since 1992 20,046 persons have died as a result of insurgency-related incidents in the six states mentioned above (SATP 2013). These figures only include violence employing firearms and explosives. The total number of casualties from these conflicts is, however, much higher: many of the insurgencies started prior to 1992, for which data is not available. Excluded from this data are the number of fatalities of ethnic riots and also the number of injuries (whose numbers one can assume are significant but are unknown due to lack of data). In terms of civilian casualties, of the 20,046 estimated overall fatalities, 9,710 are civilians – constituting a striking 48.43 % of all fatalities and thus raising fundamental questions on civilian protection. Of the six states, Assam and Manipur are the most violent, with Tripura seeing steady reductions in fatalities since 2001. Between 2007 and 2010 violence in Manipur outweighed all the other states.

## Historical Context of the Conflict Situation in Manipur

The state of Manipur is characterized by a complicated multi-ethnic social fabric which makes collecting and analyzing data on the causes of the conflict extremely difficult. This is accentuated by the fact that each ethnic group has its own distinct

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<sup>2</sup>Interview with anonymous police official, 10th November 2010.

narrative of its relationship to the larger conflict pervasive in the state. Certain communities that exist within the boundaries of the state are also associated with co-ethnic communities living in Myanmar. Historically, the state existed as a semi-independent kingdom with extensive trade and cultural linkages to countries in Southeast Asia. One of the most important junctures in the history of Manipur has been the nature of the merger of the then kingdom with the Indian union. Prior to integration, the kingdom of Manipur was part of a unique sub-system of states that were defined by their outward relations with South-East Asia. As mentioned by Hanjabam (2008), the major historical transitions of the former kingdom which have had modern day consequences were as follows:

- The Anglo-Manipur friendship treaty of 1762.
- The Anglo-Manipuri defense protocol of 1763.
- The Treaty of Yangdobo in 1826 between the British and the Burmese after the Burmese occupation of Manipur (1819–1826).
- The military occupation by the British of Manipur in 1891.
- The Standstill Agreement with the Union of India and the Instrument of Accession in 1947.
- The Merger with the Union of India in 1949 with statehood granted under the Indian federal system in 1972.

While the British administered the state of Manipur directly between 1891 and 1907, it was never formally annexed as British territory. The key to understanding the determinants of conflict has been the complexity of the past and current demographic patterns in the state. As described by Takehllambam (2009):

The five districts namely Senapati, Churachandpur, Ukhrul, Chandel and Tamenlong are the Hill districts and the four districts of Imphal-West and East, Thoubal, and Bishnupur, the four comprise the valley districts. Senapati district is inhabited by thirteen ethnic groups scattered in different parts of the area, “the scheduled tribes” that constitute the major groups are Mao, Maram and Thadou. The minor group groups are Kabui, Tangkhul, Maring, Chiru, Kom, Vaphei, Kacha Naga, Sema and Koireng. In Churachandpur District the Chikim dominates over the Naga group. Here also there are “thirteen scheduled tribes” scattered, the major groups among them are Hmar, Paite, and Thadou. The minor groups are Anal, Chothe, Kabui, Kom, Vaphei, Zou, Mizo Gangte, Simte and Ralte. The Naga groups dominate Ukhrul District, the major tribe is Tangkhul and the minor group is Thadou. In Chandel District, fourteen scheduled tribes inhabits the land, the major groups in the District are Anal, Maring, and Thadou, whereas the minor groups comprise the Lamkhang, Zou, Gangte, Myon, Monsang, Aimol, Chothe, Puram, Mizo, Thangkhul and Kom. In the valley districts, the majority are Meitei, Meitei Pangal along with minor groups of the tribes living in small pockets (pp. 140–142).

The transition from British control to full integration with the newly formed Union of India was a highly contested process, which consequently led to the development of a historical grievance, whereby integration with India was seen as an external imposition. However, the degree of polarization within the state itself is also important to a more complete understanding of the conflict situation, especially between the Meitei dominated valley districts and the non-Meitei dominated “hill” districts. There have been increasing pressures within the state itself to transform

the existing land-tenure and related tribal systems of self-governance in the “hill” districts.<sup>3</sup> These internally generated sources of strife, especially in terms of the structural divide between the populations of the “hill” and “valley” districts are reflected in various ways, the most prominent of these being in terms of the developmental entitlements that are extended to these regions (Hassan 2006).

The nature of armed insurrection, while reflective of larger structural factors, is a distinct phenomenon. Most importantly, there is a high degree of polarization among armed groups, with a clear distinction between the hill and valley-based groups. The state has witnessed several phases of armed insurrection in various forms since the 1960s. The prominent actors functioning in the state include the “valley” based groups such as the UNLF, PREPAK, KYKL, PLA, KCP and PULF (See Table 6.2). Added to these are the more than 20 Kuki armed groups and the NSCN-IM and NSCN (K) (which are composed of Nagas), all operating in the “hill districts.” The Table below has listed the various armed groups that are functional in the state. The list of ethnically constituted armed groups mentioned in Table 6.2 refers to the significant groups and does not include the factions that exist within the various groups that operate independently of each other.<sup>4</sup> While it is beyond the scope of this study to detail the organizational development of each group, the complexity of the ethnological makeup of the state, as well as the conflict situation itself, contributes to the lack of precision in deriving the causes of the conflict but also in understanding the motives of the armed groups themselves.

The situation is made even more complex when the nature of the state response and the type of security regime that governs the state is examined. There are several legal regimes beyond the prominent *Armed Forces Special Powers Act* that allow for the operations of the security forces. These include the *Unlawful Activities Prevention Act* (1967), *Prevention of Seditious Meetings Act* (1911), *Punjab Security of State Act* (1953), *Foreigners Protected Areas Order* (1958), *National Security Act* (1980), *Terrorist and Disruptive Activities (Prevention) Act* (1985) (Loitongbam 2010). Human rights abuses facilitated by legal protections accorded to the security forces have been well documented and include: enforced disappearances, arbitrary detention, extrajudicial killings and torture (Human Rights Watch 2008; Civil Society Coalition on Human Rights in Manipur 2012).

<sup>3</sup>Regulations that determine land distribution in the state are as follows: The Manipur State Hill Peoples (Administration) Regulation Act, 1947, The Manipur (Village Authority in Hill Areas) Act, 1956, The Manipur Hill Areas (Acquisition of Chiefs Rights) Act, 1967, The Manipur (Hill Areas) District Council Act, 1971, The Manipur (Village Authorities) in Hill Areas (Amendment) Act, 1983(see Kipgen 2009).

<sup>4</sup>For instance the MMID (2008–2009) records the following factions of the KCP itself: KCP(Noyon), KCP(Tabungga), KCP (Wanglen Khuman), KCP(Mangolijao), KCP ( Sengoi), KCP (City Meetei), KCP(City), KCP(GS), KCP (Ibungo Ngangom), KCP(Imoinu), KCP(KK Manging), KCP(KK Ngamba), KCP(Kokai), KCP(Laheinba), KCP(Lamphei), KCP (MC)(Lamyamba Khuman), KCP(Tamngaba), KCP(Puryanthaba-Layamba), KCP(Wanglen Khuman). Similarly PREPAK has the original groups and its offshoots PREPAK(GS), PREPAK(VC) and PREPAK (Shanti). The PULF has in addition to the original the following factions: Quaji Omar, Azad, M.I.Khan, and Umar Farooq factions. Also in certain cases individuals working for multiple organizations such as the KPC (MC) and UNLF and the security forces at the same time.

**Table 6.2** Armed groups functioning in the State of Manipur (CDPS 2010)

Active	Ceasefire but operational	Inactive
Kanglei Yawol Kanna Lup (KYKL)	Hmar National Army (HNA)	Kangleipak Liberation Organisation (KLO)
Kangleipak Communist Party (KCP)	Hmar People's Conference (HPC)	Kangleipak People's Liberation Army (KPLA)
Kangleipak Communist Party – Military Council (KCP-MC)	Kuki Liberation Army (KLA-KNO)	Komrem People's Army (KPA)
Manipur Naga Revolutionary Front (MNRF)	Kuki Liberation Army (KLA-UPF)	Singlung People's Liberation Army (SPLA)
Naga National Council (NNC)	Kuki National Army (KNA)	United Naga People's Council (UNPC)
National Socialist Council of Nagalim – Isak Muivah Faction (NSCN-IM)	Kuki National Front – Military Council (KNF-MC)	
National Socialist Council of Nagalim – Khaplang Faction (NSCN-K)	Kuki National Front – Zogam (KNF-Z)	
People's Liberation Army (PLA)	Kuki National Front (KNF-S)	
People's Revolutionary Party of Kangleipak (PREPAK)	Kuki National Organisation (KNO)	
People's United Liberation Front (PULF)	Kuki Revolutionary Army – (KRA)	
United National Liberation Front (UNLF)	Kuki Revolutionary Army – Unification (KRA-U)	
United People's Party of Kangleipak (UPPK)	United Komrem Revolutionary Army (UKRA)	
	United Kuki Liberation Front (UKLF)	
	United Socialist Revolutionary Army (Old Kuki) (USRA)	
	Zomi Reunification Front (ZRF)	
	Zomi Revolutionary Army (ZRA)	
	Zou Defence Volunteers (ZDV)	
	Zou Defence Volunteers – United Peoples' Front (ZDV-UPF)	

## Previous Estimates of Conflict Casualties in Manipur: SATP and RIMS Hospital Forensic Department Data

It is imperative to indicate that there are very few estimates regarding the actual number of casualties in the ongoing insurgency. However one of the most important sources of estimates of fatalities is the data provided by the South Asia Terrorism Portal (SATP). According to their incident-based documentation from official government sources, there have been a total of 6132 fatalities between 1992 and 2012. Of these, civilians constitute 2,197 fatalities, while there have been 971 deaths of security forces personnel, and 2634 deaths of insurgents. Absent in the publicly available casualty data are the number of injuries, as well as victims who have been abducted and whose whereabouts are unknown.

