



Handbook:
Mapping Conflict Motives in War Areas
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Introduction

Tackling a problem starts with a complete understanding of it. In order to resolve wars, we need to understand what drives them. This handbook is conceived as a tool to visualise and understand such drivers. It compiles insights from a wide range of literature and is a sincere effort to work in an interdisciplinary way on the issue of war motivation.

In the first part of chapter one we give an overview of the current literature on the causes and drivers of war. We give a short overview of the greed vs. grievance debate and add some important insights drawn from the political ecology, geopolitics and international law disciplines.

In a second part we present our research model, which is based on the literature discussed in the first part of the chapter. The model explains the relations between events on the ground and the motives and objectives behind the waging of a war.

We conclude the first chapter by explaining the geographic tool IPIS is developing to analyse the drivers of armed groups in a conflict situation. The most important feature of the tool is a diverse collection of maps of the war zone.

Whereas chapter one is mostly theoretical, chapter two deals with the application of the tool. We explain which maps should be created and how this should be done. In general there are two types of maps. One series shows the positions, concentrations, and operations of armed men. The positions of combatants are subject to change. Therefore we call these maps dynamic maps.

A second set of maps indicates all geographic features that might interest/motivate the different warring parties. Most of these interests are permanent geographic features, which is why we call such maps static maps.

In the third chapter we explain how to use the maps and more importantly how to read them. Besides the motives behind the waging of a war there are also the concrete war objectives and a wide variety of situational factors that can influence the behaviour of warring parties. The difficulty is to distinguish the situation-related behaviour of warring parties from actions in which their motivations are reflected.

In a short fourth chapter we have included some guidelines on how to present the results and conclusions generated by the 'mapping' method.

This handbook is a tool in development. All comments and suggestions are very welcome.

Chapter 1

Outline

In this first introductory chapter we want to:

- I. Provide the reader with a short overview of the current literature on the causes and drivers of war
- II. Explain the underlying theoretical choices and model upon which this handbook is based
- III. Present our tool

I. Background

Under this paragraph we will give a short overview of the current state of affairs in the literature on the causes of war¹. Insights in the causes of war are mostly generated within the field of peace/conflict research. Peace/conflict research is not an academic discipline in itself. It is a subject of research that needs insights from different disciplines to be fully understood. Until the 1990's, the field of peace research was completely unorganised. Different academic disciplines with their different views and approaches produced each their own separate theories, without much interaction or integration. The last 15 years, this has changed to some extent, since more and more peace researchers started to work in an interdisciplinary way.

The best example of this growing interaction is the clash between economists and political scientists/historians at the turn of the century, known as the 'greed vs. grievance' debate. We will first treat this controversy, then we will summarise the most relevant insights from a selection of other disciplines studying conflict: environment studies, international law, geopolitics and political geography.

1) The Greed vs. Grievance debate

a. Greed

Proponents of the greed theory argue that wars are driven by economic incentives. In their line of thinking, "conflict entrepreneurs" are profit seekers who use war to enrich themselves. To them, waging a war is comparable to running a business.

The greed model originates from publications written by economists. The first economists who started to write on conflict issues were led by Jack **Hirshleifer**. He developed a rational choice theory in which people in a society have to choose between producing the goods they need and taking it by force from others. Convinced of the fact that there is no single or universal model for conflict, Hirshleifer developed several models, each appropriate for different conflict situations. The Hirshleifer models have a few characteristics in common:

- the decision makers seek the optimal outcome for their own needs
- the separate and private decisions result in an equilibrium situation

- the decision makers are subject to Machiavelli's Theorem, which means that no one will ever neglect to seize the opportunity to exploit anyone else.

Hirshleifer was a passionate advocate of broadening the scope of economic research to all social processes, especially conflict. He was devoted to a unified social science and believed economic concepts and methods should be its universal grammar. His work can be considered as an important foundation of the greed model.

The best known economic author who published on the topic is Paul **Collier** of the World Bank. His research on civil wars is based on statistical methods in which he analyses the correlations between a set of greed/grievance variables and the incidence/duration of war. In his model, which has become commonplace in all World Bank policy publications, poverty is the central factor that explains armed conflict. The failure of economic development is in other words the root cause of conflict (Box I.1).

BOX I.1

The most important conclusions drawn by Paul Collier:

- Religious and ethnic diversity reduces the risk of war
- Ethnical dominance (one group forms an absolute majority) and ethnic polarisation (society is split into two equal groups) significantly increase the risk of war
- There is no relationship between political freedom (level of democracy) and conflict
- Inequality of income has no effect on the risk of war
- Inequality of landownership has no effect on the risk of war
- A higher level of (per capita) income decreases the likelihood of war
- Income growth decreases the likelihood of war
- The dependence of an economy on the export of primary commodities increases the likelihood of war

Paul Collier drew his conclusions from statistical research. In other quantitative research these conclusions were sometimes confirmed and sometimes contradicted.

The greed model is in fact a direct rejection of the grievance line of thought. Greed authors like Paul Collier argue that the grievance discourse of warring parties is mostly window dressing. They consider it as misleading rhetoric that is necessary to recruit followers and to maintain organisational cohesion. Besides organisational value, grievances are also important from a financial perspective because they often serve as an instrument to rally support from outside powers or Diasporas.

Another "greed author" who is often cited is David **Keen** (Box I.2). He stresses the fact that economic reasoning influences all those who are involved in an armed conflict. Both the military leader and the foot soldier often have economic motivations driving their actions. Moreover, economics pervades in all aspects of warfare and all phenomena surrounding it. He points for example at the role of relief aid and its capacity to fuel violence.

BOX 1.2

Keen notes that it is often mistakenly assumed that war has only negative economic consequences. He lists the possible benefits for those who are involved in warfare²:

- Pillage: organised or individual cases of plundering
- Racketeering: includes extortion of individuals, collecting protection money from companies and kidnapping for ransom
- Trade: during warfare black markets thrive. Some entrepreneurs make enormous profits from controlling the trade of (often scarce) goods
- Exploitation: military control over industrial sites or mining areas allows the exploitation of them. Even the occupation of certain agricultural zones can be lucrative, for example when used for growing drugs.
- Forced labour: forcing people to work cheaply or for free and taking the yield
- Land and real estate: taking control over land and buildings in depopulated areas
- Foreign aid: even the monopolisation of foreign aid can be a source of wealth in wartime
- Wage benefits: the military often fares better in war than in peace because its salaries increase

Because of all these possible benefits, it is often in the interest of warring parties to prolong the fighting and spoil the peace.

Sources and further reading:

Collier P., *Economic Causes of Civil Conflict and their Implications for policy* (Washington: World Bank, 2000), 22p.

Collier P. e.a., *Breaking the Conflict Trap. Civil War and Development Policy* (Washington: World Bank, 2003), 221 p.

Hirshleifer J., *Theorizing about Conflict* (Los Angeles: UCLA Department of Economics, 1995), 36p.

Keen D., *The Economic Functions of Violence in Civil Wars*, Adelphi Paper No. 320 (London: IISS, June 1998), pp. 1-88.

b. Grievance

Proponents of the grievance model believe that wars emerge from the opposition to perceived or actual injustice. In their view, people fight because of oppression, inequality, discrimination etc. These views are very popular among historians and social scientists. The grievance idea is also the dominant explanation given for conflict situations by mainstream media. It is mostly based on qualitative research. Recently, following the statistical methods used by economists, grievance authors make more and more use of quantitative techniques to sustain their arguments.

BOX I.3

An important distinction: Identity vs. ideological/revolutionary wars

A central dichotomy in grievance literature is the distinction between identity wars and ideological wars. If grievance wars are about the opposition to perceived or actual injustice, then this opposition can be based on ideological (political/social) or identity (ethnic/religious) grounds. This is an important distinction because whether the armed groups are rallied around ideological or identity grievances will have a great impact on the way they operate. It is for example much easier for identity groups to find money and fighters for their cause than for revolutionary movements. Identity groups might be inclined to fight for secession, whereas ideological groups are more likely to strive for revolution.

As Box I.3 indicates, there is no such thing as a unified “grievance camp”. Greed authors such as Paul Collier were the ones who created a “we” vs. “them” debate and identified most of the other literature on the drivers of wars as grievance texts. In fact the “category” of grievance literature is quite diverse. Even within the distinctive categories of identity wars and ideological wars serious differences of opinion exist. Donald **Horowitz** distinguishes ten explanations for ethnic warfare given in identity war literature³ (Box I.4).

BOX I.4

Ten explanations for ethnic warfare

1. Ethnicity is a primordial affiliation that is connected to things people cannot live without
2. Conflict is produced by ancient hatred between groups
3. Ethnic conflict results from a clash of cultures
4. Modernisation induces ethnic conflict because it makes peoples want to have the same things.
5. Ethnic conflict finds its origins in the ethnical differentiation of classes.
6. Ethnic groups provide certain services for their members. Some groups are more successful than others, which generates envy and hate.
7. Elite conflict entrepreneurs manipulate the masses in their struggle for power.
8. Groups take up arms as preventive security measure when they are not certain about the intentions of other groups. It is a rational choice.
9. Ethnic groups emphasise their identity to facilitate transactions and coordination.
10. Selfish group behaviour has its roots in evolutionary theory (Cfr. survival of the fittest)

Identity wars

A number of authors have written their own conceptualisations and models. It is impossible to compare all their works and ideas in this handbook. We will limit ourselves to a short overview of ideas from the late Edward Azar and Ted Robert Gurr, both authorities in the field of ethnic and civil war research.

Azar is the spiritual father of the theory of “Protracted Social Conflict” (PSC), which is after twenty years still in line with current research findings. In his theory he uses the “identity group” as the basic level of analysis. Identity groups can be based on racial, ethnic, religious or other criteria. According to the PSC model, the problematic relationship between such groups and the state can escalate into violent conflict.

Azar argues that the deprivation of needs of identity groups is the underlying source for armed conflict. He distinguishes three categories of needs:

- Acceptance needs (recognition of identity and culture)
- Access needs (political and economic participation)
- Security needs (nutrition, housing, physical security,...)

When these needs are not relieved (by the government), the situation can deteriorate into a PSC. Whether a problematic relationship between groups ends up in a violent conflict depends on certain “process dynamics” caused by behaviour and strategy of the identity group(s), behaviour and strategy of the government and self-reinforcing conflict mechanisms.

In the worst case, persisting needs lead to frustration, frustration leads to aggression and aggression leads to counter aggression. An escalating situation is characterised by growing antagonism in the discourse of groups. A dangerous mixture of history and mythology is proclaimed, dehumanising and demonising the other side while justifying the own. The growing hostility creates a ‘security dilemma’, which narrows down the possibilities for negotiation, compromise and a peaceful solution.

The behaviour and strategy of identity groups throughout a conflict situation have been closely studied by T. R. **Gurr**. He distinguishes 4 types of groups:

- Ethnonationalists: large and regionally concentrated ethnic groups who live within one state or across the boundaries of different states striving for greater autonomy or independent statehood
- Indigenous people: descendants of the original inhabitants of conquered or colonised regions devoted to some sort of self-determination
- Ethnoclasses: ethnically or culturally distinct minorities with immigrant origins who occupy distinct social strata and want to improve their treatment and status. A peculiar type of ethnoclass is the “dominant minority”
- Communal contenders: ethnic groups whose main political aim is to share power. In some cases communal contenders can shift to a strategy of autonomy.

Gurr sees no need to make a separate category for religious groups. Since 9/11, religious conflict has been given a lot of attention, but research has shown that religion is very seldom the sole dividing line in contemporary wars. Religious differences mostly reinforce existing ethnic divisions. However, in that respect they play a very important role because religion is among groups the most exclusive identity feature. One can have a mixed ethnic background or speak several languages, but some exceptional cases set aside, people cannot practice several religions at the same time.

Ideological wars

(Work in progress)

Sources and further reading:

A good overview of Edward Azar's theory on Protracted Social Conflict can be found in:

Miall H., Ramsbotham O. & Woodhouse T., *Contemporary Conflict Resolution* (Cambridge: Polity Press, 1999), 268p.

Harff B. & Gurr T. B., *Ethnic Conflict in World Politics. Second Edition* (Oxford: Westview Press, 2004), 237 p.

Horowitz D.L., *Ethnic groups in conflict* (London, University of California Press, 2000) 711p.

Sambanis N., "Do Ethnic and Nonethnic Civil Wars Have the Same Causes? A Theoretical and Empirical Inquiry (Part 1)," *Journal of Conflict Resolution*, Vol. 45, No. 3 (June 2001), pp. 259-282.

c. A short evaluation of the debate

Our overview of the Greed vs. Grievance debate is brief and simplified. Many nuances have been added and the last three years, several authors have tried to go "beyond greed and grievance". They have left the idea of an or/or distinction and started to investigate the ways in which greed and grievance interact and reinforce each other as drivers of armed conflict. This proves that the debate has given an important impulse to all those working in the field of peace research to think and work in a more interdisciplinary way.

A second accomplishment of the debate lies in the impact it has on policy makers and the general public. It has opened the eyes of many and made them realise that war itself is sometimes the principal and final purpose of warring parties.

A third merit of the debate is that it has shown convincingly and stressed repeatedly the link between poverty and armed conflict. This puts the problem into a broader development perspective, which places the responsibility with all actors in international relations including governments, international organisations and multinational companies.

A fourth virtue is that it made conflict in the post-Cold War period comprehensible and manageable in the minds of those who were anxious about the sudden rise of a new type of local wars in the early 1990's. In that respect, the rational choice model of the greed proponents is exactly the opposite of the "new barbarism" and "senseless anarchy" thesis associated with authors like Robert Kaplan.

Despite its value, the debate remains rather impractical for policy oriented research. In box 1.5 we briefly sum up what we believe to be its main shortcomings.

Box I.5

Important shortcomings of the Greed vs. Grievance debate

- The debate narrows the possible drivers of armed conflict down to two and creates two exclusive camps. Other explanations are largely ignored.
- The participants in this theoretical exchange analyse datasets to explain armed conflicts in general but this is of little practical value to assess a specific war situation. It is in other words a theory about the drivers of civil war but it does not entail a research method for case-studies.
- The quest for a general insight, applicable on all (civil) wars, creates an analytic bias because the explanation for any war situation is already at hand before the developments on the ground have even been studied.
- The Greed vs. Grievance debate is a simplistic story, easily picked up by anyone who encounters it and therefore a bit dangerous. It ignores the complexity of the war phenomenon and leads to statements such as “the war in Iraq is all about the oil money”.

Sources and further reading:

Ballentine K. & Sherman J., *The Political Economy of Armed Conflict. Beyond Greed and Grievance* (Boulder: Lynne Rienner Publishers, 2003), 320 p.

Korf B., “Rethinking the Greed-Grievance Nexus: Property Rights and the Political Economy of War in Sri Lanka” *Journal of Peace Research*, Vol. 42, No. 2 (2005), pp. 201-217.

Cramer C., “Homo Economicus Goes to War: Methodological Individualism, Rational Choice and the Political Economy of War,” *World Development*, Vol. 30, No. 11 (2002), pp. 1845-1863.

2) Environment and conflict

Another important perspective on the drivers of war stems from environmental researchers. Influential policy reports from the Club of Rome, Brundtland and green organisations such as the Worldwatch Institute describe the physical limits of our planet, the degradation of the environment and the violence that can occur from the resulting competition. Within the environmentalist ranks we find two opposing schools who have established quite different views on the complex relationships between environment and conflict. A first position is advocated by the **Neo-Malthusians** who believe that declining resources per capita are an increasingly important cause of violent conflicts, especially in developing countries. They claim that the scarcity of renewable resources exaggerates certain stresses within countries, leading to violence. Homer-Dixon of the Toronto School defines four critical renewable resources and three types of scarcity which can cause violence (Box I.6).

Box I.6 Critical renewable resources and types of scarcity	
Resources	Source of scarcity
<div style="border: 1px solid black; padding: 5px;"> Cropland Forests Fresh Water Fish </div>	<div style="border: 1px solid black; padding: 5px;"> Supply-induced (environmental change) Demand-induced (population growth) Structural (unequal resource access) </div>

He sets forth that increased environmental scarcity can lead to migration, expulsion and decreased economic productivity, resulting directly or indirectly in ethnic conflicts, coups d'état and deprivation conflicts. The motive for these conflicts is survival. Resource scarcity is not necessarily a natural phenomenon. Often it is socially produced, or a result of ill-governance. Certain environmentalists stress that increasing resource scarcity does not automatically result in conflict but that it has an impact on the conflict potentials already present in society. However, whether being the cause or the trigger, conflict is seen as scarcity-driven.

Box I.7 An optimistic view on the environment
Bjorn Lomborg contradicts the findings on environmental scarcity. According to him, population growth is stabilising, resources are not as scarce as we first thought human adaptation is being underestimated and in those places where resources are critically low, there's more often cooperation than conflict. In 'The sceptical environmentalist', a controversial critique on the apocalyptic statements made by some other environmental researchers, Lomborg uses statistical evidence to sustain his argument that the environment is not getting worse but better. His cornucopian response implies that there are no violent conflicts arising from scarcities and none are likely to develop.

A second radically different theory on environment and conflict was developed by **political ecologists**. The starting point for their analysis is the interaction between social and natural processes. Instead of categorising resource related conflicts as a 'primitive' and 'immediate' local survival technique, they try to find the historical and

social processes in which the resource-related conflict is embedded. Moreover, instead of taking the scarcity phenomenon for granted, political ecologists often turn the equation on its head, suggesting that violence in the South is frequently a matter of control over abundant resources. Peluso and Watts, two prominent political ecologists, focus their attention on the processes of production, accumulation and resource access that create both scarcity and abundance. The role of state agencies, the complex interactions between resources and identities and the ways such identities are violently defended or contested are central to their investigation of 'violent environments'. Greed and grievance motives play a significant role in their explanation of conflict.

Box I.8

A call for a pragmatic approach

The '**human and environmental security and peace**' perspective claims to represent another phase in the research on environment and conflict. Supported by the UN organisations and the EU, these policy oriented researchers try to develop strategies both to cope with and to reduce the impact of environmental change. They position themselves as a compromise between the Neo-Malthusians and the Cornucopians. Hans Günther Brauch developed a hexagon of 6 interacting structural causes of environmental stress (climate change, the hydrological cycle, urbanisation, population growth, agriculture and soil erosion) and listed the possible triggers that might transform stress into violent behaviour.

Sources and further reading

Brauch H.G., "Security and Environment Linkages on the Mediterranean Space: Three Phases of Research on Human and Environmental Security and Peace" in Brauch H.G et al., *Security and Environment in the Mediterranean* (Germany: Springer, 2003), pp. 35-144.

Homer-Dixon T.F., "Environmental Scarcity, Mass Violence, and the Limits to Ingenuity", *Current History*, Vol. 95, No. 604 (November 1996), pp. 359-365.

Lomborg B., *The sceptical environmentalist* (Cambridge: University Press, 2001), 515p.

Peluso N.L & Watts M. (eds.), *Violent Environments* (Cornell: University Press, 2001), 453p.

3) Geopolitics & political geography

Geopolitics and political geography can be considered as two sides of the same coin. Both study the same subject, the relationship between geography and (international) politics, but the first discipline is for the most part descriptive whereas the second is more prescriptive in nature. As a consequence the border line between the two is rather narrow and research activities of political geographers often end up in geopolitical output and vice versa. Geopolitics however, is also 'practised' by researchers from other disciplines, such as international relations. In the context of our handbook it is therefore better to refer to such literature as "geopolitics", because that would include all contributions discussed below.

Geopolitical studies focus on two types of variables. On the one hand they analyse 'permanent' geographical features like lakes, mountains and forests but also language, religion and ethnicity. On the other hand they have to take into account certain historical developments and events with a significant impact on geography. Technological evolutions like the growth of the aviation industry are a case in point, as well as mega trends like globalisation and regional integration.

Well-known, even a bit notorious, are the ideas and insights from **classic geopolitics**, the initial discipline which arose at the very end of the 19th century. Classic geopolitics tries to explain the behaviour of states through their geographical location and features. It stresses the competition between states and their pursuit of power which often leads to war for the acquisition of primacy. Primacy stems from the geographic characteristics of the territory controlled by a state. Therefore "the world is actively 'spatialised', divided up, 'labelled', sorted out into a hierarchy of places of greater or lesser importance."⁴

One of the most well-known geopolitical theories was developed by John Mackinder, after World War I. Because of new transport and mobility opportunities, of which trains were most important, he believed that in terms of power it no longer mattered to control the sea. On the contrary, he believed world power lay in a continental heartland in the middle of a World Island comprised of Europe, Africa and Asia. Its heartland consisted of Central and Eastern Europe. The Americas and Oceania were smaller islands of less importance. He who controlled the heartland would control the world island and consequently the rest of the world.

Intellectual theories like the one of John Mackinder can never be separated from the field of politics. Throughout history, classic geopolitical thought has often served the statecraft of states seeking or preserving power. As such, it had a great impact on the origin and development of World War II, when the ideas of renowned German geopolitical thinkers became politicised and adopted into the rhetoric of the king pins of Nazi Germany. The concept of "Lebensraum" for instance, got diffused through the writings of the German General Karl Haushofer. As a consequence, geopolitics was seriously discredited and for decades it passed more or less into oblivion.

Since its inception geopolitical thought has undergone two important evolutions. In the 1950's, theorists from the field of international relations developed the alternative **cognitive geopolitical approach**. In their view, there are no objective and absolute laws that can explain the power relations between states from their geographic profiles. Cognitive geopolitics recognises the importance of the 'material' environment in explaining policy decisions put argues that the perceptions of political and military elites are equally, if not more, decisive in shaping state policies.

The breakthrough of cognitive geopolitics came in 1956 with the publication of the essay “Man-milieu relationship hypotheses in the context of international politics” by Harold and Margaret Sprout. Sprout and Sprout launched the idea of a psychomilieu, an individual perceived image of a situation, as a major determinant for policy measures. For political researchers and analysts this posed a serious challenge because they had to take into account the mental world of state leaders in their analyses.

A second reaction on classic geopolitical propositions developed at the end of the 1980's in political geography literature. **Critical geopolitics** denounces the classic geopolitical assertion that (geographic) environments shape foreign policy. Instead it focuses on the opposite relationship by asking the question on how political and societal discourses shape the perception of the world political system. Gearóid Ó Tuathail and John Agnew can be considered as the founders of this new range of ideas in their respective books “Critical Geopolitics” and “Geopolitics. Re-visioning World Politics”. Within these publications they explain how politicians depict and use geographical reality to sustain their policy agendas. They consider it their scientific duty to disentangle the geographic reality from political discourse.

Since the Second World War the discipline has lost most of its negative image and it is regaining popularity.

Sources and further reading:

Agnew J., *Geopolitics. Re-visioning world politics* (London: Routledge, 1998) 150p.

Chauprade A., *Introduction à l'analyse géopolitique* (Paris: Ellipses, 1999), 320p.

Criekemans D., *Geopolitiek. 'Geografisch geweten' van de buitenlandse politiek?* (Antwerpen: Garant, 2007), 848p.

De Vos L., *Inleiding tot de Moderne Krijgsgeschiedenis* (Brussel: KMS, 2006), 160p.

4) International law

Also jurists study the motivations of warring parties. The central question of their analysis is always the legality of warfare. The 'ius ad bellum' is a branch of international law that contains all regulations answering the question when it is legally permitted (or when not) to go to war. As a consequence, it embraces all legal motivations and justifications quoted by warring parties for their behaviour. The most important source of this branch of law is the Charter of the United Nations. Its provisions on security and war were written as a reaction to World War II. They were intended to regulate the warfare between states. Since the majority of contemporary armed conflicts are at least partially intrastate, the application of the charter has required a lot of legal refining and interpretation.

Article 2(4) The prohibition of the use of force

"All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations."

The legal baseline on warfare in international relations is article 2(4) of the UN Charter. It can be considered as 'ius cogens', which means that it has primacy over other rules of law applicable on a certain situation. Since its inception there has been disagreement on its scope. Does it prohibit every use of force against another state or only those acts intended to seize territory or overthrow a government? The space left by the limited second interpretation has led to the acceptance (or at least permission) of 'new' forms of violence in international relations. We will discuss these below. Two exceptions on article 2(4) have always been integrated in the Charter itself. The first is the **right of self-defence**, written down in article 51.

Article 51 Self-defence

"Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security."

Self-defence is the reason most invoked by states to justify their involvement in a war. Every country invoking the right of self-defence should immediately report on its military response to the UN Security Council. The right of self-defence is only valid as long as the Security Council itself has not taken appropriate measures to deal with the war situation. As with the prohibition of the use of force, the right of self-defence is subjected to two different interpretations. Those who support a maximalist position argue that the right of self-defence entails the protection of nationals abroad and anticipatory action. Minimalists proclaim that military action is only allowed as a reaction to an armed attack on one's own territory.

A military response to aggression by another state is only allowed in case of an armed attack. The definition of such an attack is not clear because of different legal opinions. Particularly difficult is the question to what extent the support of a government to an insurgency in a neighbouring state can be considered as an armed attack.

A second exception to article 2(4) in the UN Charter are the provisions under **Chapter VII** of the Charter⁵. Apart from the case of self-defence, the UN Security Council intended to have a 'monopoly' on the use of force. It can authorise so-called 'enforcement actions' under Chapter VII of its Charter in any case of 'threat of the peace', 'breach of the peace' or 'act of aggression'.

Over time, several important and influential UN resolutions have received the status of customary law. The impact of such resolutions and general state practice has induced a dynamic interpretation of the UN Charter. Within the body of international law and customs we have found three additional legal motivations for the use of armed force: invitation, the protection of nationals and humanitarian intervention.

Invitation. International law explicitly allows states to intervene in a civil war when the government of the country at war requests assistance. This 'right of invitation' does not apply to the opposition forces fighting the government. However, recent political and military history contains several examples of breaches of this straightforward principle, such as the American support to for the Contra revolution in Nicaragua.

Protection of Nationals. In general, a military intervention of a third party in an armed conflict to extract nationals is tolerated within international relations. It often isn't even reported to the Security Council under art. 51 of the UN Charter. In history however, extraction of nationals has often been advanced by intervening states as a pretext for other motives and objectives.

Humanitarian intervention. Legal analysts and scholars argue that humanitarian intervention has been a part of state practice since quite some time. However, in the official discourse of states the doctrine only appeared in the early 90's. The international 'breakthrough' of the doctrine came during the Kosovo crisis in 1999, when NATO forces launched operation 'Allied Force' as a reaction to the precarious situation of the Albanian Kosovars in the region. The doctrine is far from being generally accepted. Many states consider it to be in contradiction with Article 2(4) of the UN Charter. In US foreign policy statements for example, it seems that humanitarian concerns are rather used as a moral justification and not as a legal argument.

Important pioneers of the doctrine are Belgium and the UK. Although they are not legally binding, these two countries have brought forward some political stands with considerable influence. Belgium proclaims that human rights in international relations have attained the same status of 'ius cogens' as the prohibition of force. As a consequence, their protection could justify a breach of Article 2(4). The UK has developed a framework for humanitarian intervention based on 6 principles (Box I.9).

Box I.9

The UK Foreign Office principles of humanitarian intervention

- 1) Intervention is an admission of the failure of prevention
- 2) We maintain the principle that armed force should only be used as a last resort
- 3) The immediate responsibility for halting violence rests with the state in which it occurs
- 4) When faced with an overwhelming humanitarian catastrophe, which a government has shown it is unwilling or unable to prevent, the international community should intervene. As it is a sensitive issue there must be convincing evidence of extreme humanitarian stress on a large scale. It must be objectively clear that there is no other practicable alternative than the use of force to save lives.
- 5) Any use of force should be proportionate and carried out in accordance with international law. The military action must be likely to achieve its objectives.
- 6) Any use of force should be collective. Wherever possible the authority of the Security Council should be secured.⁶

Sources and further reading:

Gray C., *International Law and the Use of Force. Fully updated second edition* (Oxford: Oxford University Press, 2004), 334 p.

Breau S., *Humanitarian Intervention: The United Nations & Collective Responsibility* (London: Cameron May, 2005), 499p.

Chesterman S., *Just War or Just Peace? Humanitarian intervention and international law* (Oxford: Oxford University Press, 2001), 295p.

Wheeler N. J., *Saving Strangers. Humanitarian intervention in international society* (Oxford: Oxford University Press, 2000), 336 p.

ICISS, *The Responsibility to Protect. Report of the international commission on intervention and state sovereignty* (Ottawa: International Development Research Centre 2001), 91p.

II. Our research model

Every analysis is a reduction of reality. It is a certain perspective that, when selected, excludes (parts of) other perspectives. The geographic method presented in this handbook simplifies, reduces or even ignores certain aspects of other peace research literature. As a matter of intellectual honesty, we clearly frame our specific window of analysis under the following paragraphs.

1) Theoretical assumptions and choices

a) Types of war

Box II.1

A definition of war

There are a number of typologies and definitions of war circulating within peace and conflict research literature. The Sipri/Singer and Small criterion⁷ is most widely used. It describes war as: a violent conflict that has caused at least 1000 battle deaths. All opposing sides are armed and at least one belligerent group is the government of a state. Conflicts that remain below this threshold are labelled as armed conflicts. This definition takes only the direct war casualties into account, not people who die as an indirect consequence of hostilities (e.g. Famine, disease etc.)

Within peace research literature a distinction is often made between civil wars and interstate wars: civil wars are fought within a state, while two or more independent states are involved in interstate wars (national armies). Many wars however, are a combination of both these types of war. During civil wars for example, violence often tends to spill across borders. Besides the neighbouring countries also other states - who have interests in the region or whose international credibility is challenged- might become affected.

Consequently, although the difference between inter and intrastate war can be highly important in legal terms, our handbook will ignore this distinction⁸. It is our aim to develop an analytic tool applicable on different types of armed conflicts, regardless of the way they are categorised.

However, conflicts without a clear and limited territorial dimension are beyond the scope of our instrument. Since the Al Qaeda terror war and the American war on terror are waged on a global scale, they cannot be analysed using our geographic tool.

b) Time scope

Box. II.2 Onset vs. Duration

Research on the causes of armed conflicts distinguishes between the initial causes of warfare and other drivers that emerge later. Reasons for war onset can be very different from those that explain war duration⁹.

Drivers of conflict can change. This means that every analysis on the causes of conflict is only valid for a limited period of time. It is important to understand that our geographical method will not reveal timeless explanations of the motives of warring parties. The analysis will be limited to a specific point in time and should be updated regularly. However, with these updates, we can create a time series of maps. This will allow us to monitor possible evolutions in the behaviour of armies.

c) A personal perspective

In our mapping method we clearly opt for a personal (leadership) perspective. This means that in our opinion, the final decision to take up arms rests with individuals and within their minds lay the decisive causes of war. The same could be said about the decision to end a war. It requires the right amount of will of combatants –and more importantly of their leaders- to lay down their arms and stop the fighting.

The opposite perspective of the leadership perspective is the one that looks at the structural determinants of war. In this line of thinking war ‘happens’ when certain conditions are fulfilled.

d) Opportunity vs. motivation

Related to the perspective issue discussed under the previous paragraph, is the question whether opportunity or motivation is the main precondition for warring parties to start or continue fighting. The answer to this question is crucial, because it determines where policy makers should concentrate their conflict prevention efforts on. This handbook focuses primarily on the role of motivation as a cause of war. Warfare is an ugly, dangerous and complicated undertaking. It seems unthinkable that somebody gets involved in it without sufficient motivation. Moreover, motivated fighters with little opportunities can be very creative when it comes to gather the necessary resources. The kidnapping plagues in Colombia and Chechnya are a case in point.

Our clear choice does not imply a contestation of the idea that opportunity is an important explanatory variable for armed conflict. We believe both elements are to be taken into account when explaining the causes of warfare.