Another important set of data is the annual compilation of data on forensic cases by the Department of Forensic Medicine, Regional Institute of Medical Sciences (RIMS) which is based in the state capital of Imphal.<sup>5</sup> The data, which covers the period from 1991 to 2009, reports an aggregate of 3,599 fatalities arising out of firearm injuries, 205 arising from explosive weapons related incidents, 264 from sharp weapon injuries, and 532 from blunt weapon injuries. The fact that firearm injuries constitute the highest number of cases being registered for autopsy is significant as it provides statistical evidence that suggests the prevalence of small arms (Fig. 6.2).

While representing an important piece of evidence, it does not provide a complete picture, firstly because the data only accounts for the fatalities mainly occurring in the four accessible valley-districts, rather than in all nine districts of the state.<sup>6</sup> Although the author did not get access to the original files stored in the records of the hospital (as the cases were under police investigation) an analysis done by the hospital officials showed that firearms are the greatest cause of death.

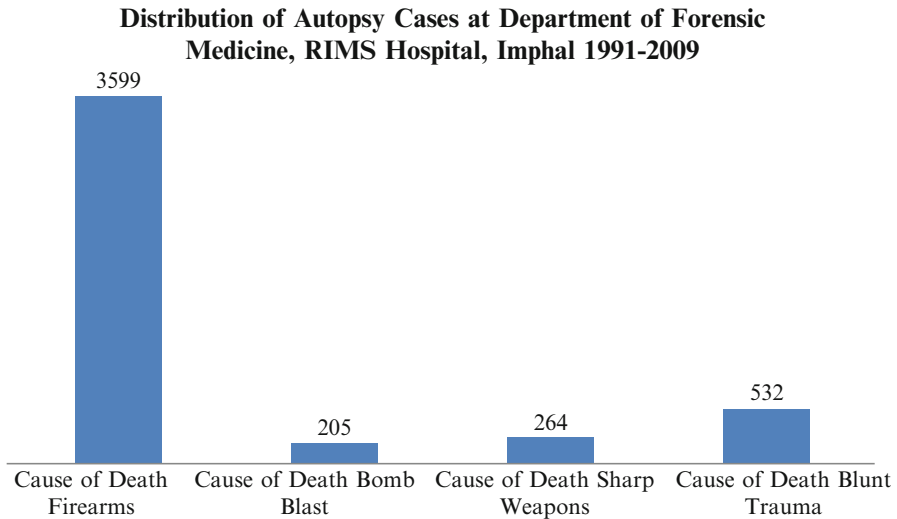
RIMS hospital carried out a retrospective study of homicidal, fatal, firearm injury cases brought for autopsy in the Department of Forensic Medicine, RIMS from two valley districts: Imphal-East and Imphal-West districts for the period 1986–2005. It was found that out of the 3947 medico-legal cases brought from these two districts for the time period, 1248 (or 31.62 %) were caused by firearms (Pradipkumar et al. 2005). A total of 671, or 53.7 % of all deaths, were civilians, of whom 353 were killed by “unknown” perpetrators, 265 by insurgent groups, and 53 by security forces (p. 222). Insurgent and “unknown” deaths numbered 395 and deaths of security personnel numbered 180 (ibid.).

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<sup>5</sup>Compiled from the Display Board, Department of Forensic Medicine, RIMS Hospital, Imphal.

<sup>6</sup>Interview with anonymous RIMS hospital official, 13th November 2010.



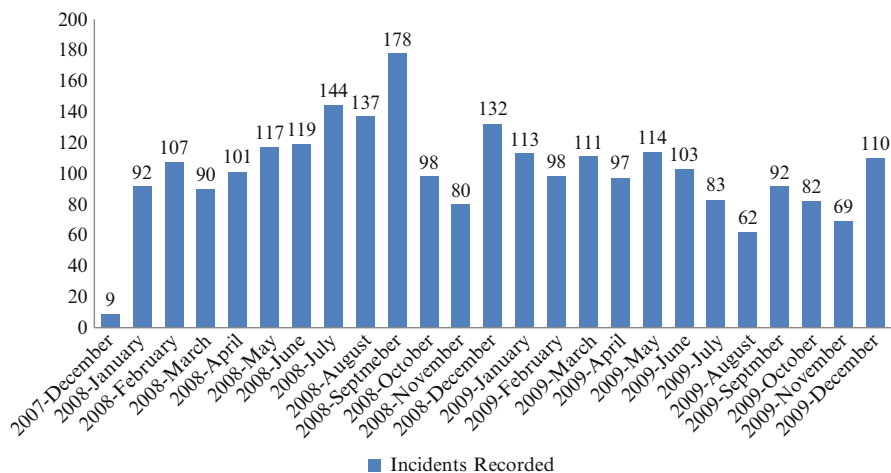


**Fig. 6.2** Forensic cases registered in RIMS Hospital 1991–2009

### **Constructing the Micro-level Insurgency Events Database (Methodology)**

The MMID (2008–2009) essentially uses a disaggregated approach to understanding conflict processes in Manipur. There were two major sources of data that were utilized for creating the micro-level record of insurgency related events. The primary source of data was the archives of the *Imphal Free Press*, which is one of the most important state-level newspapers in Manipur. Archived newspaper editions were available for most days of the years of 2006 through June 2010. A second major source was an online forum called “*e-pao.net*” which publishes a section called “*The Killing Fields*.” This forum has been documenting violence in the state since October 2007 on a daily basis. The forum publishes conflict related stories from two state-level newspapers: *The Sangai Express* and the *Heuyien Lanpao*. In many cases the security forces or armed factions also publish official press releases in the newspapers. These statements can shed further light on specific reported incidents, and also provide information on additional incidents that are not reported immediately by the press on the day of occurrence.

Data was thus generated based primarily on reviewing the newspaper edition of each day of the 24 months of 2008–2009, and then recording every insurgency related incident based on certain parameters. Cases of crime were excluded. Fatalities and injuries were rechecked and corroborated with the two sources published in “*e-pao.net*” and also with the death registers of the Regional Institute of Medical Sciences (RIMS) hospital, which were collected during fieldwork. RIMS hospital is the nodal hospital in Manipur and receives a majority of firearms and explosive related injuries.



**Fig. 6.3** Monthly distribution of overall (Fatal and Non-fatal events) incidents recorded in MMID 2008–2009 (Non-fatal events include incidents like the closure of public services, closure of schools and hospitals, detentions, grenade attacks, abductions, firing incidents, bomb attacks)

The value of these archival media sources cannot be underplayed. The biggest advantage of these sources is that they allow the documentation of local-level incidents that have generally been overlooked at the national level. For example, in using these sources it became apparent that a majority of the incidents are not mass-casualty incidents and occur at the village level on intra-village pathways or in the villages. This micro-level information is not covered in national level publications and leads to a degree of variation with existing SATP data (Fig. 6.3).

## Limitations to the Methodology

There are limitations to the methodology. It is likely that not all events are reported or covered in the local media sources. The reporting in the sources used may be constrained by geographical factors and problems in information flows between key informants and publishers. Hence a majority of the incidents recorded in the database were occurring in the valley-districts, with fewer incidents reported in the hill districts. This also arises from accessibility, whereby news from the more remote districts remains unreported. Also, as there were ongoing military engagements, it is virtually impossible to know what transpired in a specific incident. Many of these locations were in remote forested areas and difficult to verify due to the security situation.

There are several potentially important sources that were inaccessible or could not bring forward due to ethical issues of confidentiality. While forensic records were mentioned earlier, the narratives of victims' families recorded by NGOs were

not used as these were treated as internal documentation. Incident reports from the security forces were another source of data which was not given to the author.

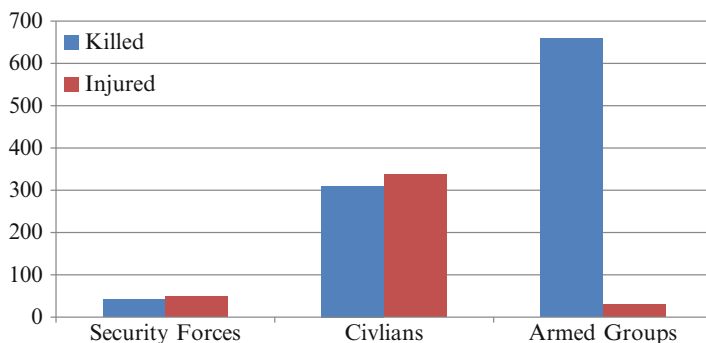
## Patterns of Victimization in Manipur: Findings from MMID 2008–2009

The most critical finding of the database was the identification of 1,010 fatalities for the years of study as well as the identification of 416 injury victims. 659 fatalities were members of armed groups, 310 were civilians and 41 were security forces personnel. A total of 29 members of armed groups, 338 civilians and 49 security forces personnel were injured. The SATP data for the corresponding years indicates 218 civilian fatalities and no account of deaths of members of armed groups.

For the same time period the RIMS hospital data records 751 fatalities (without disaggregating them into distinct categories such as civilian or combatant), of which 729 are firearm deaths and 22 explosive related, thus indicating a high degree of variance. There is no baseline data available for injuries around which we can compare estimates arising out of the MMID (Fig. 6.4).

### *Fatalities Among Non-combatants*

The nature of civilian fatalities poses serious questions regarding the protection afforded to non-combatants in areas that are experiencing some form of civil strife. One of the most striking features of the distribution of fatalities is the difference between deaths caused in explosive related incidents and those that have been caused by small arms (and other means). As can be seen in the table and graphs below, there is a degree of variation in comparison with the baseline with the MMID data showing 310 fatalities and SATP showing 218. This difference is attributable to



**Fig. 6.4** Comparison of overall fatality and injury victims from MMID (2008–2009)

distinct recording practices and data sources. However, the significance of this variation would no doubt be amplified if more longitudinal data were included (as is currently being undertaken for the years 2006–2007).