2) The model

Box II.3

What our model is not

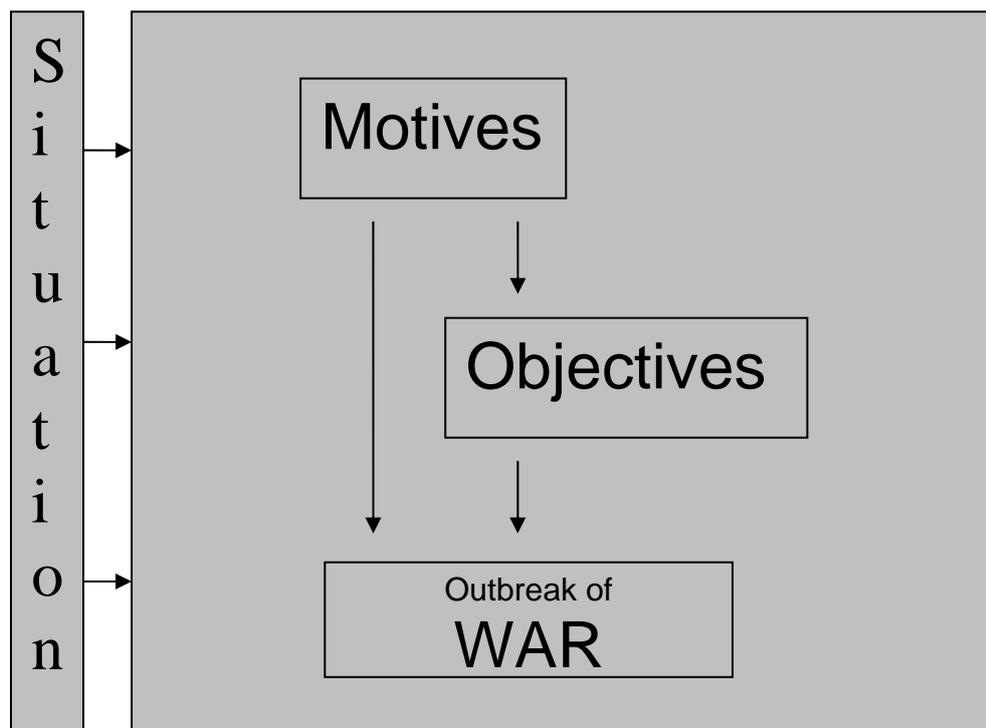
Before we enunciate our model we first need to make clear what it is not.

It should not be seen as an overall theoretical model that explains 'wars'. The conception of such models is done by others in academic environments. Therefore the reader should neither be looking for any predictive value. Our theoretical model is the visualisation of the reasoning that constitutes our tool, no more no less, which is why we have added it to the handbook. Our tool is intended to uncover the drivers of warring parties within a specific war; the model is a blueprint for how we will tackle this.

a) The diagram

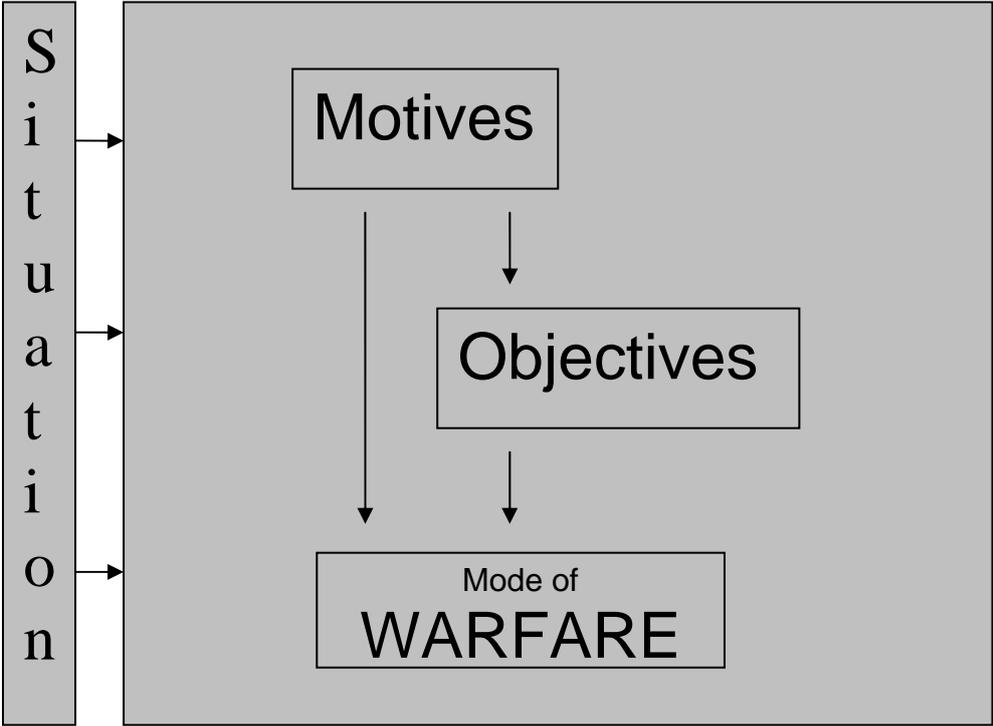
Our model starts from the finding that there is a war (or at least an armed conflict) going on (Fig. 1). We perceive this war as a tool that is used to attain a certain goal or objective, for example the secession from an existing state. Such objectives are driven by a certain motivation, for example people want to secede because they are being discriminated and oppressed. Why some motives lead to the outbreak of war and others don't, depends on opportunities and other situational factors.

Fig. 1



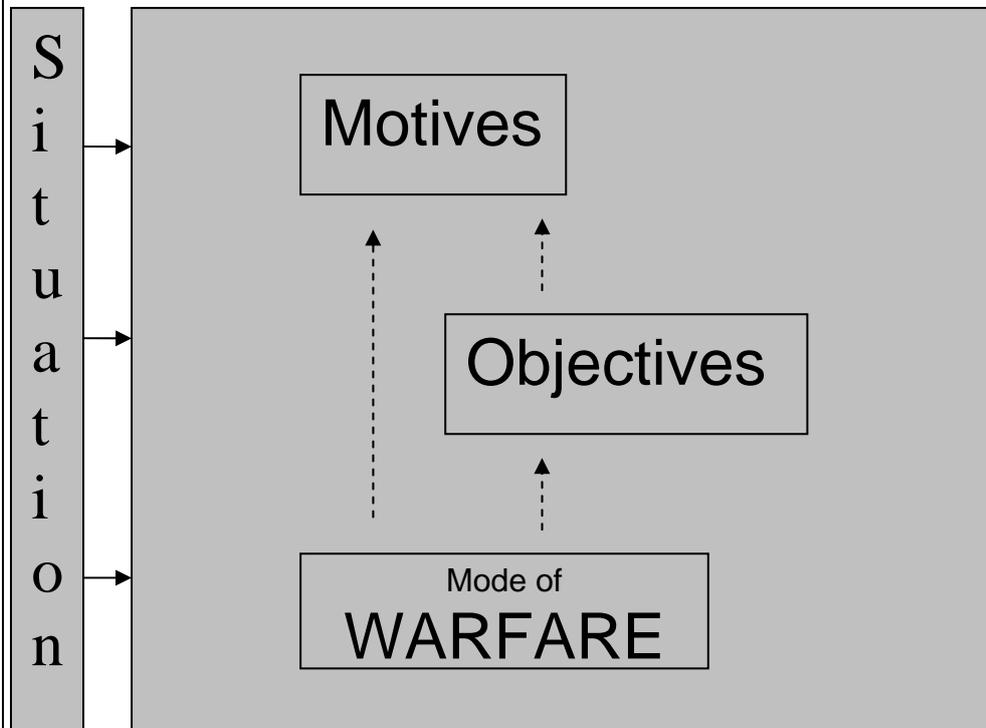
Motivations and objectives are the drivers of war and as such they will influence the way in which a war is being waged (Fig. 2). Naturally these are not the only factors determining the mode of warfare. The relations between motivations, objectives and modes of warfare are affected by an array of situational factors. The military balance for example can have a serious impact on the behaviour of warring parties.

Fig. 2



If we want to reveal the drivers of warring parties, we need to start from the only objective information we can rely on: the facts on the field. Warring parties may claim to be driven by certain motives and towards certain objectives but this could be a mere misrepresentation. Observers on the ground often have honest and well-founded opinions on the subject, but in the end they are still a matter of secondary interpretation. Assuming that motives of warring parties shape their objectives and their mode of warfare, our tool wants to analyse concrete military actions and decisions, and retrace these back to what provoked them (Fig. 3).

Fig. 3



b) The variables

Warfare

Warfare is the dependent variable of our model. We define it as the way a war is fought geographically. Who is fighting where? Where not? Which areas are most heavily defended? Which areas are most fiercely attacked?

The motives

Profit is the central motivation in the 'Greed' theory of conflicts. War can create enormous personal gain, which might be enough reason to wage one. Profit motivated conflicts entail phenomena like: pillaging, organised crime, preying on natural resources, preying on economic activity etc.

Grievance: In every society there are groups and individuals who oppose the current political and/or social situation. Their dissatisfaction is caused by feelings of inequality, oppression, discrimination, hatred and injustice. When these feelings remain unanswered they can become a driver of violent conflict.

Survival: People or peoples who feel threatened in their survival resort quite often to violence to safeguard their future. Essential elements for survival are: access to food, access to water, physical security, shelter, living space and outlet possibilities.

Power: History has seen many examples of politicians using war to win more political or territorial power. Wars driven by the search for power are wars for conquest. The relationship between power and geography has always been the central topic in geopolitics.

Humanitarian considerations: Waging war to save lives. That is the ratio behind military operations such as humanitarian interventions. New combatants join an existing conflict to prevent or stop genocide or a humanitarian disaster.

Box II.4

Motives vs. objectives

While analysing conflict one needs to make a distinction between the aims of warfare and the motivation for it. The aims of a war are an answer to the question to what end it is fought. War motivation on the other hand explains why warring parties want to attain a certain goal. Motivation precedes objective. There is in other words a direct relationship between the motivation for waging war and the purpose it serves. Different motivations for warfare create different aims. A warring party can be driven by multiple motives and objectives.

The objectives

What do warring parties want to achieve? We distinguish four different types of objectives. Sometimes, different objectives can interact in a single conflict.

Military control: When a conflict party aims to take military control over a certain territory, it needs to establish a military presence in all key areas and secure all borders. Regime change or territorial adjustments are not the primary objective. Fighting for military control is possible in two directions.

An Occupation is the “physical control of a part, or the whole, of an enemy’s territory by military means” (Nolan 2002:1195). Examples are the 2003 occupation of Iraq by the ‘coalition forces’ or the Rwandan military presence in Eastern Congo after the fall of Mobutu.

A Liberation is the “expulsion or defeat of a foreign army of occupation” (Nolan 2002:958). A liberation army intends to regain full control over the state apparatus as to restore the sovereignty of the state.

Territorial change: In territorial disputes, a change of borders is at stake. There are three classical examples of (armed) territorial strife.

Annexation is the legal incorporation of a, usually smaller, territory into another entity. It always involves a certain level of coercion and sometimes it results in open warfare. The annexations of Tibet in 1959, East-Timor in 1975 and Kuwait in 1990 for example, all caused severe conflicts. While every annexation implies a military occupation of the territory, not all military occupations envisage annexation.

Irredentism is the strife for the annexation of a territory based on a common ethnicity and/or historical possession.

A Secession always implies a struggle between an opposition group and a recognised government. It is “the political expression of separation by the inhabitants of a region from some pre-existing state structure” (Evans and Newnham 1998:487). A group of people with their own (imagined) territory decides to set up a new state by

withdrawing from another state. The group can be defined on an ethnical or other identity basis and is not interested in overthrowing the government, but in creating its own, on a separate territory. The peaceful separation of Singapore from Malaysia proves that secession doesn't necessarily involve warfare. However, as the violent struggles in Chechnya, Kosovo, Sri Lanka and East-Timor illustrate, warfare is a more practised method to secede.

Political change: When a warring party is fighting for political change it may have rather limited demands. Armed insurgents fighting for limited political objectives seek *increased participation* in politics. They are for example members of a minority group fighting for a power sharing arrangement to end the discrimination against their 'kin'. In Colombia for example, insurgent Indians of the Quintin Lame movement attempted to implement a project of national transformation by conducting guerrilla warfare in rural regions.

In practice however, most warring parties fighting for political change will have a complete political overthrow as their main objective. *Overthrow* literally means 'to bring down a government'. During an overthrow, a leader or party is forced from power. There are many different ways to overthrow a government. It is important to note that not all overthrows involve warfare.

There are two concepts related to overthrow that need some clarification.

A rebellion literally means the refusal to accept authority. In conflict literature the term is usually used for the armed resistance against a government.

"Revolutions are the forcible overthrow not merely of a given government, but of an entire political and/or social system, usually by a significant portion of the population – though seldom a majority - and usually accompanied by mass violence" (Nolan, 2002:1401).

The absence of the State of Law

Some warring parties don't have military, territorial or political goals. Their only objective is to obstruct peace and continue the war situation. Such warring parties are identified by Stephen John Stedman as peace spoilers. He defines them as "leaders and parties who believe that peace emerging from negotiations threatens their power, worldview and interests, and use violence to undermine attempts to achieve it". The cases of Angola in 1992 and Rwanda in 1994 demonstrate the extremely negative effects spoilers can have on a peace process. Stedman's original view on spoilers was quite narrow. In later literature however, the term was often used for all warring parties who deliberately tried to prolong a war situation. Chabal and Daloz, in their analysis of African politics, recognise such spoiler behaviour among African warlords. They find that political disorder can become a process by which political actors seek to maximise their returns. Where disorder has become a resource, leaders will have no incentive to work towards ordering society, nor to any collective interest whatsoever. Warlords are not interested in overthrowing a regime, in ideology or ethnicity but in power and money. Their objective is to eliminate all 'outside' control and to create a lawless atmosphere in which they can prey upon certain resources to enrich their own network of power.

Sources and further reading:

Chabal P. & Daloz J.P., *Africa Works* (Bloomington, The International African Institute in association with James Currey and Indiana University Press, 1999), 170p.

Evans G. & Newnham R., *The Penguin Dictionary of International Relations* (London, Penguin Books, 1998) 640p.

Luttwak E., *De staatsgreep: een handboek* (Amsterdam: Van Genneep, 1969), 191p.

Nolan C.J., *The Greenwood encyclopedia of international relations* (Westport: Greenwood, 2002).

Situation

Although we focus on motives and objectives of warring parties, we are aware that there are also other factors influencing the areas in which a war is fought. Troops on the ground are often forced to make certain strategic and tactic choices out of necessity or following military logic. If we want to draw conclusions on the drivers of the conflict from manoeuvres on the ground, these situational influences need to be made explicit and filtered out. We make a distinction between the influence of deliberate military actions and other, mostly coincidental, circumstances.

Military logic: Armies or armed groups operate following a certain strategy. Within this overall strategy they use several tactics to apply their available means with maximum efficiency. These tactics follow a logic of their own, irrespective of the underlying conflict drivers. Points in case are operations of warring parties trying to prevent their opponents from achieving a certain goal. In such cases, armies are not pursuing their own objectives but reacting to the actions of others.

Other situational factors: The category of other situational factors is very diverse and probably even endless. While some are rather structural, such as the climate and terrain, others are more haphazard, such as sudden bad weather or a landslide blocking a road. Both can have a considerable impact on military actions. When analysing conflict, one must account for these important local situational factors, influencing warfare in a myriad of ways.

c) The relations

The variables described above are related to each other. Especially interesting is the relationship between war motivations and objectives. Some war motivations and objectives go hand in hand, other combinations are unlikely.

For a greedy leader of an armed group political or territorial change are not his prime concerns. What he needs is some military control and certainly the absence of the state of law. A profit motivated head of state on the other hand might very well aim for territorial change when he is interested in the (natural) treasures of his neighbour.

A rebel group fighting to resolve certain grievances probably needs more than military control for such purpose. It is likely to strive for significant political and/or territorial changes.

When physical security concerns are the major motivation driving people to fight, they need at least military control to resolve their situation. If the threat stems from the people in power, they might try to overthrow the government.

A state that wants to enhance its power will probably try to expand its territory. States whose power is threatened by an aggressor will try to retain military control within their borders.

During a humanitarian intervention, it is essential for the intervening party to establish full military control over the area. In long-term operations with persisting humanitarian problems, the objective might evolve (or maybe this was the intention from the beginning) into political change.

III. The mapping tool

Having introduced the current state of affairs in the literature on the causes of war and having clarified the theoretical assumptions and model underlying our approach, we will now turn to the geographic tool itself.

As we have explained before, this handbook intends to provide conflict researchers with a method to analyse the drivers of a conflict situation. In the following paragraphs, we will give a short overview of the mapping tool and discuss its applicability.

1) Method

The method we have developed was partly inspired by the work of Halvard Buhaug, in particular by the following quote taken from an article he wrote together with Scott Gates (Box III.1)¹⁰.

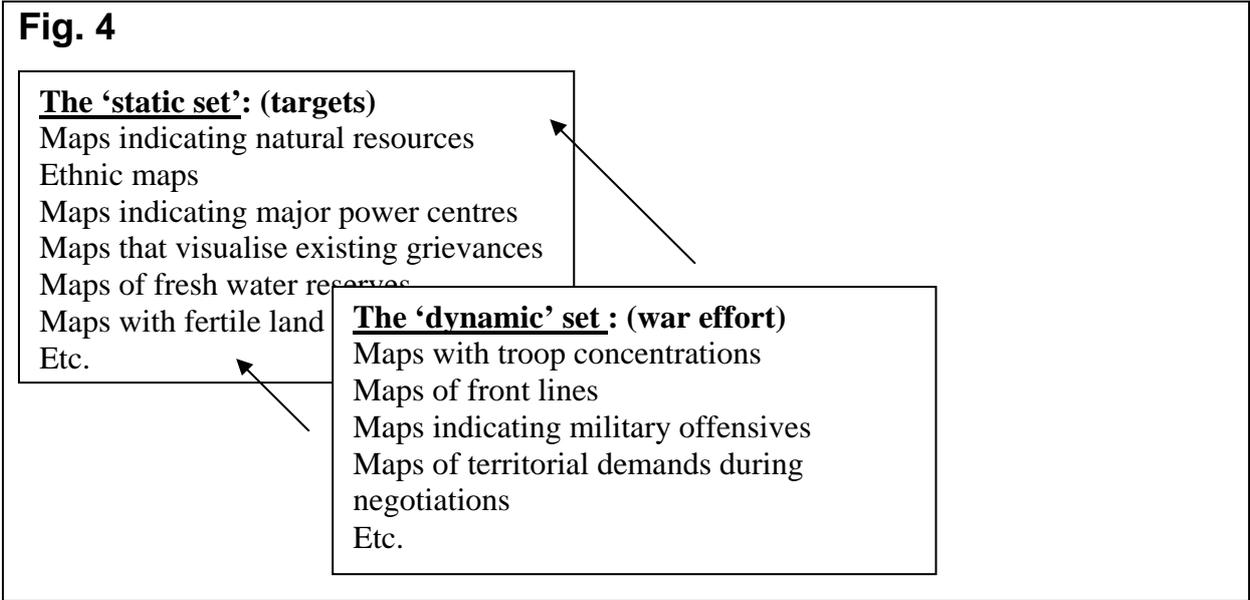
Box III.1

“We have very little systematic knowledge about the actual fighting of civil wars. Ironically, one reason for the general lack of understanding in this regard is that there is no actual fighting in these models of war onset or duration. There are no battles, no deaths, no weapons, no guerrilla tactics and no counter-insurgency activities. Territory and resources are never lost or gained. There are no victories and no defeats. Yet motivations regarding peace and war are clearly linked to the prospects of winning or losing a civil war. In addition to securing wealth through the capture of resources, civil wars are often fought over a political objective – control over the apparatus of the state or the creation of a new sovereign state. Clearly, different objectives will alter the way a civil war is fought”

We fully agree with this sharp and lucid description. It is impossible to create an insight into the drivers of a war without taking into account important events and developments on the ground. The clearest and most systematic way to gather such information is to locate and visualise it on maps of the area.

Therefore, the central features of our research tool are two different sets of maps. The first set of maps is *static*. These maps represent the location of all possible targets of the parties involved in the conflict. The targets on these maps are based on the different theories on the drivers (motivations) of armed conflict as discussed above (paragraph I.1). We acknowledge the value of each of these theories (or at least give them the benefit of the doubt) and therefore we want to integrate them all in our method. This set is labelled as static because in general the targets of warring parties are features with a relatively fixed geographic location (for example: the capital, fertile land, diamond mine etc.).

The second collection is *dynamic*. It visualises the areas in which the warring parties concentrate their military or diplomatic efforts. Since war zones and front lines often change during warfare, we have labelled this second set as dynamic. Each of the maps is only valid for a limited and well-defined period of time. During our analysis we will literally put maps of the dynamic set over maps of the static set (Fig. 4)¹¹. In this manner, we will be able to check which war targets are present on a territory where heavy fighting is taking place or tough negotiations are held on. From this comparison we can deduce the intentions of the warring parties and thus the motivation that drives them.



The findings from the geographic analysis should be completed with desk research of existing sources and, if possible, information gathered in the field. A detailed explanation of how to produce the maps and how to use them for analytical purposes is given in the chapters 2 and 3.

The final result of an analysis made with the mapping tool, is a combination of a set of digital maps and a written report. The text of the report constantly refers to the maps. Examples are given in the following chapters.

2) Advantages and applicability

There are some specific uses and advantages about the geographical tool we would like to highlight:

The resulting material can be used to sustain a written analysis as well as an oral presentation. It offers a considerable added value in comparison with mere text.

It is easily accessible and therefore useful for a very diverse audience. Examples of interested groups are: international workers, the press, policy makers and the general public.

The analysis give occasion for interaction since readers or audiences have access to the sources (the maps) it is based on. They can follow every reasoning made and

comment on it. Because the sources are shared with the interested public, there is an extra guarantee for objectivity.

New information or developments can easily be added to previous findings. All it takes is one new map to be compared with the originals.

Applying the tool will shed a new light on the interaction of different war motivations because it will reveal contradictions, parallels etc.

In some cases it might reveal intentions or drivers which were previously hidden behind the discourse of warring parties.

It will be particularly interesting to compare the maps of one conflict with maps of other conflicts.

The additional value of maps to get information across has been recognised by many other researchers and organisations active in the field of peace research. In Box III.2 we have listed some interesting websites with analytic and descriptive maps on war.

3) Related research on geography and conflict

The IPIS 'Mapping Interests in Conflict Areas' tool integrates knowledge from a variety of academic disciplines. Because of its method however, it is associated most with research activities within political geography/geopolitics. It is therefore in this field that we have to look for related research.

The element of cartography and the use of GIS (Geographic Information Systems) for analytic purposes are not new in the field of peace research. A very innovative geographic approach is being developed by scholars like Halvard Buhaug, Nils Petter Gleditsch and others at the Peace Research Institute of Oslo (PRIO). The PRIO Centre for the Study of Civil War (CSCW) conducts large quantitative studies of civil wars. There are important parallels between their work and the work of World Bank analysts such as Paul Collier. The major distinction however between the two approaches is that CSCW is developing a system to conduct statistical conflict research on a sub-national level. In a new research design CSCW abandons the habitual country level of analysis and divides the geographic space of its analyses in grids of 100 by 100 km. The researchers attribute to each grid certain values to geographic variables they want to relate to conflict. The central research questions Halvard Buhaug and other researchers at CSCW want to answer are:

To what extent are geographic factors like topography, natural resources, climate and conflict location key determinants of course and outcome of internal conflicts?

How do geographic elements interact with military attributes of the warring parties?

The IPIS mapping tool is broader and at the same time narrower than the CSCW approach. It is broader because it is not only interested in the conflict role of physical geographic elements but also of other factors that can be plotted on a map. It is narrower because it is not intended to provide an overall insight in conflict drivers and dynamics but to explain the behaviour of individual warring parties.

Box III.2 Mapping conflicts – internet resources

With data at country level

<http://www.prio.no/cscw>

The Centre for the Study of Civil War (CSCW) is an autonomous centre within the International Peace Research Institute, Oslo (PRIO). CSCW has developed geographical datasets which it relates to armed conflicts. Most of their datasets are available online together with some examples of maps.

<http://www.svt.ntnu.no/geo/forskning/konflikt/viewConflicts/>

ViewConflicts is software developed at the Department of Geography at the Norwegian University of Science and Technology (NTNU). It visualises armed conflicts from 1946 till 2004.

<http://www.bicc.de/gis/index.php>

In a first experiment, the Bonn International Centre for Conversion has used GIS as an analytical tool for studying conflict. They have also tested how regional conflict related issues can be represented by a webGIS. An interactive set of maps, showing different aspects of the Angolan conflict is available on their website.

<http://www.reliefweb.int/rw/rwb.nsf/doc114?OpenForm>

Reliefweb is a secondary but important source for conflict related maps. It collects maps from a wide range of sources, such as UN bodies or the International Committee of the Red Cross (ICRC). The maps are classified per country. Most of them were designed for other reasons; nevertheless they often contain relevant information for conflict research.

<http://www.globalsecurity.org/index.html>

A website providing military information and numerous thematic maps for a number of countries.

World maps

http://nobelprize.org/educational_games/peace/conflictmap/

The website of the Nobel Peace Center hosts an educational map of civil, interstate and colonial wars in the 20th century.

http://www.goalsforamericans.org/gallery/d/35-14/atf_world_conf_map.pdf

A 'World conflict and Human Rights map' created by PIOOM, an Interdisciplinary Research Programme on Causes of Human Rights Violations at the University of Leiden.

Chapter 2

Outline

In the second chapter we will explain:

- I. how to compile the set of static maps
- II. how to compile the set of dynamic maps

The bases for both the static and dynamic maps are tables that include places with their particular characteristics or 'attributes' relevant to the specific maps, such as the army unit based in a place, its strength and its commander.

Those single tables are then joined in a GIS program to the map layer that includes all the places of the area with their geographical coordinates, thus creating the map layers of the static or dynamic maps. In those map layers specific symbols are attached to the relevant places and the additional information ('attributes') linked to those places can be retrieved, usually by clicking on them.

A good map starts with a complete table. Below we explain how to make up such tables and what kind of information they should include.

I. Compiling the static maps

The static maps are our geographical transcription of war motives. Some of these motives are quite easy to represent on maps, for others the exercise is more difficult. Below we have listed the different maps (and map layers) that constitute the static set. There are quite a few. It is not meaningful to produce all these maps for every conflict analysis. This handbook only serves as a guideline that sums up the possible motives that could drive a war. When we use this handbook to analyse a conflict situation, we should make a selection of those maps and map layers that might be relevant. If there are no indications whatsoever that a certain motive plays a role in the conflict under scrutiny, we should not include such a map in our analysis. It is for example useless to map the fresh water resources of a conflict country where such supplies are abundant and accessible to everybody. Still, we should always stay alert for war motives we might have missed or dismissed earlier on.

1) Greed maps

Making the greed maps will be one of the easier tasks when doing a mapping exercise. A war driven by profit will be located in an area that can generate economic advantages. Most of these profitable zones can be identified and directly pinpointed on a map. We distinguish 4 main categories of economic targets and will discuss each of them in detail.

a) Natural resources

The role of natural resources in fuelling armed conflict is an issue that received a lot of attention since the beginning of the new millennium and not without reason. A number of army and rebel officers in conflict areas throughout the world have become mining agents instead of soldiers (BOX I.1). Therefore an important map of our greed collection should indicate the location of mining areas.

Box I.1

An example of military miners: Bisie in North-Kivu, DRC¹²

Bisie is an enormous tin mine in the Congolese jungle. The area comprises 57 pits with more than 1,000 miners working below the ground. Bisie is relatively far away from the war zone, but it is a source of conflict. The ownership of the mining concession, for example, is heavily disputed between two firms, 'Mining Processing Congo' (MPC) and 'Groupe Minier Bangandula' (GMB).

For several years now, the mining site has been 'protected' by the 85th Brigade of the Congolese army (FARDC). The 85th FARDC Brigade, commanded by Colonel Samy Matumo and composed of ex-Mayi-Mayi fighters, controls the access to the mine and a large part of the mining activities. Soldiers of the 85th Brigade steal from other miners, they levy illegal taxes, they rape, torture and force people to work for them. Colonel Matumo organises the exploitation of several pits himself and is known for his wealth. The involvement of the 85th Brigade in the mining business runs deep.

In August 2006, the administrator of the Walikale territory, Dieudonné Tshishiku Mutoka, signed a deal with the GMB company. In exchange of 10% of their weekly production and several other benefits the administrator would provide for the security of GMB. However, the only group capable of guaranteeing security at Bisie are the FARDC. That the mine is really important to the soldiers is further illustrated by the fact that in the past different factions within the 85th Brigade have even fought among each other for the control of the site.

The FARDC is not the only warring party interested in Bisie. It is interesting to note that one of the key people behind GMB is Alexis Makabuza, allegedly one of the important financiers of the rebel General Laurent Nkunda.

In the absence of law and order, all natural resources can be profitable to control/exploit, but some are more suitable than others. The resources in Box I.2 are taken from the priority list of the PRIO institute in Oslo¹³. In general, these resources have a considerable value and are easy to plunder. The list contains those resources most preyed upon by warring parties, but surely it is not exhaustive.

Box I.2

The PRIO list of profitable resources

Diamonds and other gems

Oil

Natural gas

Copper

Gold

Chromite

Tantalite (tantalum and coltan)

Timber

Not only the concessions currently exploited by mining companies should be included on the natural resources map but also old concessions or deposits frequented by artisanal miners. Collecting data on mining areas is not an easy task. For the larger sites, the best starting point is likely to be a geological institute, state-run or academic, provided that it is willing to share the information. Data on artisanal mines is even harder to come by. If the war area has not been the subject of a specialised study, the information can only be gathered through terrain visits and interviews with local experts/officials.

Natural resources can be indicated on maps as points or as areas. A point either refers to the town or village where exploitation is known or to the precise location of a mining pit. An area either relates to a concession area (polygon) or to a more or less extensive zone with evidence of mineral exploitation (area enclosed by a curved line). The choice depends on the level of detail of the analysis and the information available. Since locations of places and mining pits are more precise than swaths of land, the former are preferable. It will be easier, however, to find maps with concession areas (for example from the mining registry or another state service) than maps with exact locations.

Both points and areas can, of course, be combined on a map.

With respect to the occurrence of diamonds, the natural resource which is probably most associated with conflict, a global data set exists and is accessible on line (BOX I.3).

Box I.3

DIADATA from the PRIO Centre for the Study of Civil War (CSCW)

DIADATA is a dataset that covers known diamond deposits worldwide. The dataset contains information on the exact geographic location of the site, the geological form of the diamonds, the date of discovery and the first production date. All deposits are represented as points (coordinates). In the case of large extraction sites, the coordinates point to the approximate centre of this area. Sometimes the sites in the dataset represent an amalgam of different deposits. The DIADATA set is available as a GIS shapefile and as an Excel table at: <http://www.prio.no/CSCW/Datasets/Geographical-and-Resource/Diamond-Resources/>

Diamonds have a very high value-to-weight ratio. This makes them easy to smuggle and profitable to sell.

We have to stress the important distinction between primary and secondary diamonds. Primary diamonds –aka Kimberlite diamonds– are those stones that are embedded within rock. Most of the time they are difficult to reach and their extraction requires sophisticated equipment. Secondary diamonds tend to be much more attractive for making a profit. They have come apart from the deposit they originated from and can be extracted (rather easily) along riverbeds or in estuaries.

A similar dataset exists on oil and gas wells (Box I.4).