Of the 310 civilian deaths recorded in the MMID, explosive devices lead to thirty fatalities. There were a total of nine fatalities caused by crossfire during gunfights between security personnel and insurgents (and during factional clashes among insurgents). Of these four fatalities were contested by their families and NGOs leading to public protests. In addition, two persons were killed in custody by security forces. The remaining 192 persons were killed in a deliberate and targeted manner using firearms by unknown perpetrators. In addition, the bodies of 73 persons were found with bullet injuries, injuries caused by torture, and injuries caused by the use of sharp and blunt weapons.

Two major categories of victims of “One-Sided Violence” emerge from the data on civilian fatalities. The first category involves incidents that have been recorded as “Killings.” A second clustering of incidents involved a much more ambiguous set of events whereby on certain occasions the body/bodies of persons were recovered (and were coded as “Body Found”).

Within this second category of fatalities recorded as “Body Found”, which included 61 incidents involving the discovery of 73 bodies, three significant categories emerge. Firstly, persons whose bodies showed signs of torture or whose death was attributed to gunshot wounds. The reports highlighted that these individuals in most cases been executed after abduction. Their deaths were attributed to armed actors and could be added to the data on deliberate one-sided killings. The second category is that of persons who have been killed by other means (sharp weapons/blunt injury) and whose deaths are difficult to attribute to armed actors. The last type is those cases without any reported cause of death. In terms of distributions: 49 of the 73 fall into the first category (66.12 %); 14 persons belong to the second category (19.12 %); and 10 persons belong to the third category (13.69 %).

The occurrence of targeted killings of non-combatants has two major components that need to be examined. The concept of “One-Sided Violence” referred to earlier has been defined by the Uppsala Conflict Data Program (UCDP) as “the use of armed force by the government of a state or by a formally organized group against civilians, which results in at least 25 deaths per year” (Eck and Hultman 2007: 235). One-sided violence encompasses only those fatalities that are caused by the intentional and direct use of violence, distinguishing between four types of incidents:

- *Intentional killings*: refers to any action that is taken to deliberately kill civilians.
- *Unintentional deaths*: comprise those deaths that result inadvertently from conflicts, for example, civilians caught in crossfire.
- *Direct killings*: encompass all deaths caused directly by an actor, such as by bombing or shooting.
- *Indirect deaths*: include those deaths caused indirectly by an ongoing conflict, mainly due to disease or other health problems.

Second, the fact that a significant proportion of casualties in Manipur have been caused by direct and intentional violence is reflective of an absence of internal

regulation within the organizational frameworks of the perpetrators. It leads one to question the motives of the perpetrators as well. In terms of perpetrators of civilian deaths, a total of 249 fatalities (80.64 %) are attributable to “unknown” perpetrators while 53 fatalities (17.09 %) are attributable to specific armed groups. The remaining 3 % is attributable to security forces. Of those deaths attributed to “unknown perpetrators” (a category reported in the news report) the victims belonged to a variety of socio-economic strata, including: government officials, teachers, health workers, members of community-based organizations, gram panchayats (village council) members, school teachers, street vendors, laborers, rickshaw pullers, non-Manipuri persons and others. There were also incidents involving the targeting of former members of the insurgency or the relatives of insurgents by unknown gunmen.

### *Non-combatant Injuries*

The occurrence of non-combatant injuries in the state of Manipur is an under-examined problem. There is a dearth of analysis in particular on the health and financial implications for the survivors. Injury can lead to disability, increased expenditure on healthcare, disruptions in livelihoods and social stigma. However, within the MMID database it was possible to determine that the number of injury victims constitutes 23.40 % of the overall number of persons affected by violence in the years of study, and constitutes 52.16 % of the 648 non-combatant casualties. Moreover, civilian non-combatant injuries constitute 81.25 % of all injuries recorded in the data.

Clearly, the number of injured non-combatants far outweighs the number of injured combatants. While the concept of “one-sided” and “direct” or intentional killings to denote a specific type of violence, a category of direct, intentional and one-sided injuries is also useful to understanding the nature of violence. Categorizing the injury by cause is critical, as each has distinct health implications for the victims that closely tie to the costs of recovery. The following categories emerged as for causes of injury (and the numbers of victims are also mentioned):

- Physical Assault (82)
- Bomb Explosions (91)
- Crossfire during armed clashes between security forces and armed groups, or inter-armed group clashes (20)
- Gunfire (not involving deliberate targeting of victims) (17)
- Grenade Explosions (13)
- IED explosions (9)
- Deliberate, intentional and targeted shooting and injury of victims (104)

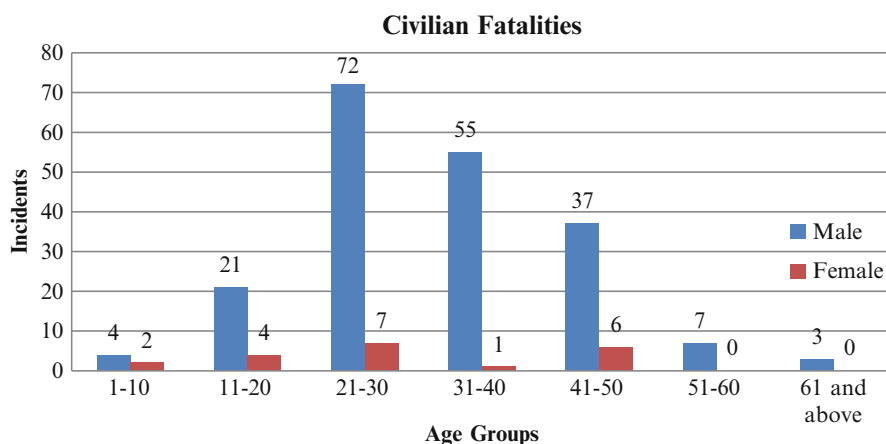
Physical assaults, bomb-attacks, and deliberate shooting accounted for the highest number of casualties, with the last category leading to the highest number of injuries. The implications of this type are two-fold. First, we see continuity in the pattern where one-sided violence is a predominant form. Second, small arms and

light weapons and explosive devices were the major sources of injury. Examining the causes of injuries by perpetrator, of the 157 incidents recorded eight were attributable to security forces, 28 to suspected armed groups and 118 to “unknown” perpetrators – a majority at 75.51 %.

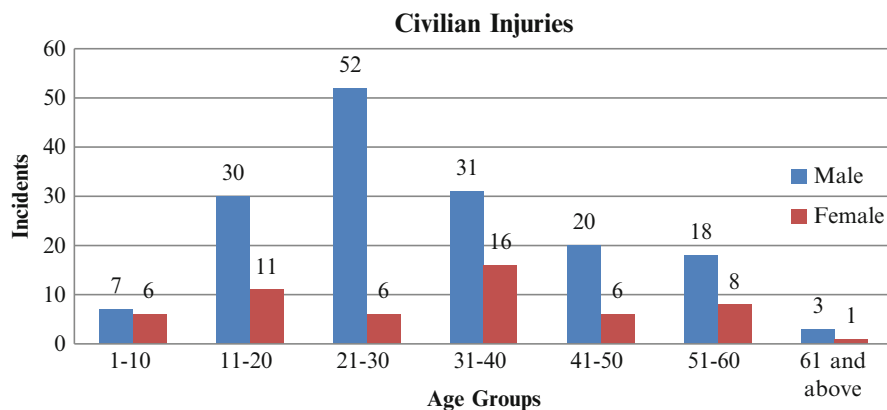
### ***Demographic Distribution of Non-combatant Fatality and Injuries***

One of the major constraints of the archival sources has been in identifying the demographic details of individual victims. Disaggregating victimization patterns by age and gender allows researchers to understand the societal consequences of conflict. The lack of precise demographic details for all victims arises from the nature of reporting of the events and the lack of access to individual forensic records. Although we had access to the death registers of the two major hospitals in the state capital, the registers reported fatalities and injuries that were mainly caused by disease accidents. The graphs below show a breakdown by gender and age of 219 civilian fatalities and 215 injury victims whose demographic details could be derived from the sources. A majority of victims fall in the range of 21–40 years and are primarily male (Figs. 6.5 and 6.6).

In the case of Manipur, the conditions of injury victims are made more complex by the geographical remoteness of many of the villages, especially in the “hill districts.” Perhaps one of the greatest effects of the conflict on the populations’ health has been inadequate access to healthcare, due to the insecure environment and geographical remoteness. Thus for instance, on 11 January 2008, an improvised explosive device exploded in Kajilong village of the Tamenlong sub-division, injuring four minors aged 12 years, 7 years, 3 years and 3 months respectively (Imphal Free



**Fig. 6.5** Age-wise distribution of civilian fatalities



**Fig. 6.6** Age wise distribution of civilian injuries

Press 2008). In order to reach RIMS hospital, villagers had to walk overnight for twelve hours, carrying the victims for thirty kilometers through dense jungle before reaching the district headquarters. From there they travelled by jeep to the hospital. The remoteness of the “hill” districts, and the consequent unwillingness of health staff to function in these areas means that adequate healthcare provision is of special concern (The Sangai Express 2013).

### ***Fatalities and Injuries: Non-State Armed Groups***

Fatalities among armed groups have been a consistent feature of the incidents that were reported in the years of study and constituted 65.18 % of all reported fatalities. The months of September 2008, December 2008 and April 2009 were the most violent in terms of number of armed group members killed, with a steady decline in the number of incidents after June 2009, a trend that seems to be continuing. Fatalities of armed non-state actors can be divided into three distinct types with regard to the nature of the incident:

- First, there are deaths caused by clashes between different armed groups. There were 21 incidents of inter-group armed clashes that led to 42 reported deaths and 14 injuries. In addition three persons were abducted and their fates unknown.
- Second, the most predominant category involves the occurrence of fatalities in firefights with security forces. The number of persons killed was 581. This category constitutes 88.16 % of all fatalities suffered by armed groups. A total of 60 fatalities or 10.33 % of those killed by security forces were contested, in the form of protests by family members or the communities to which these individuals belonged.

- Lastly, there are 35 fatalities among armed group members attributed to deliberate abduction and killings by unknown perpetrators. Included in this is a suspected execution of a member of an armed group as punishment.