Box I.4
PETRODATA from the PRIO Centre for the Study of Civil War (CSCW)

Similar to the DIADATA project, the PRIO CSCW developed another dataset on hydrocarbon reserves called PETRODATA. It includes 890 onshore and 383 offshore locations worldwide. As opposed to the DIADATA dataset, the resources are represented by polygons instead of points. Shapefiles and tables are available at: <http://www.prio.no/CSCW/Datasets/Geographical-and-Resource/Petroleum-Dataset>

Petroleum is still by far the most strategic resource worldwide. Petroleum and natural gas are both hydrocarbons, the former in its liquid form, the latter gaseous. Hydrocarbons are absolutely essential in the world economic system because they are the feedstock for most fossil fuels and important materials such as plastic. In conflict literature, war over oil is often linked to secessionist objectives.

Instead of drawing a separate map for every single mineral, it is better to produce a composite map showing all the different mineral deposits of the research area. If feasible, it might be handy to add some additional information on the deposits. Apart from specifying what resource(s) is (are) found, information on the type of mine (open pit, alluvial, industrial etc.), also the ownership structure and the operator(s) can be useful. In case a workable criterion can be formulated, a value should be attributed to each site reflecting its worth/importance, for example by classifying mines according to their estimated reserves or the income they generate.

Figure 5 shows the table IPIS uses to build its natural resources map.

Figure 5
 Natural resources table

Place	Territory	Mineral	Type of exploitation	Concession holder	Operator(s)
Bisie	Walikale	Cassiterite	Artisanal	MPC	Artisanal miners

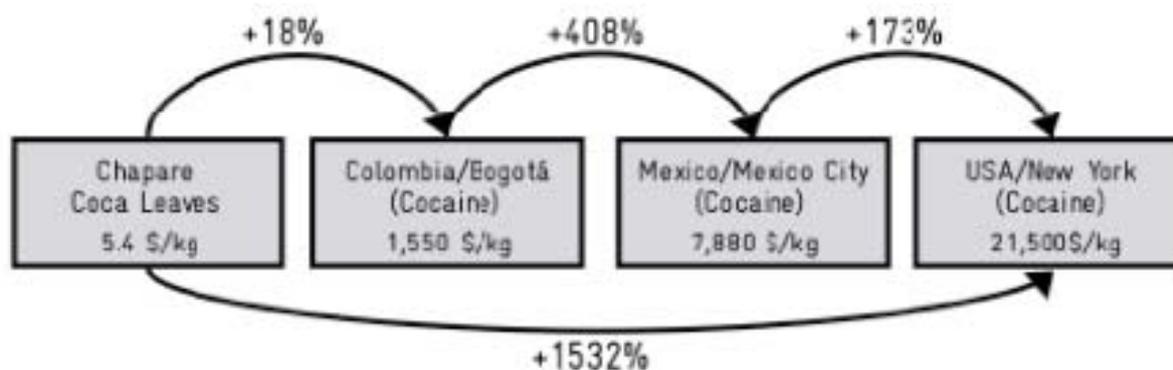
If necessary, other key locations of the mining business, such as warehouses, processing facilities and points of export, should be added to the map. In this case, there might be an overlap with the “trade and distribution routes” map layer (which will be discussed below in paragraph c).

b) Illicit substances

Several armed groups in the world rely on the production of drugs to finance their operations. Some of their leaders have become extremely rich from the drug business. Their income from the traffic in narcotics often exceeds the costs to sustain their organisation by several times. A case in point are the Colombian rebels of the FARC and their paramilitary counterparts (Box I.5).

Box I.5

The margins of profit on cocaine¹⁴



It is possible that for such groups, sustaining their business has become an end in itself or even an apple of discord between them and their opponents. To check this, a map is needed that gives an overview of the major production centres. If necessary, other key locations of the drugs business, such as markets, warehouses, laboratories and points of export, can be added to the map. In this case, there might be an overlap with the “trade and distribution routes” map layer (which will be discussed below in paragraph d).

Getting hold of such information is a considerable challenge. The most obvious source are agents of state security services, but in conflict zones their presence and control might be limited. Moreover, if they are present, some of their elements might be implicated in the traffic. A telling example is the traffic in hemp in Eastern DRC (Box I.6).

Box I.6

Hemp traffic in Eastern DRC

The drug that is grown in central North Kivu is called ‘chanvre’, which is French for hemp. It is a local and strong variety of cannabis. The climate and soil of the region are well-suited for growing hemp and the drug is popular in the DRC and its neighbouring countries. Most of the hemp fields are controlled by the rebels of the ‘Democratic Forces for the Liberation of Rwanda’ (FDLR).

The rebels have several hemp fields of their own but they also profit from the production of the local population. They ‘secure’ the fields where hemp is grown and

they 'escort' the villagers who grow the drugs when they bring them to the road at night.

When the drugs arrive at the road, they are loaded on a truck and hidden beneath a load of manioc or other goods. The trucks bring the hemp to the provincial capital of Goma where it is treated before it crosses the border with Rwanda.

The profits are considerable. In the villages, a bag of 60 kilos of untreated hemp costs 30 dollars. At a local market, the price of the bag doubles to 60 or 70 dollars. In Rwanda, the treated plants are worth 90 to 100 dollars per kilo.

If the FDLR are the biggest sellers of hemp, elements of the regular army are the biggest buyers. In fact, it is often not the soldiers themselves who buy the drugs but their wives. While their wives organise the transport to the provincial capital of Goma, the husbands make sure that the trucks can pass any barrier along the road without too many problems. The regular army and the FDLR rebels seem to cooperate well together. They each control their part of the territory and the production chain.

It is probably safer and more reliable to try to obtain information from NGOs or other knowledgeable local contacts. Another solution might be to work through remote sensing. Very high-resolution (VHR) satellite imagery can be used to track the cultivation of illegal crops. This method is applied by ISFEREA (Information Support for Effective and Rapid External Action¹⁵), a research unit of the SES (Support to External Security) of the European Commission, to monitor poppy cultivation in Eastern Afghanistan. Naturally this is an expensive method only open to those with sufficient resources at their disposal.

Figure 6 shows the table IPIS uses to build its illicit substances map.

Figure 6
Natural resources table

Place	Territory	Substance	Activity
Miriki	Lubero	Chanvre (hemp)	Market

c) Trade and distribution routes

Trade routes can be used for legal trade or illegal smuggling. As such they do not generate money themselves but they facilitate profit made from the exploitation of natural resources or illicit substances. Sometimes, however, controlling routes does generate income because it offers good opportunities for extortion. A war profiteer does not need to take control of the whole transport route, it is sufficient for him to have access to a few 'choke points'. A point in case is the practice of several armed groups around the world to attack pipelines of oil companies to receive 'protection' money.

A trade route can be organised via land, water or air. In case of an air route, it will most likely have a single beginning and end point (airports, airstrips). For land routes, the picture will look a bit more complicated, but they will often have a clearly distinguishable end point at a border crossing or market.

The people who are best positioned to provide information on land routes and border crossings are the traders or transporters themselves. They know which roads are used most and by whom. Information on airstrips is normally known to every pilot

flying in the area. Especially humanitarian pilots should be approachable, although they might be less knowledgeable than their commercial or military counterparts. Because of their occupation, pilots can give the location of airstrips immediately with the right coordinates.

The trade routes map should be a network of points (transit/market places, airports, border crossings, harbours) and lines (roads, rivers). The map is built by selecting the relevant features from the GIS map layers containing all places, airports, roads etc. of the area, thus creating the six map layers that make up the trade routes map.

e) Aid

The food and goods aid organisations distribute can generate a certain wealth for those who can take large shares of it for their own. At worst, armed groups use aid to sell it on the market and buy new weapons.

However, caution is needed. The presence of armed groups in the vicinity of aid convoys might also indicate that the physical existence of these groups is threatened. Therefore, the appropriation of relief supplies by armed groups might also indicate that survival motivations play a role.

An aid map should only be created when there are important indications of systematic appropriation by armed groups. Incidents with aid distribution will seldom go unnoticed because usually there is a presence of international workers. Such members of relief agencies should be able to provide the data on relief transports and deliveries. They are busy but approachable people.

The aid table should indicate for each delivery whether there was an incident with one of the warring parties. If so, a detailed description of the incident and the armed group(s) involved will be found on the incidents map, one of the dynamic maps discussed below. Since the aid table contains the date and location of the delivery/transport, it should be fairly easy to find the incident on the incidents map.

Figure 7 shows the table IPIS uses to build its aid map.

Figure 7
Aid table

Date	Place	Territory	Type	Organisation	Incident
15/12/07	Kitchanga	Rutshuru	food	PAM/WFP	no

2) Grievance maps

Translating grievances geographically into physical targets is without any doubt the most difficult conceptual exercise of the mapping conflict motives method. As opposed to the greed maps, one cannot identify a general set of geographical targets that represent all grievance targets everywhere. For example, a gold mine is always interesting for any greed-motivated armed group, but grievances are in most cases specific for each armed group. Therefore we should produce separate grievance maps for every warring party.

Grievances arise from a certain need or injustice which is always formulated in a narrative. Normally, such narratives can be found on the website of the armed group, in the discourse of its leaders giving interviews, or in political pamphlets and other printed documents. As a first step, these existing narratives need to be analysed and summarised. The analysis should answer at least four key questions (Box.I.7).

Box I.7
Summarising the narratives of a warring party

Identity group x:

- Which injustice(s) do they denounce?
- What are their needs? (Cfr. Azar)
- Which changes do they want?
- What do they want to achieve? (Cfr. Gurr)

Let us take the Serbs (in 1992) as an example:
 Short and simplified, the Serb narrative that expressed their grievances during the Balkan wars could be summarised as follows: *The Serbs have been a victim throughout history, always having been denied what is rightfully theirs. After a break-up, the Serbian ‘people’ will end up in three different countries. In such a situation the Serbs will be oppressed (and worse) by Fascist Croats and Muslim Bosniaks. Moreover, they will lose a part of the territory to which they are historically tied.*
 Analysing this narrative through the framework developed by Azar, we can conclude that they need their security restored and their Serb identity safeguarded. Therefore they want to unite all Serbs in one undivided territory that corresponds with the borders of the ‘historical Great Serbia’ (Fig. 11) . Using the Gurr classification, they could be labelled as ‘ethnonationalists’ with irredentist tendencies.

In a second step these needs, changes and goals need to be converted into physical targets on a map. This is a logical exercise.

Returning to our example of the Serbs during the Balkan wars of 92-95:

If the Serbs want to unite all their fellow Serbs, we need a map with the ethnic division in the region. The underlying table for such a map would look as follows (Fig. 9):

Figure 9
 Ethnic table

Municipality	Canton	Bosniaks	Serbs	Croats	Other
Gorazde	Bosnian Podrinje	70%	26%	0,2%	3,5%

If the Serbs want to carve out a greater Serbia from the Yugoslav territory, we need a map with the border lines of this territorial idea.

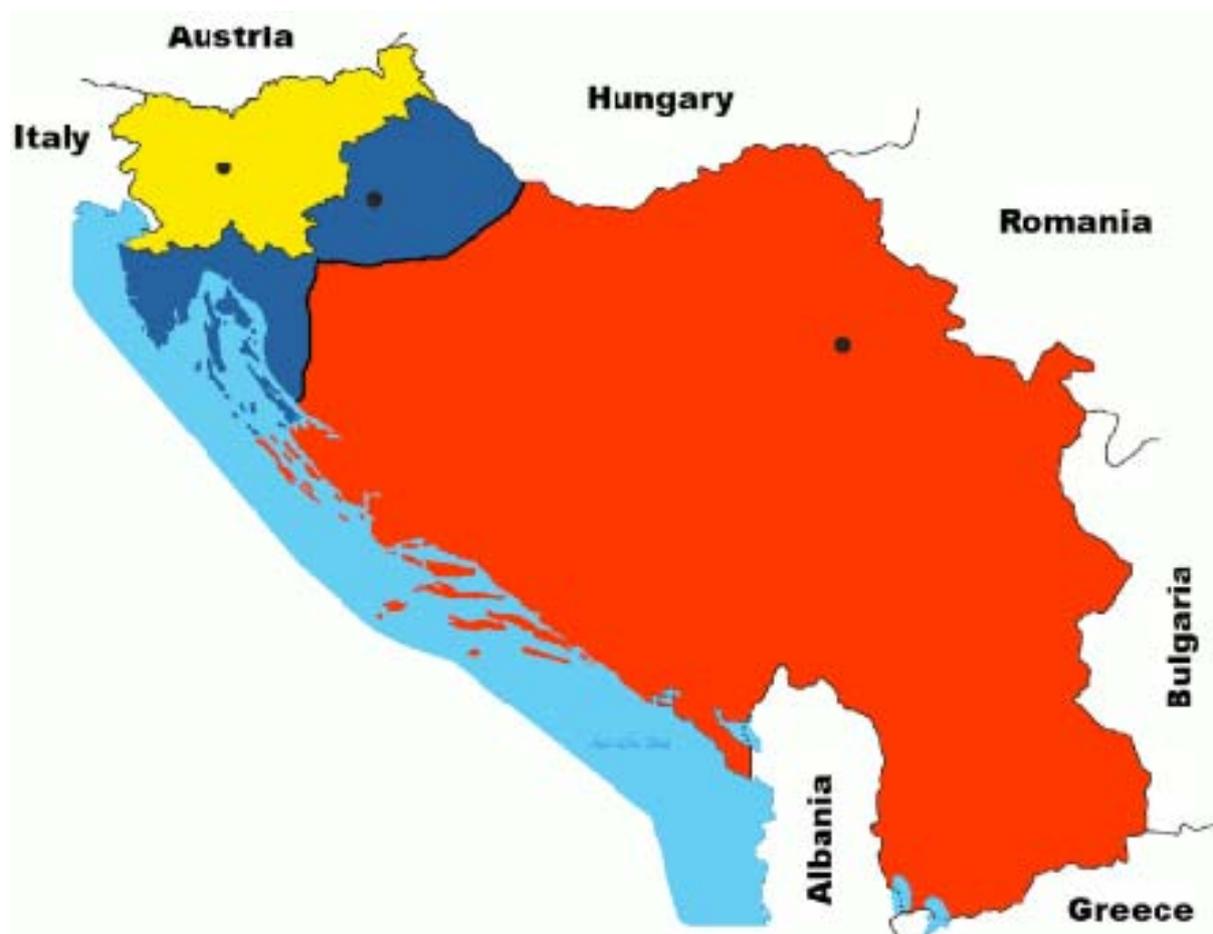
If the Serbs feel historically/culturally tied to certain areas, we need a map indicating those areas. This third Serbian grievance map could be based on the following table (Fig. 10):

Fig. 10
Historical/cultural table

Republic/autonomous province	Historical area	Explanation
Kosovo	Kosovo Polje	Historical battlefield where the Serbs...

Some areas can have great cultural/historical importance for more than one of the warring parties. The historical/cultural targets of all groups can be integrated in a single map layer.

Fig. 11
Greater Serbia as it was proposed by the Serbian Radical Party in the early 1980's



Although there might be some parallels between the grievance narratives of armed groups from all over the world, a preceding analysis is required each time. We will redo the same exercise we did above for the Tamil Tigers (LTTE) of Sri Lanka.

The following excerpts were taken from the Tamil Eelam Homepage (<http://www.eelam.com>):

“Sinhala majority governments unleashed a systematic form of oppression that deprived the Tamils of their linguistic, educational and employment rights.... As the Sinhala state oppression and discrimination unfolded in its ugly forms threatening the national identity, the Tamil parliamentary political leadership responded with mass political agitations.... The Sinhala Government reacted with military violence and terror, brutally crushing the non-violent peaceful campaigns of the Tamils. Instead of looking into the genuine grievances of an aggrieved people, Colombo Governments adopted a harsh policy of military repression.... The event that climaxed the state oppression against the Tamils was the new Republican constitution of 1972 which was a blatant attempt to legalise and institutionalise Sinhala chauvinism at the cost of alienating the Tamil nation from unitary constitutional politics. It was during this specific historical juncture, that the armed resistance movement was born on Tamil soil with the determination to fight for political independence from alien domination. The armed struggle emerged as a historical development of the Tamil struggle in response to the determined efforts of the Sinhala Government to subjugate the Tamils. The Tamils took up arms when they were presented with no alternative other than to defend themselves against a savage form of genocidal oppression.... The LTTE's armed struggle is based on a clearly defined political programme. This political project aims at securing the right to self-determination of the Tamil people. The LTTE is committed to the position that the Tamils constitute themselves as a people or a nation and have a homeland, the historically constituted habitation of the Tamils, a well-defined contiguous territory embracing the Northern and Eastern Provinces. Since the Tamils have a homeland, a distinct language and culture, a unique economic life and a lengthy history extending to over three thousand years, they possess all the characteristics of a nation or a people. As a people they have the inalienable right to self determination.”