### *Non-lethal Burdens of Conflict*

While killings and injuries of individuals reflect the most physically harmful consequences of the violence in Manipur, other, non-lethal or physically injurious consequences of the conflict have also had a great collective effect on the region. These include mass arrests, abductions, extortion, and destruction of property. For the tracked time period the MMID database record the details of 1792 persons arrested by the security forces in the two-year period, 127 abduction victims, and 284 extortion related incidents. Also included in the database are more than 328 firing and grenade attacks on village councils, government offices, and residences by unknown perpetrators; as well as the occurrence of 55 incidents of closures of schools, hospitals, banks, markets and transportation as a result of the extortion related activities of armed groups.

However, the political-economic consequences of the insurgency do not necessarily mean that all armed insurgency groups are driven purely by avaricious or predatory motives. Rather, armed groups in the region traverse a fine line between ideological motivation and purely instrumental action for personal or group benefit. It is necessary to highlight these non-lethal incidences by armed groups, not to argue that they are driven by purely economic motives, but instead to demonstrate that the burden born by the civilian population as a result of the conflict is complex, and extends beyond one of direct victimization. This is especially true for extortion related incidents which result in closure of services in the private and public sector, including schools, shops, transportation services, health facilities and government offices.

The closure of schools due to extortion by armed groups has had severely negative effects on school enrollment, as well as greatly disrupting the academic calendar. For example, in January 2008 the Jawahar Navodaya Vidyalaya at Khumbong was closed due to extortion threats, affecting 520 students, while the September 2008 closure of the Don Bosco School located at Chingmeirong affected more than 2000 students.

A second target of extortion has been shop owners. In February 2008 a mass closure was reported after 35 shops were shut down at Lamlong Bazar. Two other incidents where 200 and 100 shops were closed due to extortion demands occurred in August and September 2008 respectively. In December 2009 the entire of Yangpokpi Bazaar (one of the most important markets of Thoubal District) was closed. Other economic targets of extortion include Cinema Halls, Cable TV networks, mobile phone services and banks (for instance the shutting down of Vijaya Bank in April 2009).



Extortion has also resulted in the closing down of transportation services, involving the suspension of public and private bus services along various important routes such as the Imphal-Moreh, Imphal-Churachandpur, Imphal-Senapati, Imphal-Motbung, Imphal-Kangpokpi routes. These events occurred mainly due to the inability of transporters to pay the “taxes” levied by various groups along different sections of the roadways. These routes are the lifeline for ordinary citizens, traders, or those seeking to visit government offices in Imphal. Given the poor state of roadways and low volumes of car ownership, these disruptions severely affected those accessing these services.

Even more problematic is the temporary shutting down or destruction of health facilities. The impact of these closures tends to affect those who are already vulnerable i.e. those who are seeking medical treatment and the even more serious cases of individuals who require emergency care and surgery. Examples in this category of incidents include: the closing of Imphal Hospital and Langol View Hospitals due to extortion in January 2008; the closure of the state run Jawaharlal Nehru Hospital due to extortion demands in September 2008; the destruction of a Public Health Centre (PHC) by armed cadres (the PHC was formerly being used a security forces camp) in September 2009; the closure of all hospitals in protest of the killing of a former chief medical officer (CMO) in October 2009; the closure of pharmacies around RIMS hospital; the shutting down of a private hospital after a ban by the KCP(MC) in April; and the temporary closure of routine surgeries at Shija Hospital in December 2009. These must also be seen alongside the various cases of abduction, extortion, firing attacks and grenade attacks committed against doctors by mainly “unknown” perpetrators.

Lastly, there were three incidents where government offices were closed due to insurgent activity. The Deputy Commissioners’ Office, Senapati District was closed down due to a “diktat” by the NSCN-IM in May 2008, the State Youth Affairs and Sports Department was closed due to a bomb threat in September 2008 and the Zonal Education Office at Khoyathong was also closed in the same month.

## Conclusion

The paper has provided an overview of certain significant findings of the MMID 2008–2009 database. Statistical approaches to the study of armed conflict in the context of India require a degree of re-examination, especially in terms of the sources of data used, and what this data actually seeks to establish. One of the major problems of aggregated statistical data on the human costs of conflict in India is the inability of the existing conflict statistics to provide more detailed demographic information about victims when it comes to situations such as the Kashmir conflict, the Maoist insurgency, and the various insurgencies of the Northeast. This absence of data is even starker when it involves recording details of injury victims and the challenges they face in terms of healthcare costs. Even more problematic is the

absence of surveys on the household level impacts of conflict in the Indian context.

The study has sought to achieve two main goals. Firstly, the database sought to reveal patterns of victimization arising from violence dominated by the use of fire-arms and explosives. Secondly, it sought to use newspapers published in Manipur to shed light on the societal consequences of this type of violence through the recording of various non-fatal events. There are certain processes, however, that the methodology does not address, including those that are fundamental to understanding the conflict dynamics in the state. While the event-based approach utilized by the MMID database can tell us about the number of victims and some other demographic identifiers, it does not tell us about the nature or type of injury (which is only available in forensic, medical and police records). The database is not able to provide details on the types or caliber of weapons used or the actual details of how a person died, for example were they were killed at extremely close quarters or were these execution-style killings? The MMID data also does not shed light on another aspect of the violence including an understanding of the reasons why individuals actually become participants in the violence. Such an understanding of motivation will be fundamental to the designing of violence reduction programs. Thus the study is not able to talk about the “push” or “pull” factors that actually drive individuals into the insurgency in more detail but rather focuses on outcomes.

In recent years, the state of Manipur has witnessed significant reductions in the number of fatalities and injuries attributed to the insurgency. This reduction is partially attributable to a ceasefire arrangement termed the Suspension of Operations Order (SoO) of 2008, and the implementation of a “surrender” policy for members of armed groups (Ministry of Home Affairs 2012). However despite their limited success Acharya and Karp (2011) highlight that “official responses to armed violence tend to be fragmented among bureaucracies and the central and state governments, with limited collaboration among institutions, or between government and non-government actors.” (p. 10). There is thus significant variation in the disarmament process, and also in the implementation of the two programmes: with the “surrender” policies for valley-based groups being governed from the state capital; and the various ceasefires with “hill” groups being mainly overseen by the central security forces.<sup>7</sup>

In conclusion, based on the findings of the MMID database and its noted limitations there are three avenues for further research. First, there is a need for the collection of strong micro-level and disaggregated data on the victims of both conflict and armed violence, which incorporates multiple sources like newspaper reports, police statistics and medical records. This should be coupled with the gathering of evidence through scientific sample surveys on the impacts of fatality and injury on the civilian population. The gathering of such evidence would require methodological refinement, including by combining conventional social science approaches with tools from disciplines such as conflict epidemiology. Second, with specific regard to Manipur there is a greater need to study the micro-foundations of the

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<sup>7</sup>Interview with anonymous paramilitary forces officer, 14th November 2010.

insurgency, especially in terms of group membership and the consequences of the increasing incorporation of groups into ceasefire arrangements. Third, and most importantly, avenues by which casualty data can be utilized for channelizing entitlements under the various state-based aid programmes for victims of conflict require further investigation. While certain state based programmes for victim assistance have been developed in the Indian context (Marwah et al. 2014) they suffer from a dearth of precise baseline data. This means a number of potential beneficiaries are not accessing aid that is entitled to them.

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# Chapter 7

## Documenting Human Losses in Croatia 1991–1995

Igor Roginek

### Introduction

Since the end of the Balkan wars, Croatian civil society organisations, including *Documenta*, have been advocating for an official state-led process to deal with the past by establishing factual truth about the war and its victims. At *Documenta*, we had hoped the relevant state institutions would do everything in their power to determine a comprehensive list of all the victims of war, regardless of their ethnic, religious, political or social affiliation, and including their key identification data and the circumstances of their suffering. Such a list would not only honour the victims but also contribute to a necessary shift in the political discussion away from a poisonous dispute over casualty figures. Yet decades after the end of the war in Croatia, there is still no official, publicly available and verifiable list of all dead and missing Croatian citizens. As a result, political and ideological manipulation of the number of victims still prevents a move toward social trust and sustainable peace.

In the face of continued state inertia on this matter, *Documenta* began the process of documenting human losses through the personal identification of victims in early 2009.

The broad scope and sensitivity of this research required not only a significant raising of all existing intra-organisational standards and procedures at *Documenta*, but also the introduction of a new documentation and data management system, protocols on confidentiality and security issues, and improved communications tools. It was also necessary to meticulously analyse the current situation and environment in Croatia, in order to select the most appropriate methodology and tools for this kind of research – presenting a significant challenge for a small civil society organisation.

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At the same time, the task of documenting human losses presented specific ethical challenges as a result it being a human rights and peace-building civil society organisation attempting to undertake this sensitive, objective and scientifically based research on the victims of the war, rather than an official state institution. Issues regarding access to existing documentation, data availability, legal confidentiality and legitimacy of the undertaking of such research by a civil society organisation (which draws its legitimacy from the rights to freedom of expression, organisation and assembly), represented specific challenges that had to be taken into serious consideration. These challenges, combined with a challenging political environment and questionable condition of the existing archives, influenced the selection of methodological tools and the implementation of research. How *Documenta* addressed these challenges, formed our methodology, and undertook our research is discussed below in further detail.

## Context

In the mid-1990s, one of the most ruinous wars in modern history came to an end in Croatia, one caused by the violent disintegration of Yugoslavia and a tinder box of other socio-political elements. The dissolution of the former Yugoslavia was accompanied by three major wars – in Croatia (1991–1995), Bosnia and Herzegovina (1992–1995) and Kosovo (1998–1999), and two smaller-scale, shorter conflicts in Slovenia (June–July 1991) and Macedonia (January–August 2001). These conflicts were marked by gross human rights violations, including genocide, ethnic cleansing, concentration camps, mass sexual violence and a panoply of atrocities unseen in Europe since World War II.

All post-Yugoslav countries continue to face many challenges in trying to deal with the legacy of armed conflicts that left more than 130,000 people dead, 50,000 women (and men) raped and abused, and at least 1,000,000 refugees. Impunity for wartime crimes remains commonplace and there are still some 13,500 missing persons whose fates have not yet been clarified.<sup>1</sup> Thousands of women who have suffered sexual violence remain without adequate assistance, while the legitimate claims for reparation of approximately 438,000 refugees and other displaced persons have not yet been met. In addition, the situation of about 18,000 stateless persons in the region, or those at risk of statelessness, especially Roma, poses serious human rights and humanitarian concerns that need to be addressed in compliance with the highest international standards.

In Croatia alone 54 % of the nation's territory was affected by the war, an area where 36 % of the whole Croatian population was living at the time. At the end of the war in 1995 much of Croatia was devastated, with estimates ranging from 21 to 25 % of its economy destroyed and an estimated \$37 billion in damaged

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<sup>1</sup>As against 15,200 in 2006. See Chap. 4 section “[Audacity](#)” by Isabelle Vonèche-Cardia in this volume.

infrastructure, including 180,000 homes. As of 2009, there were more than 52,000 persons in Croatia registered as disabled due to their participation in the war. This figure includes not only persons disabled physically due to wounds or injuries, but also persons with deteriorated health due to their involvement in the war, including diagnoses of chronic diseases such as diabetes and cardiovascular disease, as well as post-traumatic stress disorder (PTSD). Most sources place the total number of deaths in Croatia at around 22,000, including ethnic Croats and Serbs. According to recent data from the Ministry of War Veterans the fate of a further 1,703 persons remains unknown.<sup>2</sup>

War, and the post-war environment, has been highly influential in the organisation of Croatian society. Socio-political problems, insecurity, recurrent violence, and ethnic divisions are direct consequences of this. Denial of a violent past and refusal to take responsibility for past war crimes continue to prevent full social, economic and political development and significantly slowed down Croatia's process of accession to the European Union – finally achieved on 1 July 2013 after an integration process lasting twelve years and four months. The situation in the rest of the region is similar if not worse. A failure to critically review their role in armed conflict, and responsibility for the crimes committed in that conflict, is common to all other countries in the Western Balkans. Consequently 'dealing with the past' is of vital importance for all the nations of the former Yugoslavia so that they may achieve peace and economic stability in the future (Council of Europe Commissioner for Human Rights 2012).

Genuine inter-ethnic reconciliation and durable peace in the region cannot be achieved without justice. All post-Yugoslav countries have accepted judicial trials as the most effective legal mechanism for establishing individual responsibility for war crimes. The experience of the International Criminal Tribunal for the former Yugoslavia (ICTY) has demonstrated the necessity of having established facts regarding casualties and human rights violations in order to both convict war criminals and fight the denial of atrocities. As a result of the completion strategy of the ICTY, the trying of low-level and intermediate-level accused has been largely transferred to the post-Yugoslav states' national judiciaries, requiring a high-level of competence from each state and serving as an important catalyst for the strengthening of national judicial systems and the rule of law (United Nations Security Council 2004; United Nations General Assembly 2010).

But post-war justice is not only judicial and retributive, aimed at punishing those who have committed crimes through fair proceedings. It must above all be restorative and preventive, aiming to provide redress to victims, eliminate impunity, and ensure that all people in the region come to terms with the past and live in peace and security in cohesive, pluralist, democratic societies. To achieve these aims, post-war justice mechanisms should complement judicial processes with truth-seeking processes, reparation programmes, institutional reforms, or a combination of these tools

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<sup>2</sup>Data for this section drawn from: Nator (2010), World of Information (2003), Roller (2009), Croatian Ministry of War Veterans (2012), Zivic (2005), Goldstein (2001), and Croatian Red Cross/Croatian Ministry of War Veterans (2012).

and others. It is important that all stakeholders including civil society organizations, governmental institutions, academia, media and the public take part in this process (United Nations General Assembly, Human Rights Council 2009).

The number of organisations directly working on dealing with the past in the former Yugoslavia is still small, due to pressure from powerful social and political groups. Sustained support and capacity building of local civil society organisations is greatly needed in order to aid a vast range of reconciliation efforts, including accounting for the war's human losses, aiding refugee returns, indicting accused war criminals, and providing compensation for victims and their families.

Sadly, a culture of impunity remains in Croatia. A bias against trying ethnic Croats in courts of law breeds lawlessness, insecurity, and a continuing dehumanisation and denial of the rights of victims and minorities. Victims and their families remain under-represented in the public discourse, and most have received neither moral nor material satisfaction. Moreover, unscrupulous ideological, political, religious and other manipulations of casualty figures are frequent. This is likely exacerbated by the fact that an accurate accounting of the number of war victims – primarily those killed or missing – on the entire territory of Croatia has not been established despite the implementation of peace.

To counter the political manipulation of casualty numbers, a number of research institutions and civil society organisations (including victims' associations and human rights organizations from Croatia, Bosnia and Herzegovina and Serbia) have been collecting data on the killed and missing in the war in Croatia since 1991. A vibrant civil society in the region, including groups of professionals and victims, has been initiating truth-seeking processes and clarifying the fate of missing persons since the end of the conflicts. Non-governmental organisations, as well as international organisations such as the International Commission for Missing Persons, have collected vast amounts of evidence on casualties, revealing stories hidden for years and providing truth about the fate of victims to families and communities across the region. Additionally civil society organisations have organised round tables and debates, offering a forum where victims have had the opportunity to publicly tell their stories.

Four of the most prominent human rights organisations dealing with the past in the region are *Documenta* (Zagreb, Croatia), the Humanitarian Law Center in Belgrade (Serbia), the Humanitarian Law Center in Pristina (Kosovo) and the Research and Documentation Centre (Sarajevo, Bosnia and Herzegovina). These organisations have been working in co-operation with other local and international organisations for more than a decade, gathering information, revealing evidence, organising educational campaigns, giving support to victims, and promoting accountability and reconciliation.

However, without a comprehensive list of the wars' victims it is impossible to initiate a reconciliation process. Providing such an account would contribute towards the development of trust between Croatia's different ethnic groups, thus aiding in the acceleration of the reconciliation process and the establishment of a lasting peace.



Since its establishment, *Documenta* has encouraged a process of dealing with the past and establishing factual truth about the war in order to help shift the discussion of casualty figures from a dispute over facts (the number of killed people, etc.) towards a constructive dialogue on reconciliation. In the promotion of dealing with the past by the public and in society, the complementarity of *Documenta*'s programs with those of its partner organisations across the Balkans has proved to be very successful, most notably on the publication of regular reports on war crimes trials, transitional justice, and indemnities due to death of a close relative, among other topics. Indeed, we believe that through its overall activities *Documenta* has, to some extent, contributed to a greater acceptance of the concepts of 'dealing with the past' and 'transitional justice' amongst the general public.

At the beginning of our work, the concept of dealing with the past was used in public only exceptionally. It has since become deeply rooted in public discourse. Nevertheless, despite this transition, the use of the terms does not necessarily signal the readiness of the Croatian society to take responsibility for the consequences of war.

*Documenta* has always held the firm belief that any process for dealing with the past must be based firmly in truth and established facts and figures. Thus, in 2009 *Documenta* began the process of documenting human losses through personal identification. Our methodology is described in detail in the following section.

## Methodology

Different organisations around the world use different methodologies for recording the casualties of conflict. The type of methodology chosen is determined by a number of factors including whether conflict is on-going, the nature of the conflict, estimated number of victims, security issues, aims of the research, use of collected data, type of data set required, and sources and confirmation methods. Although the quality of the results obtained by different methodological practices can vary significantly it is important to emphasise the usefulness of each. The methodology of each study is usually chosen in relation to the capacity of the research organisation, the status of the conflict whose consequences are to be explored, and the goals to be achieved. It should also be emphasised that even incomplete data sets or survey results can later become a very important source of information on a conflict (Minor 2012).

In order to achieve our goal of establishing a comprehensive name-by-name list of all the dead and missing Croatian citizens, we designed a three-part methodology. The first phase involved the collection of data on victims from a content analysis of existing sources. The second phase focused on the analysis of these existing data and sources and the verification of this information through the cross-referencing of at least three independent sources. Finally, the third phase involved the verification and updating of existing data, and the collection of new data, through fieldwork involving direct interviews with families and acquaintances of victims.

Our chosen methodology required significant data collection from witness statements, as well as a thorough desk review of existing literature and archives pertaining to all human losses in Croatia during the 1991–1995 wars. The process was standardised and now serves as a methodological tool for data collection for four compatible information systems in four documentation centres: *Documenta* (Croatia), Humanitarian Law Centre (Serbia), Humanitarian Law Centre (Kosovo), and Research and Documentation Centre (Bosnia and Herzegovina). This coordination of data systems strengthens the synergy of the data collection and allows for a full picture of the scale and nature of Balkan conflicts.

Due to a particular set of circumstances, *Documenta* began researching human losses fifteen years after the end of the war; the first analyses of victims' lists showed the existence of a large number of sources which could be used in the research; and our aim was to create a list with names of all killed and missing citizens of the Republic of Croatia. Making the choice of the methodological approach to be used was quite straightforward. It was clear that the only correct way to do the research was to analyse all available sources, prioritising on-the-ground verification, and supplementing existing sources with information obtained from family and/or friends of victims. It is also important to emphasise that in deciding on which methodology to be used, we took into account positive experiences and lessons learned by our partner organizations from Bosnia and Herzegovina, Serbia and Kosovo.

In terms of how we carried out the work in practice, therefore, it was necessary for *Documenta* to first analyse the existing data on the casualties of the war in Croatia (phase one). Beginning in 2009, this analysis revealed the existence of numerous attempts by individuals, organisations and governmental institutions to make some lists of the victims of war. Unfortunately the majority of these lists were not comprehensive in their approach, nor did they seek to include all the dead and missing citizens of the Republic of Croatia.