Which injustices does the LTTE denounce?/What are their needs?

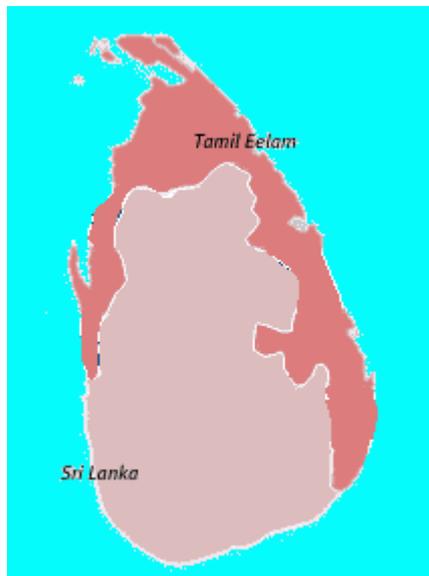
The LTTE denounces the oppression of the Tamil people in Sri Lanka by the Sinhalese majority. Not only are they being deprived of certain rights and discriminated against, the LTTE advances that the very existence of Tamil identity is threatened.

Which changes do they want?/ what do they want to achieve?

In order to protect the Tamil legacy and guarantee full/equal Tamil participation in society, the LTTE fights for self determination for the Tamil people of Sri Lanka. It strives for full self-determination in a separate secessionist state 'Tamil Eelam' that encompasses the Northern and Eastern provinces of current Sri Lanka (Fig. 12).

Fig. 12

Map of the island of Sri Lanka divided in a Sri Lankan state and Tamil Eelam



How to convert these motivations into maps?:

If the Tamils want to secede from the Sri Lankan state, they will fight for the territory they are claiming. Therefore we would need a map showing Tamil Eelam.

If the Tamils want to protect their kinsmen against oppression and brutalities, they will liberate those areas where many Tamils live. Therefore we would need a map with the division of the population. Alternatively and more directly a map can be added showing all the human rights violations against Tamils. It can then be checked whether the Tigers care about their fellow kinsmen and intervene in those places where violations have occurred. Such a map is in fact a reduced 'incidents' map, one of the dynamic maps that will be discussed below.

3) Survival maps

When drawing our survival map, we have to identify those areas crucial to the physical security of people on a certain territory. The physical security of people depends on the fulfilment of basic human needs and the presence of acute danger of life.

a) Human needs

According to Maslow's hierarchy of needs, survival of the individual or the group is in danger when physiological needs like breathing, sleeping, eating, drinking, being able to regulate body temperature and dispose bodily wastes are under strain. Any threat to one of these needs could generate a survival-driven motive for conflict. Consequently we should indicate on our maps those geographical features essential to the fulfilment of basic physiological needs. As we have described in the first

chapter, Homer-Dixon identifies four of these features. He finds that shortages of four renewable natural resources can lead to violent conflict (Box I.8).

Box I.8

Survival map layers

Arable land

Forests

Fresh water sources

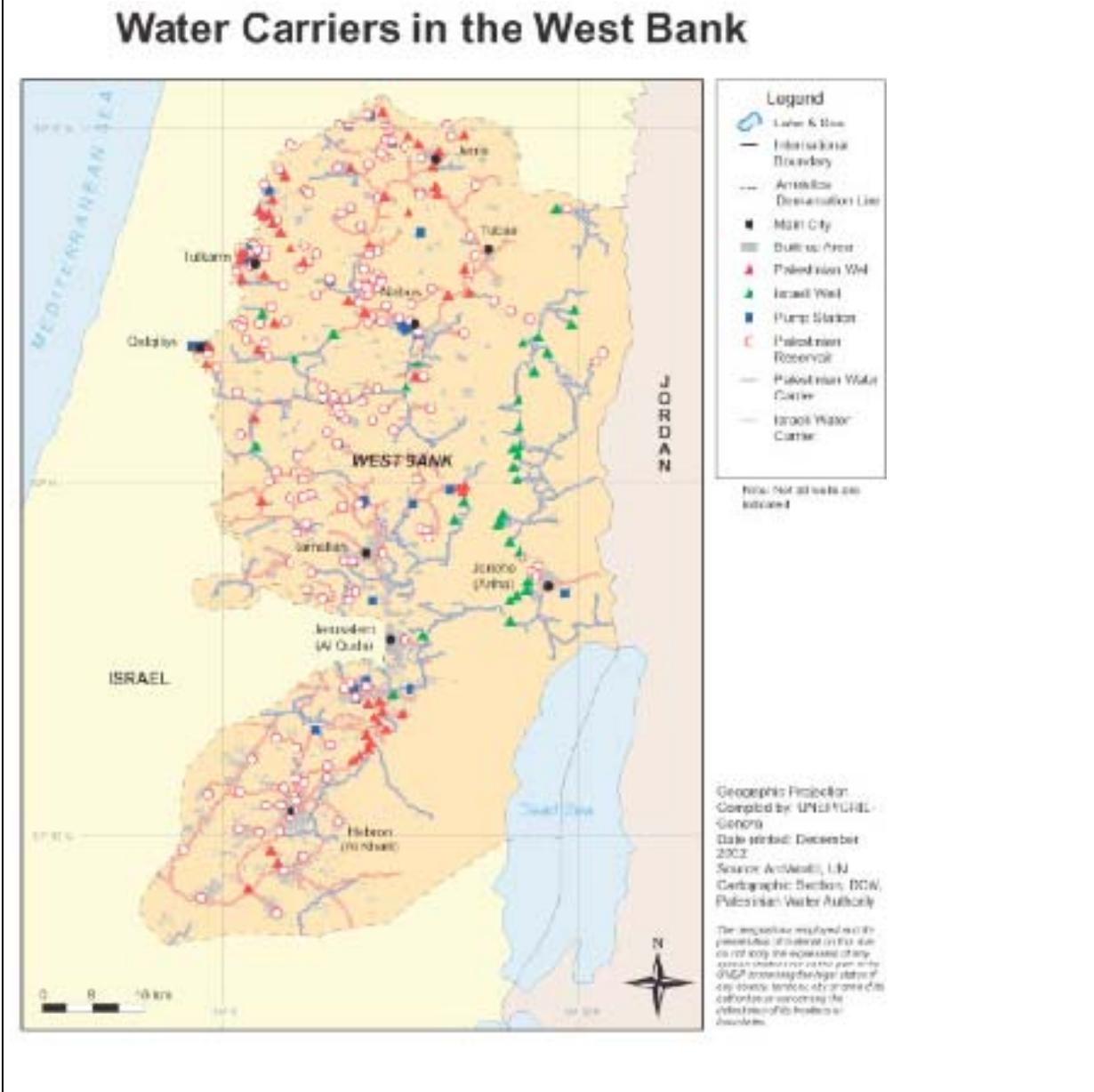
Fishing grounds

The four crucial resources can be combined on a single needs map based on a land use or vegetation map. Forests and fresh water sources figure directly on any vegetation map. Getting hold of a vegetation map of the conflict region should not be difficult. Such maps exist for every part of the globe and they are normally available at any geographic institute that works on the region.

Plotting arable land and fishing grounds might pose a bit more problems. Arable land is a category that is only included on land use maps, which are harder to find. If a land use map is not available, arable land can be indicated on a vegetation map but then additional information first has to be obtained from national or international agriculture experts. Also the locations of fishing grounds need to be collected through interviews. Starting from any map showing seas, lakes and waterways, this should be a feasible task.

The important role of fresh water resources in the Israeli-Palestinian conflict is an issue that is being put forward by several analysts (Fig. 13). The mapping tool could convincingly strengthen or refute the assertions made in their reports. When applying the mapping tool to the lasting Middle Eastern conflict, we would have to represent all wells and other water sources in the region on a 'static' map. We could then compare this map layer with 'dynamic' maps showing borders and demarcation lines during the different periods in the conflict. We can, for example, calculate the percentage of territory gained by Israel and compare it with the percentage of fresh water wells located in these areas. In case we find an abnormally high proportion of wells, this would lend support to the hypothesis that the access to water is an important driver of the conflict.

Fig. 13
Applying the mapping tool to the Israeli-Palestinian conflict



b) The presence of danger

Survival can also become a motive for violence when people perceive there is an acute danger of life because of the aggression by others. In such cases, violence becomes a matter of self-defence, which can be a very strong driver of war. Many warring parties claim they fight out of self-defence, sometimes deceitfully. The mapping method is well suited to check such assertions on their veracity.

Producing a separate static 'mortal danger' map is not appropriate because defensive actions are always a reaction to the offensive actions of an opposing group and therefore it is impossible to determine a fixed set of defensive geographical

targets. Defensive behaviour, however, can easily be deduced from studying the dynamic maps. Information from all dynamic maps could be relevant to draw conclusions but the most important is a map that shows the operations and positions of the attacking party. This map allows us to check whether the 'defenders', in their operations, are only reacting to moves from the 'attackers', or also taking the initiative. Where do the 'attackers' launch their operations? Where do the 'defenders' retaliate? What is the position of the bulk of the defending troops? These questions and others are posed while analysing.

People fighting for survival will try to unite, to secure a safe area and to strike at their aggressors in those areas where they suffer the worst attacks or where they risk getting isolated. Additional offensive operations might be executed in other areas to strike at the aggressor's capability or morale but they will only be of secondary importance.

How to come from maps and questions to a set of conclusions is further explained in chapter 3.

Box 1.9

An example of a question on defensive/offensive priorities: the Rwandan Patriotic Front (RPF)

Whether the prime intention of the RPF during their offensive in 1994 was to defend their people against the genocide or to take the power in Rwanda, is a question that has been debated upon among analysts. When the RPF launched its final offensive in 1994, it asserted that it came to the rescue of the Tutsis who were being slaughtered by the Interahamwe militias. If the RPF claims about fighting for the survival of the Tutsi people were true, their military operations should have been concentrated on those places where Hutu militias were active and they should have made an effort to consolidate an area where their people would be safe. These are hypotheses we can check on our maps. A comparison of our maps would reveal, for example, whether the RPF focused on chasing the Interahamwe or on overthrowing the regime. In the latter case, the maps would show that the RPF was focussing the majority of its efforts on the capital of Kigali.

4) Power maps

When making our power map, we will mainly rely on insights from geopolitics. The power of a leader depends on the power of the people and the territory he controls. If, through conquest, a warring party wants to enhance its power, it has to take into account a hierarchy of territorial targets of greater or lesser importance. Below we have listed the geographical features that are relevant to our tool with an explanation of their impact on the existing power relations.

a) Geographical elements that are always relevant (and consequently should feature on every power map)

The most important area of a country: its capital

Within the capital lies the political control of a country. It is, in power terms, the most important area where the legislative and executive power is concentrated. Any attacker that tries to take over the control of a country needs to take control of its capital. Conversely, when a ruling government loses the capital to its enemy, it is most likely the announcement of the government's downfall.

Other centres (vs. periphery)

Every country consists of a centre and a periphery. The centre comprises the most important political and economic zone(s) of the country. The capital normally constitutes the major political centre but secondary centres may exist. The key economic zone of a country is always a region. Once the centre is located, the periphery is simply derived and defined as all other territory. The periphery is always to a certain extent subjected to the power executed by the centre.

Major roads

The major roads of a country's traffic network are its arteries. Effective control over them is necessary to safeguard the mobility and provisioning of troops, the distribution of food and goods and the capacity to trade and tax. When an attacker controls an important part of the road system of a country, he might be able to wear down the incumbent regime. Even if he controls only a smaller part, that will enable him to set up a parallel economy and levy significant taxes. Moreover, he will always disturb the deployment and movement possibilities of the national army.

Strategic zones: isthmi, straits, canals, mountain passes and outlets

There are a number of strategic areas that have been inherently powerful throughout history. Because of their unique geographic characteristics they strengthen the power of those who control them.

An isthmus separates two seas (Fig. 14); it is a strip of land at the crossroads of two masses of land and two masses of water. It is a very strategic area because whoever controls it, controls all passing terrestrial movement.

A strait connects two masses of water, a canal is its artificial counterpart. They have a huge strategic importance because controlling them means controlling all maritime traffic. An isthmus and a canal or strait can exist in the same zone.

When a mountain pass serves as (one of) the sole access(es) to a certain area or as a connection between two areas, it has a comparable importance.

A classic strategic zone that has been the stake of several historical wars is an outlet to international waters. A sea outlet is often strived for by 'enclosed states', states

that are only bordered by land areas. They find themselves in a very disadvantageous situation compared to their neighbours. For transport and trade matters such states are largely dependent on their neighbouring states (who do have access to the sea). Therefore the unlocking of the landlocked country is often very high on the political or military agenda. States can also strive for a second access to (another) sea, because this can seriously enhance their strategic power.

Fig. 14
Isthmus of Panama



b) Other geographic features that might be relevant (and consequently could be added to the power map if necessary)

Features in this paragraph can be as important as those mentioned above. However, whereas the previous features are inherently of great strategic value, the power potential of the following geographic elements is case dependent.

Even when the following types of terrain add little to the power of a territory or state, they can be worth studying because they are often used in strategic ways which can give us additional information on the behaviour and motives of warring parties.

Mountains

Mountains can roughly be divided into two categories. On the one hand there are strategic heights from which surrounding territories can be dominated. Consequently, it is crucial to have a military presence in these areas. Large mountainous border zones on the other hand, often have very little importance in terms of power. They are only useful to regroup or hide. In such remote areas, armed groups tend to operate and survive for many years.

Rivers

In history the control over a river used to be a considerable military and economic advantage. Nowadays its importance for military incursions has diminished. However part of its strategic value has remained since river areas tend to be densely populated (most great cities are built on one or two river banks) and have fertile soil. In places where freshwater has become a scarce resource, rivers are important geopolitical targets.

Resource-rich areas

The control over strategic resources is a central issue in foreign policy around the world. Oil is probably the most infamous example with some writers and journalists even speaking of 'petroleum wars'. However, not all resources are equally important in terms of power and not everywhere to the same extent. On our power map we will only indicate those resources with power relevance.

Deserts

Combatants can use deserts as a refuge area. Therefore troop concentrations and movements in the desert might indicate that the warring party is preparing itself for a protracted guerrilla war. On the other hand, deserts could also be an offensive type of terrain since they allow rapid movements of troops.

Marshland

Marshland is strategically of little value. Throughout history however, it has proven to be one of the most stable types of border. Moreover, as with certain deserts and remote mountain areas, it is often used by warring parties to seek shelter.

Forests

The same could be said of forests. Control over a forest is of little value when the intent is to control a country. Areas with dense vegetation tend to be used as a hideaway for criminal organisations or rebellions on the defence.

Islands

Insular areas are by definition isolated places which makes it difficult to exert control over them. Therefore they are the perfect refuge for rebel movements on the run for the government. Sometimes coastal islands also have a strategic value for offensive purposes because they make a great base of operations for military actions directed at the mainland.

A power map should be based on a basic topographic map of the area on which the elements discussed above can be highlighted. It is important to add a clear explanation for every map element as to why it is important in terms of power.

Most of the information needed to create the power table already exists on maps. However, it is one thing to have a map with the location of all mountains, roads etc., it is another to know which ones are strategic enough to add them to the map. This information is best gathered through interviews with military experts. If that is not possible, other regional experts with sufficient knowledge of the geography of the area can be equally helpful.

Figure 15 shows the table IPIS uses to build its power map.

Figure 15
Power table

Name	Feature	Description
Goma	Provincial capital	Seat of the governorate, trade centre

The power layer will show a mixture of map elements, with highlighted points, lines and polygons.