Most of the existing lists were the result of local commemorative practices, including the placing of memorial plaques, the raising of monuments, the publishing of books, lists made by family members or veteran's associations, and/or lists aimed at guaranteeing the statutory rights of families. The vast majority of these lists targeted only one group of victims, while others were often completely overlooked. Despite the incomplete nature of most of the lists, it was obvious that the passage of a relatively long period of time since the end of the war had allowed for the creation of a large number of individual name-by-name lists of war victims. These provided an excellent starting point for our own research. With realistic estimates of the scope of research and existing reusable resources we could then develop the most appropriate and effective means of verifying this information (phase two) in order to create a complete and unique list of the killed and missing in Croatia.

In the second phase of research we worked closely with local organisations that had produced these lists, and involved their members and volunteers in our work, which was a great help. Local volunteers know and are connected with local areas, contexts and communities much better, allowing us to more easily approach victims' family members. The participation of local communities in the implementation of the research added to the legitimacy of the work and facilitated the

presentation of its importance in each local community. We also noticed positive changes in terms of efficiency, as we were able to double the number of field research teams through the approach of involving local organisations and volunteers. Furthermore, by educating volunteers we have indirectly raised the capacity of local organisations and individuals for documentation management, outreach activities and participating in other studies.

For the third phase, in order to gather information directly from the families, relatives, and acquaintances of victims in a systematic and uniformed way, it was necessary to develop and test a questionnaire that would be filled out with interview subjects in the field. Through the development and testing of this questionnaire, we came to the conclusion that it is important to use closed-ended questions as often as possible. The only question that was open-ended, allowing for a more extensive response, asked for a description of the circumstances that led to the injury or killing of the victim. The main aim of the research was to gather as much concrete information about people who were killed or went missing as possible. For this purpose, closed questions, which lead a respondent to a clear and concrete answer, were a more suitable tool.

Information on victims that has been collected with the questionnaire includes personal data (first and last name, parents' names, place and date of birth, personal identification number, profession, ethnicity, etc.), specifics of the particular human rights violation suffered by the victim (place and time of imprisonment, time and place of death, place and time of burial, type of location where a body was found, by whom, information on exhumation, etc.), affiliation with military or civilian groups, and names of perpetrators (if known). The one open-ended question also provided us with information on the particular circumstances that had led to the death or disappearance of the person. At the end of the questionnaire, identification and communication details of the person with whom the questionnaire was filled are also taken, with the purpose of further contacting that person in case there is a need for additional information.

Once the questionnaire was developed, fieldwork included searching for a victim's family members and conducting interviews to gather the necessary information. Upon arrival to the community, researchers presented the project's goals, objectives, activities and results, and emphasised its importance for the local community, its citizens and society in general.

Any additional documentation that could provide information on the victims, such as monuments, memorial plaques, tombstones and site of killing was then photographed or scanned on site.

Lastly, it also proved particularly useful to our research to contact all potentially interested local stakeholders and to present to them our research, asking for contributions in the form of existing data on victims that might be available in municipal and county authorities, libraries, archives, associations, and/or museums.

As for the process of information collection from individuals, we determined that it was necessary (in order to systematically ensure the methodical equability and quality of information) that questionnaires be filled out by trained researchers through interview rather than by the respondents themselves. For the response to the

open-ended question regarding the circumstances of death, the researcher listened to the story of the respondents, paraphrased and summarised their response, and then read it back to the respondent in order to check that the circumstances were noted in accordance with the testimony. At the end of the interview all interviewees were asked to sign their witness statements, thereby verifying the provision of the information, and authorising *Documenta* and project partners to publish and use the information in the project. All questionnaires were then stored in both paper and electronic format, abiding by strict archival rules.

Given the sensitive nature of the research, the frequent travel, intensive fieldwork and constant communication with people who have experienced severe trauma, there was a threat of secondary traumatisation of researchers and/or survivors/victims and victims' family members. In order to avoid traumatisation we insisted that all researchers work in teams of two. In this way we could ensure peer support among researchers in the moments when it was most needed and in instances of particular stress. Furthermore, all researchers (both field and desk) had access to free professional psychological help at any time, including whenever they or their superiors felt that it was needed. It proved important to organise regular, periodical psychological evaluations of all those who were exposed to the risk of secondary traumatization in order to detect potential symptoms and prevent further deterioration of a person's health.

At every interview there was a potential for re-traumatising a witness who may be a survivor of torture or other severe trauma. The golden rule that we apply in all our work is 'do no harm'. Researchers were thus made aware of the effects of trauma on certain witnesses and used this awareness in formulating interview strategies. On occasion, researchers had to modify their interview techniques in order to adapt to the situation. Standard interview techniques that were helpful in this respect included the following: treat the interviewee with humanity; help the interviewee feel safe and in control; and be thorough but sensitive. It is important to keep in mind that the researcher may not be aware of what the witness is going through during the interview. The researcher must also strive not to influence the manner in which the witness presents him or herself or describes the events. Rather, the researcher must be aware of how he or she is conducting the interview, adapt his or her own behaviour, give the interviewee time to recompose him or herself if necessary during the interview, and allow the interviewee to relate the account of his or her experiences in a manner that is the most comfortable for them. The use of two-member teams helped to ensure that all of these tactics were employed effectively.

Apart from their role in helping researchers to manage secondary traumatisation, two-member teams were also important for practical purposes. With researchers spending many days in the field, challenges such as cars getting stuck in snow and mud, cars breaking down, and hostile or aggressive respondents were inevitably encountered, and the use of supportive two-member teams meant that researchers were better equipped to manage these situations.

Despite the advantages of two-member teams, after the completion of a pilot research project, we came to a conclusion that further solutions were needed in order to speed up and complete the research process. This was the key reason why we decided to include local volunteers in the implementation of field research.

With the inclusion of local volunteers in fieldwork, we used teams that consisted of one volunteer and one researcher. Each researcher was responsible for several volunteers, with whom the researcher could arrange field activities depending on their availability.

This team structure had ultimately positive results. The local volunteers knew the local environment and potential interviewees better than the researchers, which was a great help to the researchers in their work. Moreover, by educating volunteers to work on the research, we indirectly raised the capacities of local organisations and individuals for participation in similar research projects in the future. Furthermore, the participation of local communities in conducting the research provided added legitimacy to the research itself, making the demonstration of its importance to local communities significantly easier.

At the beginning of the process we feared that one of the biggest problems would be a general unwillingness by respondents to share information about the victims. However, less than 5 % of all interviewees refused to participate in the research.

By the end of 2012 our research team had spent over 2,500 working days in the field, filling out around 4,500 questionnaires with victims' family members, and taking over 2,500 geo-referenced photographs of sites of killing, mass graves and graves. *Documenta's* electronic database now contains over 50,000 scanned documents collected from both private and official archives, while around 4,000 documents (mostly court documents from war crimes trials) still need to be digitised and analysed. We have collected around 300 h of video-footage from the war and over 2,500 war-related books and publications, available for research in our library and in our electronic database, which contains data on almost 10,000 victims so far.

Statistical analysis of these figures allows for a breakdown of the distribution of victims according to municipality, ethnicity, place of birth, place of death, sex, age, and combat status (civilians vs. combatants) with special attention to soldiers who have been killed as prisoners of war. Data will be further analysed in three groups: civilians, members of military formations, and missing persons. This data is all publicly available on *Documenta's* website.

It is our aim to make the results of the *Documenta's* (and our partners') research more accessible to a wider public in a simple and efficient way. Therefore we are developing an interactive map of human losses and war crimes committed in the region. Behind each and every location marked on the map there are years of extensive fieldwork, data gathering and information crosschecking. Since each piece of information made available through the platform will be backed with a number of documents, testimonies, and photographs, the map will be a trustworthy and reliable source of information.

## Conclusion

Despite the numerous challenges, the great effort that has been invested in this project so far obliges us to continue and finish it. We are also driven to complete our task out of respect for, and a responsibility toward, all Croatian citizens who lost their

lives or whose fate remains unknown. A final (or nearly final) figure of the number of war victims in Croatia, distinguished by name and with a description of the circumstances of their death, would contribute to a normalisation of ethnic relations in Croatia and the Western Balkans and is an essential prerequisite for the development of a peaceful multi-ethnic and multicultural environment. Establishing the facts concerning the events and consequences of the war is extremely important and will, we hope, discourage the future arbitrary, inaccurate, unverified and malevolent political manipulations based on the number of war victims and the proportions from different communities. A factual and comprehensive list would furthermore assist national and international tribunals to hold those guilty accountable and establish a sustainable peace.

Inter-ethnic reconciliation, social cohesion and durable peace in the former Yugoslavia cannot be achieved without the states of the Western Balkans fully addressing the consequences of the serious human rights violations suffered by thousands of victims during the wars in the 1990s. The remaining challenges require wise vision and determined political leadership. Peace and stability in the region should be firmly grounded in the principles of human rights and the rule of law. In this way, we can contribute to the individualisation of responsibility for crimes and challenge the dangerous notion of the collective responsibility of entire nations.

For the first time in the history of the region – and as a direct result of the work of *Documenta*, the Research and Documentation Centre in Sarajevo, and the Humanitarian Law Centres in Kosovo and Serbia – factually based lists of the victims of war now exist: major milestones on the road to a comprehensive accounting of all human losses throughout former Yugoslavia. These lists, presented online and in *The Bosnian Book of the Dead* (Sito-Sucic and Robinson 2013) and the *Kosovo Memory Book* (Humanitarian Law Centre 2013), represent a fervent pledge to build and uphold a sustainable peace.

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## Chapter 8

# Conclusion: The Demographics of War and Development: Issues for Policy-Makers

Marc-Antoine Pérouse de Montclos

As we have seen throughout this book, the body count of the victims of violence is not only an issue for development and population studies, but also for peace-making and the understanding of armed conflicts. For aid workers, it helps to inform and implement effective relief delivery; for governments and international agencies, to plan reconstruction and facilitate reconciliation; for legal practitioners, to prosecute war criminals and prove the systematic pattern of massacres; for humanitarian organisations, to assess basic needs and estimate performances.

Yet methodological disputes leave much room for interpretation and the statistics of excess mortality are often manipulated, sometimes upwards, sometimes downwards. The diversity of case studies does not help in this regard. The annexes of this book have shown that casualty-recording practitioners follow different objectives and methods. Some advocacy groups investigate the death toll of war to alert the public about the collateral damages of certain types of weapons: human rights and humanitarian organisations like Human Rights Watch, Handicap International and Oxfam have thus informed policymakers and the public about the unacceptable harm caused by landmines and cluster bombs. Others document the victims of past conflicts in order to facilitate national reconciliation, as in Croatia, Bosnia or Guatemala. By contrast, the Manipur Micro-level Insurgency Events Database focuses on only one specific region of India to assist policy makers and identify which demographic segment of the population bear the burden of the conflict. Last but not least, another category of casualty-recording practitioners monitor fatalities at the state level and on a daily basis to alert the international community or to assess risk, as with the Iraqi Body Count, Nigeria Watch or the Syrian Network for Human Rights.<sup>1</sup>

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<sup>1</sup>To learn more about these organisations, see: <http://www.everycasualty.org/practice/ipn/members>

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Clearly, these different purposes impact on methodologies and the scope of activities. In population studies as well as in international organizations, there are no recognized standards for estimating the numerator of excess mortality in case of war, i.e. the body count. Ideally, a minimal requirement would be to identify and record each victim with the place, the date and the conditions of his or her death. However, this is not always feasible in situations of armed conflicts, and it is not even an international obligation for states. Moreover, attempts to standardize the body count of war are still hindered by disagreements over the definition of a civilian or military victim, as well as the direct or indirect and political or criminal causes of fatalities. It should be noted that towards overcoming some of these issues, and as part of a global policy initiative on the recording of casualties, Every Casualty Worldwide, the London-based NGO that coordinates the Casualty Recorders Network, is currently undertaking a process with casualty recording practitioners and other stakeholders to resolve some of these questions and develop robust standards for the field of casualty recording in particular.

This book has shown the limitations and manipulations of excess mortality as a relevant indicator for post-conflict reconstruction and development. A mere quantitative approach of population changes through the body count is not enough to understand properly the human impact of war. A qualitative analysis of the political, economic, social and cultural context of armed conflicts is also necessary, and complementary.

A second important finding of this book is that counting the victims of armed conflicts is a political issue that entails manipulation, affects the estimation of excess mortality and has some implications for population studies. In the public debate, it is more than just a statistic or a key indicator of the demographics of war. Testing the validity of a body count to estimate excess mortality raises many questions. For instance, how do we measure violence in terms of human security? How do we assess risk and peace? How do we compare levels of violence? How do we qualify them? Are developing countries more prone to armed conflicts? Is violence really declining? Or rising? What are the policy implications for development practitioners and decision-makers?

The discussion thus needs to go beyond methodological disputes on the statistics of excess mortality. The introduction to this book touched on different arguments regarding the evolution of violence and the on-going debate on the positive or negative correlation between security and development. For the theoreticians of “new wars”, armed conflicts are now more frequent and devastating, especially in developing countries. In the long run, Malthusians also argue that a growing demographic pressure, together with a depletion of resources, will exacerbate tensions.

However, contemporary studies show that poverty as such may not cause violent resource competition (Theisen 2008; Fearon and Laitin 2003). The relationship between poverty and violence remains an area of contest since the times of Victorian England, when the theory of social Darwinism criminalized and reinforced stereotypes of the destitute. In developing countries today, both wealth and scarcity actually exacerbate competition. Hence many authors have discussed the paradox of plenty when natural resources become a curse or a disease (for example Karl 1997).

We can assume that poverty is not enough to trigger armed conflicts. From the USA to colonial powers like the United Kingdom or France, the countries most often involved in wars were “rich”.

In the long run, the societies of developing countries are not more prone to violence. Nowadays, they still experience war on their land, whereas the USA prefers to fight abroad. Consequently, their population is more directly impacted by the conduct of hostilities, as shown by the chapter of Scott Gates, Havard Hegre, Havard Mogleiv Nygard and Havard Strand. Yet the indicators of human development are not conclusive to determine the probability of war. For instance, common wisdom has it that higher levels of education should have a pacifying effect as people become smarter and averse to violence. Globally, Clayton Thyne observed a positive correlation between peace and the percentage of gross domestic product invested in education, the proportion of the youth enrolled in primary and secondary schools, and the level of adult literacy (Thyne 2006). But Alan Krueger et al. found no causal connection between poverty or education and participation in terrorism.<sup>2</sup>

In any case, many authors mentioned in the introduction to this book claim that today’s wars are less frequent and deadly. If we accept their findings, it is necessary to question the causes of such a trend in order to best adapt the response of development practitioners, peacemakers and aid workers to armed conflicts. Should the decline of violence be understood as the consequence of a global reduction of poverty since the end of the cold war? Or does it result from a democratization process? Or from the development of state institutions? We need here to discuss the thesis of Norbert Elias and his follower, Steven Pinker.

## The Celebration of the State

In his famous essay, Elias argues that the early modern state in Europe laid the foundation of a civilizing process where war was no more glorious, inevitable and normal (Elias 2000). By imposing a monopoly on the legitimate use of force, the state put an end to the jungle law and the feudalities of the Middle Age. By coercing people, moreover, it deterred rebellion, stabilized political competition, and eventually fostered trust in public institutions and goods. Together with the development of the rule of law and the welfare state, it also contributed to advancing humanitarian norms that led to the abolishment of slavery and condemnation of the atrocities of wars (Ray 1989).

In his seminal work *The Better Angels of our Nature*, Steven Pinker confirms the argument of Norbert Elias with an accumulation of evidence. Based on archaeological excavations, he starts by showing that on average, wars killed 15 % of the population of primitive and tribal societies of hunter-gatherers (Pinker 2011, p. 49). By contrast, the earliest states fared better. Pre-Columbian Mexico, for instance,

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<sup>2</sup>The militants of movements like Hamas or Hezbollah, for instance, are more educated than the average in Palestine or Lebanon. See Krueger and Jitka (2003).

recorded 5 % of deaths in warfare before the sixteenth century. In modern Europe, the rate of battle deaths then varied between 2 % and 3 % during the seventeenth and twentieth centuries, the two most violent centuries ever, with the bloody wars of religion and the two world wars (Wright 1942–1947). Out of 6 billion people who died during the twentieth century, Steven Pinker considers that the percentage of war deaths even fell to 0.7 % as the last four decades were less deadly (Pinker 2011, p. 50). Lewis Fry Richardson, who included both battle deaths and murders, found a proportion of 1.6 % during the period 1820–1952 (Richardson 1960).

To explain this relative decline of violence, Norbert Elias and Steven Pinker's argue that the more states developed, the more they regulated conflicts to avoid the jungle law and the Hobbesian "war of all against all" (Hobbes 1969). The cold war, for instance, was allegedly a period of peace because superpowers ruled the world (Levi 1981; Gaddis 1986; Gaddis 1987; Luard 1988). Since then, Virginia Fortna and Andrew Mack claimed that the military humanitarian interventions of states have also contributed to enforce peace and contain armed conflicts (Fortna 2008; Mack et al. 2005). The international mediations of intergovernmental organisations played a role too. During the period 1940–1989, three wars out of four were brought to an end by military victories. In the 1990s, however, over 40 % were settled thanks to peace negotiations: more than during the two previous centuries (Toft 2010; Call and Cousens 2008).

The celebration of the state as a peacemaker is, however, contested. Written just before World War Two, the book of Norbert Elias was quickly contradicted by the atrocities perpetrated by the governments engaged in the hostilities. For Rudolph Rummel, states are themselves the biggest producer of violence and the repression of their own populations kills more than civil or international wars.<sup>3</sup> Steven Pinker disputes these claims with two main critiques. Firstly, he argues, Rummel's definition of the participation of a state in an armed conflict is too loose because it includes the use of militias, paramilitaries and warlords. Actually, the median death toll caused by recognised governments of sovereign states was 33,000, as against 100,000 for pseudo-governments (Pinker 2011, p. 337). Secondly, Pinker points out that the big killers are totalitarian regimes, not "civilized" democracies. Indeed, three quarters of all the deaths counted by Rummel and caused by governments during the twentieth century were committed by just four countries: the Soviet Union with 62 million deaths, the People's Republic of China with 35 million, Nazi Germany with 21 million, and Nationalist China with 10 million between 1928 and 1949 (Rummel 1994, pp. 4, 15, 367). These state were followed in levels of aggression by so-called "mega-murderers" such as Imperial Japan (6 million), Cambodia (2 million), and Ottoman Turkey (1.9 million). Totalitarian regimes were thus responsible for 82 % of the total killed, of which 65 % were caused by communist dictatorships. On average, totalitarian governments killed 4 % of their population; authoritarian regimes, 1 %; democracies, 0.004 %.

In fact, both Rummel and Pinker argue that democracies are less violent because they are reluctant to kill their own population and prefer to settle disagreements by

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<sup>3</sup>Rummel (1994). See also Marshall and Gurr (2005).

diplomatic negotiation, without resorting to force (Rummel 1998). Including 2,300 cases of militarized disputes between 1816 and 2001, in addition to recognized interstate wars, Bruce Russett and John O’Neal find that the chance of a conflict falls by more than half when the countries involved are fully democratic (Russett and Oneal 2001, pp. 108–11). The presence of a dictatorship, however, doubles the likelihood of a quarrel and raises the possibility of dragging the belligerents into a full-blown war. As for authoritarian regimes, they seem to be more prone to resort to military warfare because they don’t have a code of honour to avoid disputes between them.

Together with the development of the state and the rule of law, democratisation does thus appear to be the main reason for the global decline of violence. Such a thesis would explain the pacification of Latin America since the 1980s. In the same vein, it is argued that the end of the war in Europe after 1945 did not result from the Pax Americana or the balance of nuclear terror, but instead arose from the democratisation and growing economic interdependence of its states (Wright 2000). More generally, researchers have observed that the global decline of violence followed the development of a world where there are less and less autocracies and more and more democracies.<sup>4</sup> Indeed, the democratic system of checks and balances prevent governments from using force as they wish without seeking further consent or approval from the populations they represent. The judiciary, parliamentary opposition and the media all play a role in this regard. According to John Spanier, for instance, accountability mechanisms compel democracies to use force with parsimony because “the press and the television report on every facet of hostilities, no matter how embarrassing or politically damaging it may be to the government” (Spanier 1987, p. 277).