Box I.10
A special case: election maps

When one observes a systematic use of violence of a state army against its own citizens, it might be worth checking with an elections map whether there are power motives involved.

An election map shows the results of the latest election, preferably on a sufficiently detailed level. Attention should be paid to those areas where the incumbent regime attained the worst result. It may be that the government army is retaliating against those parts of the population that did not vote (sufficiently) for the current rulers and that they are trying to consolidate their power in this way. This can happen in peace, conflict and post-conflict times.

5) Humanitarian intervention maps

There are policy documents that deal with the issue on how a military humanitarian intervention should be organised and executed. The impulse for a military doctrine answering this question was written down in a document called “The Responsibility to protect. Report of the International Commission on Intervention and State Sovereignty” (ICISS). The report is the final product of a number of meetings of an international ‘council of wise men’ initiated by the Canadian government in response to a question from the former UN Secretary General Kofi Annan. According to this document a military humanitarian intervention should be intended to protect populations and not to destroy or defeat the enemy. The basic objective of the operation should be to ‘achieve quick success with as little cost as possible in civilian lives and inflicting as little damage as possible so as to enhance recovery prospects in the post-conflict phase’. The wise men have identified some essential operational characteristics of a humanitarian intervention (Box I.11)

Box I.11

Some operational characteristics of a humanitarian intervention

- The troops are expected to engage in activities such as: arresting criminals, halting abuse, deterring would-be killers etc.
- The intervening forces should honour the principle of 'proportionality' in their use of force and restrain themselves from using unnecessary destructive power.
- It is essential that they stringently observe international humanitarian law.
- The intervening troops should win the hearts and minds of the people. They should demonstrate clearly that their sole interest is to protect the population against ongoing violations of Human Rights, not the defeat of the state.
- They should guarantee the same level of protection for all groups in the war area.
- Protecting the protectors (for instance: the reluctance to use ground troops) must never have priority over the resolve to accomplish the humanitarian mission.

On our maps we should check whether these operational 'directives' are put into practice during a foreign intervention. We do not need to create a new static map with specific targets of a 'humanitarian intervention' for this. Analysing whether humanitarian considerations are an important factor in the actions of an intervening party can be done through studying our dynamic maps. The following elements have to be taken into account:

- The combats in which the intervening party has been involved.

When and where did it take the initiative? Did it use an appropriate amount of force or was it disproportional? Did it use ground forces in the operation? Did it sustain any losses?

- The incidents in which the intervening party has been involved.

Are there reports of human rights violations by the intervening troops? Are they many and how serious are they? How is their human rights record compared to that of the warring parties? Did they arrest any key war criminals?

- The deployment of the intervening party.

Has it been its priority to deploy in areas where the greatest human suffering was taking place? Did it prevent further suffering?

The above elements should also be plotted on an ethnic map to check whether the behaviour of the intervening party is the same towards the different population groups.

To facilitate the analysis, the relevant layers of the dynamic maps can be combined in a single map.

A self-proclaimed humanitarian intervention that fails to abide by the principles described above might be a cover for other war motivations. In the boxes I.12 and I.13 two cases are described of international interventions that have postulated humanitarian considerations for justifying their course of action. It would be interesting to take a closer look at them.

Box I.12

Case: The ECOWAS intervention in Sierra Leone 1998

In 1991 a (mostly) civil war between the government forces and the RUF (Revolutionary United Front) 'freedom fighters' broke out in Sierra Leone. While the latter were backed by the Liberian warlord Charles Taylor, the former were supported by the ECOMOG forces of the ECOWAS (Economic Community of West-African States) mission in Liberia. Throughout the civil war, widespread atrocities against civilians were committed including: mutilation, killing, mass rape, torture and slavery. In 1997 ECOWAS explicitly and the UN implicitly authorised the use of armed force by the ECOMOG troops against the RUF fighters. At the same time, the UN sanctioned an arms and oil embargo against Sierra Leone. Despite a series of diplomatic efforts fighting continued throughout 1998 and 1999. On the 7th of July 1999 a peace agreement with power-sharing provisions was signed in Lome. The civil war continued until 2000 but by then the ECOMOG troops had left the country. ECOWAS advanced several reasons for its intervention/involvement in the Sierra Leone civil war: invitation by the ruling government, threat to international peace and security and humanitarian intervention.

Box I.13

Case: The US and UN intervention in Somalia (1991-1994)

The Somali civil war resulted from the disintegration of the country after the overthrow of the Siad Barre regime in January 1991. In 1992 the combination of a very destructive civil war and a drought led to a terrible famine. Under Chapter VII of its Charter, the UN deployed a small peace keeping force and established an arms embargo. The 500 Pakistani peacekeepers assisted with the delivery of humanitarian aid. They operated with the consent of the most powerful warlords in the region. In December 1992 a dramatic change happened when the Bush administration asked the UN for a mandate to send 30 000 US troops. In resolution 794 and under Chapter VII the UN Security Council unanimously authorised the operation under American command. The preamble of the resolution states that 'the magnitude of the human tragedy caused by the conflict in Somalia, further exacerbated by the obstacles being created to the distribution of humanitarian assistance, constitutes a threat to international peace and security'. Apart from the US and Cape Verde, all signatories advanced mainly humanitarian reasons as a justification for the enforcement operation. The US intervention was rather limited in its scope. It did not tackle the issue of disarming the armed gangs and focussed solely on the distribution of aid. The mandate of the subsequent UN mission however, was much more elaborate. Only 20 000 soldiers strong, the blue helmets were supposed to rebuild the social and political institutions and restore the rule of law. The far-reaching mandate led to confrontations between the Somali Warlords and the blue helmets especially with the powerful and notorious General Aidid. Air strikes by US troops caused many civilian casualties and the international peacekeepers started to lose support from the Somali people. When the first body bags came back to the US and images of a dead Ranger, being dragged through the streets of Mogadishu, were broadcasted all over the world, Western states abandoned the mission.



In the framework of a humanitarian intervention it could be interesting to study the behaviour of relief agencies and other international NGOs. Sometimes international workers need to leave a war area for the intervention to succeed. Because, if they choose to stay, they can become a liability to the operation, if they are taken hostage, for instance. Therefore, relief agencies leaving a war zone during an intervention suggest a certain belief in the intentions and capacity of the intervening forces. NGOs unwilling to leave would indicate the opposite. However, analysing the behaviour of international NGOs in armed conflict is beyond the scope of this handbook.

II. Compiling the dynamic maps

1) Maps with positions

Maps with the army units' positions and movements are essential to the mapping analysis. Obviously the largest troop concentrations need to be investigated, to find out what the troops are fighting for/defending. Furthermore, army positions in unexpected areas require examination and the same goes for the lack of troops in areas where one would expect them.

Both the positions of regular armies and rebel units need to be recorded and added to the maps. They should be as detailed as possible, without obscuring matters. Showing positions at the level of separate companies would be ideal but sometimes such information may not be available and so one has to limit oneself to an analysis at the battalion level (Box II.1). In specific cases, it might be interesting to show even more detail to explain the behaviour of groups of combatants.

Box II.1 Army Structure¹⁶

Squad: Up to 10 soldiers.

Platoon: 16 to 44 soldiers. A platoon consists of two to four squads or sections.

Company: 62 to 190 soldiers. Three to five platoons form a company. An artillery unit of equivalent size is called a battery.

Battalion: 300 to 1,000 soldiers. Four to six companies make up a battalion.

Brigade: 3,000 to 5,000 soldiers. A brigade headquarters commands the tactical operations of two to five battalions. Armoured, cavalry and Special Forces units of this size are categorised as regiments or groups.

Division: 10,000 to 15,000 soldiers. Usually consisting of three brigade-sized elements but this could be more.

The easiest way of working when creating the position maps is to start from an existing diagram on which at least the Brigade headquarters are indicated. Such schemes surely exist within the army/armed group itself but it might be easier to obtain them from a contending party or a neutral force (for example peacekeepers, or military observers). Ideally one can combine the data of different diagrams and create from them a new and improved version. However, most of the time these schematic diagrams will be incomplete and out-of-date. It is therefore necessary to correct them after presenting them to a series of knowledgeable interviewees. When a longer period is spent on the ground, also personal observations could help in producing the maps. If possible the names of the army unit commanders should be added because sometimes the names of units change or commanders are posted to another area.

By tracking the commanders it becomes possible to check whether the behaviour (and motivation) of individual army units is related to who commands them.

Figure 16 shows the table IPIS uses to build its positions maps.

Figure 16
Positions table

Base	Territory	Unit	Strength	Commander
Walikale	Walikale	85th Brigade	Bde HQ / 1 Bn	Col. Samy Matumo

2) Maps with combats

Combats are violent incidents in which at least two of the concerned parties are opposing armed groups. They tell a lot about the objectives and intentions of warring parties. In general, a military unit will not engage in a deadly fight if there is no good reason for it. Therefore it is important to add to the map a short description of each combat with details on the approximate number of soldiers involved, the duration of the incident and the estimated number of casualties.

Data on combats is not hard to come by. Many of the military actions are reported on by the press. However, doubt can be cast on the reliability of such reports. National and local press reports on a war situation are never impartial. The international press, on the other hand, reports only on a limited number of combats and their interest in a certain war area is often short-lived. Moreover, the primary sources for combat coverage are often statements by the government army or by armed groups. Especially the figures they release on casualties are mostly incorrect.

In this respect it is advisable to add the sources of the data on the combats map.

Figure 17 shows the table IPIS uses to build its combats map.

Figure 17
Combats table

Date	Side A	Side B	Place	Territory	Description	Source
08/07/07	FDLR	FARDC (Alpha Brigade)	Mirangi	Lubero	Soldiers ambush pillaging FDLR unit	Radio Okapi

3) Maps with incidents

Other than in combats, in incidents only a single warring party is involved, the other side being civilian. Incidents can reveal the presence of combatants apart from the areas where they are quartered and where they are waging war. They can tell

something about the activities of the soldiers that otherwise would not have been noticed. When producing an incidents map, one should specify for each incident who was involved and what has happened. As with the combats map, it is best to mention the source(s) from which the description of the incident was taken.

The most obvious sources to gather such information from are organisations monitoring the human rights situation in the area. This could be local NGOs, international NGOs, international organisations or individual activists. When using such sources, it is important to distinguish between the incidents they have investigated/verified themselves in the field and those that were only reported to them (unconfirmed incidents)¹⁷.

From a scientific viewpoint, it might be logical to fix a criterion for which incidents should be included on the map (for example only incidents with casualties). However, if an incident helps to build an argument and if it is therefore relevant to the analysis, why leave it out? In fact, the more data on human rights violations or other incidents, the better.

Figure 18 shows the table IPIS uses to build its incidents map.

Figure 18
Incidents table

Date	Perpetrator	Place	Territory	Description	Source
03/08/07	FARDC (3rd Brigade)	Kavumu	Kabare	A Corporal abducts and rapes an 11-year-old girl	OCHA

4) Maps with demands

Away from the battlefield, another important indication of the objectives of a warring party are its territorial demands during negotiations. All peace negotiations at some point include territorial arrangements: the demarcation of (internal) borders, the ceasefire positions of opposing army units, the determination of buffer zones etc. During peace talks the warring parties need to compromise on certain issues. When such negotiations develop, it becomes clear on which issues (areas) the warring parties show the most intransigence. The insistence of a negotiator on retaining a certain geographic area on the one hand, and his willingness to give up another on the other hand, reveals a lot about his motives and objectives.

Collecting information on the proceedings of a negotiation is only possible by interviewing witnesses who are willing to tell tales out of school. Testimonies of representatives from all negotiating parties are desirable as well as the opinion of mediators.

A demands map should include the key territorial concessions and achievements of the negotiating parties. It is useful to add a short description of the concession/achievement and how it came about. Because motives can change, only negotiations that were held within the same period as the data on combats, incidents and positions should be treated.

Figure 19 shows the table IPIS uses to build the demands map.

Figure 19
Demands table

Area	Date	Negotiating party	Outcome	Description
Gorazde	1995	Bosnian Serbs	concession	Milosevic agrees to a corridor linking the Gorazde enclave with the rest of the Federation of Bosnia and Herzegovina.

Chapter 3: Interpretation

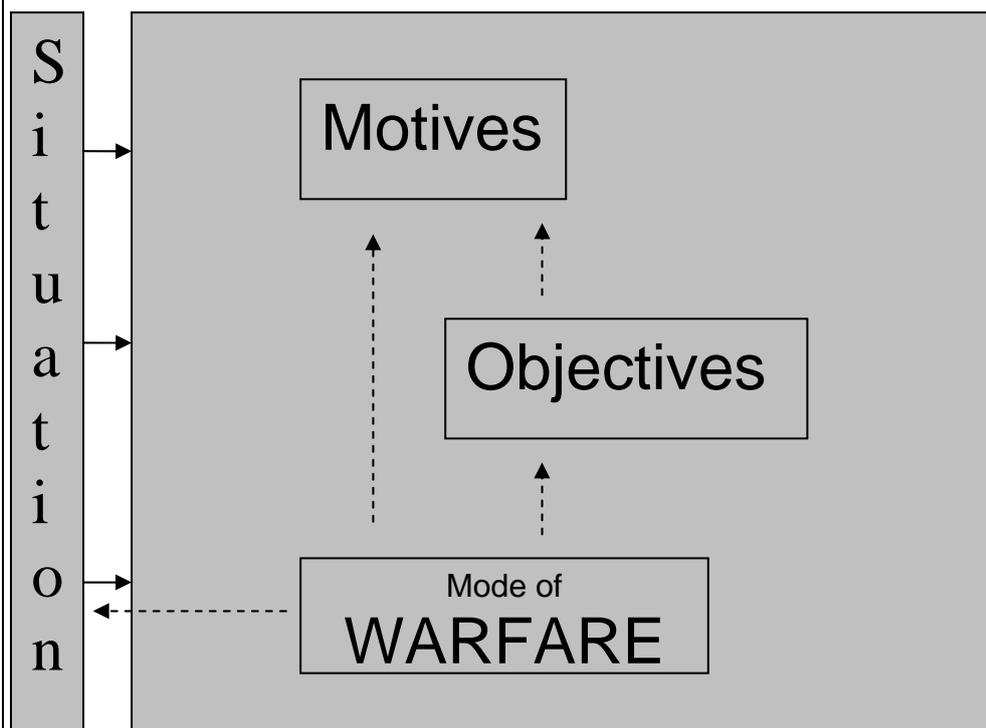
Outline

In the third chapter we will:

- I. Explain how to distinguish the tactical behaviour of armies from behaviour based on their war motivation
- II. Explain how to recognise the different objectives of warring parties and elaborate on the relationship between objectives and motivation.

Having discussed which maps should be created and how, we now turn to their interpretation. Recalling our model (Fig. 3) we distinguish between three factors influencing the mode of warfare: the situation, the war objectives and the war motivation. We will discuss each of them below.

Fig. 20



I. The situation

Each commanding officer of an army or an army unit follows a certain strategy with priorities related to his motivation and objectives. Situational factors however, often impel him to change priorities or to behave in a manner which seems at first sight inconsistent with his strategy. If we want to distil the priorities of warring parties on the ground from their behaviour, we need to understand the impact of military logic and other situational factors.

1) Military logic

Military operations are divided into offensive and defensive actions. Strategy is the logic that binds these actions. It involves the large scale planning, coordination and general direction of military operations. Strategies can range from a very offensive preventive war to an irregular defence or ultimately surrender. Some basic principles of military strategy are listed in Box I.1.

Box I.1

Three basic principles of military strategy

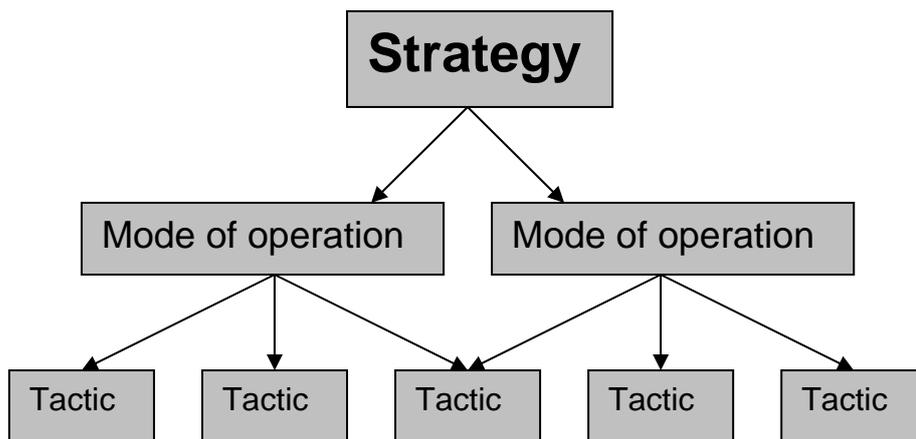
Freedom of action. To be able to choose where and when to fight, an army needs protection of communication lines, unified forces, sound intelligence and secrecy of intentions.

Attack by overwhelming force. When the enemy is much bigger in troop size, an army has to concentrate its forces to create a majority situation.

Maximum efficiency. Cooperation of land, sea and air forces, speed, selection of decisive targets and moments, unity of command etc.

Tactics are the practical applications of a strategy on the field. Although inspired by the strategy and war objectives, factors such as timing, position of the enemy, morale, local terrain, etc. exert a great influence on military commanders when they make tactical choices. Modes of operation are the link between strategy and tactics (Fig 4)

Fig. 21



a) Offensive tactics

When an army applies an offensive strategy, it can choose from two modes of operation, depending on its objectives:

Conquest: the enemy is permanently destroyed and replaced

Attack: the enemy is temporary defeated.

How this strategy is applied depends on who is attacking: ‘David or Goliath’:

David: David normally opts for guerrilla warfare: ‘the tactics of the weak’.

The theory on how to conduct a guerrilla war has been described by a number of writers, but the most influential author since the end of World War II is probably Mao Zedong. We have included his understanding of guerrilla warfare in box I.2. Many contemporary guerrillas are still influenced by his ideas.

Box I.2

Mao “On guerrilla warfare”

“The basic strategy is alertness, mobility and attack, adjusted to the position of the enemy, terrain, communication possibilities, relative strength, weather and situation. Withdraw when he advances, harass when he stops, strike when he is weary and pursue when he withdraws. The strategy of guerrilla war is to pit one man against ten, but the tactic is to pit ten men against one. A protracted war changes from defensive, to a stalemate, to offensive. The enemy will be attacked on its flanks, never in its centre. Compared to the regular army, the guerrilla unit is decentralised and always on the move, operating in the surroundings of the enemy. A guerrilla always has to be seen as complementary to a regular army, it can not be an end in itself. After attacking exterior lines, units make bases and finally extend their war area. Guerrilla warfare is defensive in character and protracted in nature. Surprise and speed are the keys to success.”

The guerrilla tactic has to be seen separate from the communist ideology Mao attached to it. Guerrillas should not be defined by what they fight for, but by how they fight. Their tactics are developed to defeat a ‘stronger’ enemy. Favourable for fighting

a guerrilla war are mountains, marshes and jungle, the possibility to withdraw in neighbouring countries and weak states with few and unorganised troops. Typical guerrilla tactics include:

Hit and run: A quick and short surprise attack by a small group who leaves the place of attack immediately after the action has taken place.

Ambush: attacking a passing enemy from a hidden position.

Human wave attack: several frontlines of infantry attacking one after another.

Goliath: Goliath usually resorts to conventional warfare: 'the tactics of the strong' Conventional warfare by a regular army is completely different from guerrilla warfare. Although interstate warfare has become rather rare, 'conventional' warfare is still practised in many places. Regular armies still occupy, annex or liberate other nations. Typical conventional tactics include:

Frontal assault: a direct attack on the front of the enemy forces

Flanking manoeuvre: an attack on the sides of the enemy forces

Encirclement of the enemy: preparing to attack the enemy from all sides at once.

Attack in the enemies' rear: by parachuting or infiltrating commandos behind the lines of the enemy.

Shock and Awe: the use of overwhelming force and spectacular display of power to paralyse the will of the enemy to resist.

b) Defensive tactics

Commanders often need to have recourse to defensive operations to retain control over crucial territory, to regroup and recover or to prepare an offensive. They can choose between two different modes of operation:

Stopping: to stop enemy forces and keep control over a specific area with the intention to push the attackers back or destroy them

Delaying: the intentional relinquishment of territory to win time, avoid direct confrontation and weaken the attacker

There are several defensive tactics at their disposal:

Defence in depth: the main strength of the defending troops is not in the front but behind the first lines.

Deep defence: defence from bunkers and fortifications

Scorched earth: a form of withdrawal where anything that might be useful for the enemy is destroyed.

Box 1.3

Special tactics

Special operations are often a mixture of defensive and offensive tactics. We give three examples.

Counterinsurgency: a military operation to stop insurgents. The rebels are tracked down, their bases encircled and/or their supplies cut off.

Counterattack: a surprise outbreak from fortifications or while in retreat

Pincer manoeuvre: allowing the enemy to attack from the front but stepping aside to attack him on his flanks

2) Other situational factors

a) Structural

Some factors such as terrain, vegetation, climate or local traditions can have a serious impact on how a war is fought (Box I.4).

Box I.4

Case: Nepal

Structural environmental factors had a significant impact on the way the Nepalese civil war was fought. We give a few important examples:

Climate: During the monsoon, landslides often blocked the roads and both armies had limited mobility. The climate forced both the rebels and the army to practically cease their activities for a while.

Local traditions: During the most important Nepalese festival, the ten day Dashain, a ceasefire was often established. Both sides used this pause to regroup and prepare for new operations.

Terrain and vegetation: In the high north, along the Tibetan border, mountain deserts, high altitude mountains and open terrain make ambushes or even Maoist presence practically impossible. In the south, near the Indian border, lies a large open plain equally unsuitable for guerrilla warfare. However, the largest section of Nepal is occupied by the middle hills, with many roads along steep and often forested hillsides. Such roads provided the perfect setting for the guerrilla tactic of roadblocks combined with surprise attack. The forests, in addition, served as an escape route when the army deployed helicopters in response.

b) Incidental

Each military action is subjected to a set of unpredictable factors. Bad weather, miscommunication, disease, superstition, a small mutiny or sudden impassable roads are just a few examples. At first sight trivial events can seriously affect the operations of warring parties. A sudden sandstorm can even bring the US army to a temporary halt, disrupting its mobility and communication option.

Sources and further reading:

De Vos L., *Inleiding tot de moderne krijgsgeschiedenis* (Brussels, Royal Military Academy, 2000), 160p.

James A.J., *Guerrilla Warfare* (London, Greenwood Press, 1996) 312p.

Zedong M., *On Guerrilla warfare*, 1937 (www.marxists.org)

Teitler G., Bosch J.M.J., Klinkert W. e.a., *Militaire strategie* (Amsterdam, Mets & Schilt, 2002) 525p.

II. Objectives

As we have explained in chapter 1 several war motivations and objectives are connected. Because of these relations it is important to recognise which objectives a warring party is pursuing. When we know these objectives it will also provide us with information on their motivation.

1) Military control

Occupation

Military occupation involves the deployment of regular troops, organised in large units, seizing strategic locations. Occupations are offensive operations. During a first phase they are directed against the major political and economic centres. In a second phase the whole territory needs to be brought under control. A connection route between the different occupied regions is safeguarded, as well as a connection with the homeland or an entry point for reinforcements. An occupying force will establish itself openly and move along the major roads. It will usually advance according to one or several frontline(s).

Liberation

A liberation war can be fought in two different ways depending on whether the liberating armed forces are mainly domestic or foreign. In case the liberation is a purely domestic affair, we could speak of a liberation insurgency. Like all other guerrilla wars, a liberation insurgency will usually start at the peripheries and gradually encroach on the centre. However, unlike other guerrilla wars it is not directed at the capital or a certain region. The main target of the liberation fighters is the occupying troops, no matter where they are located.

When foreign powers come to 'liberate' an occupied country, we usually see conventional warfare with open confrontation along frontlines. Examples are the liberation of Europe during World War II or the liberation of Kuwait from the Iraqi occupation.

2) Territorial change

Annexation and irredentism

Annexation or irredentism always involves military occupation. The main difference between annexation and military occupation is political. We will not observe any difference in military strategy or actions.

Secession

A typical phenomenon indicating **secessionist** tendencies of an ethnic group is the 'gathering in' process¹⁸. Under external pressure, people from the same ethnic background regroup in a certain region which becomes increasingly isolated from the rest of the country. This is exactly what happened in Sri Lanka (Box. II.1).

Box II.1

Case: Sri Lanka (1983-present)

In the late 70's, a climate of violence and mutual distrust between the Sinhalese majority (74%) and the Tamil minority (14%) laid the grounds for an ethnic secessionist war. The riots of July 1983, killing between 1000 and 3000 Tamils, resulted in the military organisation of Tamils in the North and the East of the country. Tamil Tigers (LTTE), proclaiming the political, socioeconomic and cultural discrimination of their people, set an independent Tamil State comprising the North-eastern region, as their ultimate goal. Very soon a guerrilla war developed in the contested areas. Since 1987 suicide bombers have also carried out attacks outside the Tamil regions, mainly in the capital Colombo. When the LTTE grew strong enough, regular army to army confrontations were conducted. The Sri Lankan army regularly deploys sea and air forces, whereas the Tigers can only rely on a small navy and some surface-to-air missiles. While suicide attacks were carried out all over Sri Lanka and even in India, all regular or guerrilla warfare is confined to strategic locations within the territory claimed by the LTTE. The Jaffna Peninsula is the main battlefield. Other strategic locations include harbours, highways and water systems. Tamil Tigers have for example closed the Maavilaru sluice gate, which provides fresh water for 15 000 ethnic Sinhalese living in territory under government control.

3) Political change

Revolutionary war

Building on the earlier works of Marx and Lenin, Mao not only developed their thoughts into a very concrete military doctrine and strategy, he also fundamentally changed the practice of a communist revolution. Instead of starting from the proletariat, Mao, like Che Guevara after him, focused on the peasants as the driving revolutionary force. Despite some local adaptations, there's probably no other country in recent history where Mao's thoughts on revolutionary guerrilla warfare have been practised more vigorously than in Nepal.

Case: Nepal (1996-2006)

For more than 10 years, Nepalese rebels have applied Mao's theory of guerrilla warfare to conduct their revolutionary war. The basic strategy of the insurgents was to hide in forests and small villages. They would move quickly from one place to another, far away from the major cities and roads. At an appointed time, hundreds of them secretly gathered and surrounded a small army barrack, police station or government office in a remote area. By dawn they would start a surprise attack, always outnumbering the enemy by far. By the time Kathmandu could send reinforcements, the place under attack was usually destroyed or seriously damaged. Instead of keeping the place occupied, the rebel army would quickly retreat into the jungle, realising it would be no match for government reinforcements. However, after dozens of these attacks, the army, police and government personnel spontaneously retreated from the villages to regroup in the smaller towns. The vacuum they left was used by the rebels to install their own government, justice and tax system. After they had occupied a large part of the countryside and after the Maoist army had grown strong enough, they started to attack police and army contingents in smaller cities, sometimes with thousands of guerrilla fighters at the same time, seizing large amounts of arms. A notorious tactic was to make road blocks with trees, booby-trap them with small bombs and wait until the army arrived to clear the road. By the end of the war, the Maoists controlled almost 80% of the country. Government control was limited to the capital, its direct surroundings, the major cities and the district capitals. The Maoists were able to isolate the capital from the outside world, causing fuel and food shortages. Finally, organised mass demonstrations in the capital, in close collaboration with sidelined political parties, toppled the royal regime and brought the Maoists into a coalition government.

As the case of Nepal illustrates, the intention of a revolutionary war waged in a guerrilla fashion is to weaken and exhaust the enemy instead of quickly surprising the state leaders (by means of a coup or putsch). It is important to note that the insurgents need at least a minimum level of mass support for their cause.

4) Absence of law

Work in progress

Chapter 4: Presenting the results

Outline

In this chapter we want to:
Provide the reader with some guidelines on how to present the results

I. Written analysis

A separate analysis for each warring party

In a written analysis each armed unit that decides independently on its actions should be discussed separately. Its position and operations should be compared with possible targets on the static maps. It is not always easy to distinguish those units that act independently. Sometimes, separate army units follow orders from their military headquarters but at the same time they regularly act on their own behalf.

An affirmation or rebuttal of each motivation

For each motivation, it should be checked whether the maps provide any evidence on its relevance. The geographic arguments sustaining or refuting the hypothesis that the motivation plays a certain role should be stated clearly.

Arguments that refer to maps

Throughout the written analysis one has to refer permanently and clearly visible to the maps that sustain the argumentation. This can be done in several ways. For example, the reference to the maps can be added within the text between brackets. It is even clearer, however, to list the maps in a separate column beside the main text.

II. Oral presentation

Work in progress



“This project is funded by the European Union and the Belgian Ministry of Foreign Affairs. The content of this project is the sole responsibility of IPIS and can in no way be taken to reflect the views of the European Union or the Belgian Ministry of Foreign Affairs”



Endnotes

¹ Since less than 10% of current wars are between states most of the recent research focuses specifically on the causes of civil wars. As explained under paragraph 2 of this chapter, we will not use this distinction throughout the handbook.

² Keen D., *The Economic Functions of Violence in Civil Wars*, Adelphi Paper No. 320 (London: IISS, June 1998), pp. 1-88.

³ Horowitz D., *Structure and Strategy in Ethnic Conflict* (Washington, D.C.: Paper prepared for the Annual World Bank Conference on Development Economics, April 1998) 42p.

⁴ Agnew J., *Geopolitics. Re-visioning world politics* (London: Routledge, 1998) 150p.

⁵ Most importantly the articles 39, 40, 41 and 42.

⁶ Gray C., *International Law and the Use of Force. Fully updated second edition* (Oxford: Oxford University Press, 2004), 334 p.

⁷ Singer D. & Small M., *The Wages of War, 1816-1965: A Statistical Handbook* (New York, John Wiley and Sons, 1972), 428p.
<http://yearbook2006.sipri.org/>

⁸ There is a growing number of researchers who consider the distinction of minor relevance. The 'spill over' effects of internal conflicts are one reason but it is also important to note that currently less than 10% of the wars worldwide can be considered as 'pure' interstate wars. Not only do analysts deem the distinction less important, they also find it less and less desirable because it has a negative impact on the will of outside parties to interfere/intervene.

⁹ Collier P., Hoeffler A. & Söderbom M., *On the Duration of Civil War* (Oxford, Centre for the Study of African Economies, 2001) 32p.

¹⁰ Buhaug H. & Gates S., "The Geography of Civil War," *Journal of Peace Research*, Vol. 39, No. 4 (2002), pp. 417-433.

¹¹ We analyse the results of overlaying these maps by making use of GIS software (Geographic Informations Systems). A GIS is a computer system capable of integrating, editing, analysing and presenting geographic information. By combining such spatial with non-spatial data, a GIS is a powerful analytic tool.

¹² Example taken from: Spittaels S. & Hilgert F., *Mapping Conflict Motives: Eastern DRC*. IPIS report, March 2008, p. 30.

¹³ Gilmore E., Gleditsch N. P., Lujala P., & Rod J. K., "Conflict Diamonds: A New Dataset," *Conflict Management and Peace Science*, Vol. 22, No. 3 (2005), pp. 257-272.

¹⁴ Source: Groubner C., "*Drugs and Conflict*," GTZ publication, 2007, 36p.

¹⁵ <http://isferea.jrc.it/index.html>

¹⁶ Source: <http://www.militarydial.com/army-force-structure.htm>

¹⁷ Usually, when human rights organisations report on incidents they have not verified, they use the words 'allegedly' or 'reportedly' at the beginning of the description.

¹⁸ Horowitz, *Ethnic groups in conflict*, 2001 in Mason, *Structures of Ethnic conflict: revolution versus secession in Rwanda and Sri Lanka*, 2003.