Yet an examination of the demographics of armed conflicts and resultant fatalities reveal other possible causes for the decline in violence. For instance, while totalitarian regimes have killed more in absolute numbers, they have also been located in some of the most populous countries in the world, such as the USSR and China. Moreover, wars of the twentieth century tended to last longer and be more deadly when fought by at least one great power (Levy 1983). Since the end of the cold war, however, superpowers have become less confrontational. This means that on a global scale, armed conflicts may kill less people simply because they occur in countries and between countries which are less populated. Here the determining factor is not the type of political regime. Thus, with the exception of the USSR, three out of the four countries that were most often involved in wars in the twentieth century were democracies: the USA, the United Kingdom, and France. The latter two fought many colonial wars and, today, still send troops abroad to former colonies, like France in Mali and the Central African Republic in 2013.

In this regard, correlations on a country-by-country basis do not help in identifying the pacifying role of democratisation if they are not related to the number of

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<sup>4</sup>Marshall and Cole (2011), p. 44. On the home front, for instance, official ethnic political discrimination has decreased everywhere since the 1950s, and it helped to reduce tensions. See Asal and Pate (2005).

people involved in the hostilities. Quantitative studies of war usually rely on states, not population or size. Consequently, their statistical findings can be distorted for reasons that do not pertain to the democratic or totalitarian nature of the regimes in power. In Europe, for instance, the number of political units shrank from 500 in the 1650s to less than 30 in the 1950s (Gat 2006, p. 456). As a result, the likelihood of an interstate war also decreased because there were fewer borders and fewer states. Worldwide, however, the multiplication of states went together with the growth of population. At the beginning of the twentieth century, there were just over 50 states, mainly in Europe and America. Today, the international community has over 190, meaning that the possibility of war between contiguous states is much higher (Holsti 1986, p. 368). In this regard, Michael Clarke shouldn't be surprised that "the number of states involved in armed conflicts is at its highest level since 1945" (Clarke 2012, p. 649). Decolonization and the implosion of the Soviet, Yugoslav and Czechoslovak federations inflated the number of political units, even if only five secessionist states really succeeded in being fully recognized by the international community: Bangladesh, East Timor, Eritrea, Montenegro and South Sudan (Caspersen and Stansfield 2010, p. 183). Moreover, the times of territorial conquest have gone. The exceptional behaviour of Russia in the Crimea, South Ossetia and Abkhazia should not cloud the fact that most of the attempts to annex countries have failed, as with Greece and Cyprus in 1974, Iraq and Kuwait in 1991 or Indonesia with East Timor, whose takeover in 1975 was eventually reversed in 1999. Since the seventeenth century, less and less wars succeeded in conquering territory (Zacher 2001, p. 218).

## **Democratisation and Peace: The Missing Link**

Statistical bias is not the only challenge to the notion that the global civilization process of democratization has caused a reduction of fatalities and wars. Indeed there are also many exceptions that do not confirm this rule. Colombia, for example, experienced very long periods of political violence. Yet it is one of the most stable democracies in the Americas, with only one non-elected government in the twentieth century, in 1953–1957. Meanwhile, Latin American military regimes of the 1960s–1980s repressed their people but seldom went to war. Worldwide, some authors thus found that the rate of involvement in war for democracies did not differ markedly from that of other kind of states (Chan 1984; Weede 1984). The only important difference, they argued, was that democratic regimes avoided to go to war with one another. Yet fragile and young democracies, together with the so-called "anocracies", were more likely to go to war than autocracies (Pate 2008). The post-cold war democratic transitions created many internal and external tensions, as in Georgia in 2008. Moreover, they often exacerbated crime, as in South Africa before and just after the end of the apartheid regime in 1994. An analysis of data from forty-four countries from 1950 to 2000 thus showed that violent crime rates were highest for transitional democracies (Lafree and Tseloni 2006).

Obviously, the assumption that democracies never go to war with one another does not mean that they are less likely to experience internal strife and rising crime. Looking at interstate wars only, it can also be argued that during the cold war, most democracies were allied to the USA, so they wouldn't fight each other, with the likelihood decreasing further as a result of geographical distance, for instance between France and Japan. According to Bruce Russett and Harvey Starr, democratic regimes actually became more peaceful because they were rich, they traded extensively with each other, and they had a common communist enemy (Russett and Starr 1985). However, the balance of terror did not completely prevent militarized disputes between allies like the UK against Argentina about the Falklands in 1982 and Greece against Turkey about Cyprus in 1974.<sup>5</sup> As for economic interdependence, Kenneth Waltz observed, "the fiercest civil wars and the bloodiest international ones [were] fought within arenas populated by highly similar people whose affairs [were] closely knit" (Waltz 1979, p. 138). The issue of wealth as a factor of peace is not clear either, since "rich" states such as the USA, the UK and France have been the most involved in wars.

Now, if the reduction of fatalities of conflicts cannot be credited to the rise in democratic states, it is clear that there is actually a multiplicity of factors that may be responsible. Some of them are quite objective indeed. Before the twentieth century, doctors and quacks often killed as many people as they saved. Progress in medicine and transport has helped greatly to contain the excess mortality of wars. The role of weapons is more difficult to assess because it is difficult to prove a direct causal relationship with an increasing or decreasing number of fatalities. On one hand, many researchers and militants argue that the proliferation and the sophistication of firearms trigger conflicts and do explain the heavy toll of civilian deaths in contemporary wars. Errol Henderson and David Singer, for instance, show that military spending exacerbates the probability of civil war (Henderson and Singer 2000). On the other hand, weapons may also deter aggression (Hegre and Sambanis 2006). As long as they are properly controlled, their proliferation is not a problem as such; Switzerland is a showcase in this regard. Moreover, the lack of firearms does not guarantee peace: in Rwanda, the genocide was eventually perpetrated with machetes; in Palestine, Intifada started with stones.

Let's take the issue of proliferation first. It is difficult to prove that the rates of firearms per capita rose over the last three or four centuries. In West Africa, for instance, the slave trade was based on barter. As a result, it did bring an enormous quantity of firearms during a period when the region was much less populated than now, especially along the coasts of the Niger Delta in today's Nigeria. Historians estimated that between 283,000 and 394,000 guns per annum were imported into West Africa between 1750 and 1807, more than 19 millions in total (Inikori 1977; Richards 1980). Nowadays, however, an estimated one to three million small arms circulate in Nigeria, the most populated country in Africa, with over 170 million inhabitants (Hazen and Horner 2008). Globally, it is also very much possible that

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<sup>5</sup> Meanwhile, the authoritarian communist block experienced interstate wars between Somalia and Ethiopia in 1977 and the Soviet Union and Hungary in 1956.

the rates of firearms per capita decreased in a short period since the end of the cold war. Indeed, many countries reduced arms expenditures, downsized their military personnel and eliminated conscription or shortened the length of compulsory service in the army. If the number of weapons was enough to predict war or peace, we should then expect a reduction of fatalities caused by armed conflicts.

Sophistication is a different issue. Today, new weapons are supposed to be more accurate to avoid collateral damages. Stephen Rockel dismisses this claim, pointing to Israel's killing of more civilians in Southern Lebanon than Hezbollah in Israel in 2006 (Rockel and Halpern 2009, p. 4). But his comparison is not really relevant. Israel certainly has a bigger lethal power than Hezbollah, so the point is to know whether its army have killed more civilians with less sophisticated weapons in previous asymmetric wars. The destructive capacity of a weapon does not say much about its effective use and impact on the population. The atomic bomb, for instance, is alleged to deter aggression and prevent war (Mueller 2010). Its lethal power is so frightening that since 1964, as many countries have given up nuclear weapons—South Africa, Kazakhstan, Ukraine and Belarus— as have acquired them—Israel, India, Pakistan and North Korea (Pinker 2011, p. 272). Likewise, poison gas is seldom used because it is seen as the perfidious method of the wizard rather than the warrior, the woman rather than the man. Except for Egypt in Yemen in 1967, Iraq against Iran and the Kurds in 1980–1988, and Syria from 2013, belligerents have not used poison gas since World War One, even if they had plentiful stocks during World War Two (Price 1997).

However, the power of new weapons should not delude us. Albert Nobel predicted that his dynamite was so destructive that it would bring peace. But the development of explosives, poison gas and chemical weapons did not deter war in 1939. In the same vein, Abramo Organski and Jacek Kugler found no evidence that countries were more cautious when conflicts had the potential to escalate to nuclear war. Since 1945, conventional superiority was a better predictor of conflicts' outcome, rather than nuclear capability (Organski and Kugler 1980; Kugler 1984). Neither deterrence nor the accuracy of sophisticated weapons can limit the harm of wars as long as people have the possibility to fight with—or without—small firearms. In other words, other determinants of violent conflicts appear to be more important.

While Steven Pinker pointed to governance and the state, Paul Collier and his colleagues paid more attention to levels of development in this regard (Collier et al 2003). As we have seen, however, both development and democratic transition can also raise tensions and provoke deadly armed conflicts. Social mechanisms that provoke mass violence are far too complex to be reduced to a purely quantitative study. The statistical comparison and analysis of conflict countries can risk confused correlations and mistaken causal connections, or over-emphasize the role of the most populated states, or pay attention only to the territories where the fighting occurs, without taking into account the intervention of foreign powers. Some researchers even argue that despite common features, wars differ so much that it is not possible to study them generically (see for instance Eckstein 1965). On the other side, the quantification of excess mortality is very necessary to qualify mass violence and assess development needs. The two should go together to improve our

understanding of armed conflicts. This book is only a work in progress, opening a way for a rationalisation of the body count of war in order to estimate excess mortality and its impact on development and population changes.

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