War, law and technology

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My gratitude towards these people is only exceeded by my love and respect for them.

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Chapter V: New Ways of Warfare

Chapter I
Introduction

§1 War, Weapons, Law

A world without war is easy to imagine, hard to realize and impossible to remember. Mankind wages war. Waging war with bare hands alone has been out of style for millennia. Human fascination with warfare and weaponry remains relentless. The creativity, effort, time and resources spent on improving weaponry are impressive and constant. Luckily, man is not a cruel, immoral, and sadistic animal only putting its efforts into increasingly clever ways of applying force. Soon after the first wars came the first rules. From 1868 onwards,[1] the process of codifying rules of warfare and making them written laws of war started. This was done by convening States from all over the world and allowing them to agree on what those rules should be. These codified rules of warfare are now known as the 'modern laws of war'. This book evolves around the question whether the changed ways in which war is fought, as far as technological innovation spurs them, require a reform of those laws of war.

§1.1 The Laws of War

The laws of war are a peculiar area of law for a good number of reasons. As Sir Hersh Lauterpacht has it: 'If International law is … the vanishing point of law, the law of war is … at the vanishing point of international law'.[2]

First, the laws of war seek to regulate actions for situations in which the human beings involved are under immense pressure. War is literally a matter of life and death and the degree of compliance with the rules is often directly related to casualties: the total number, the division between parties and between combatants and non-combatants.

Second, the principles of the laws of war apply to all fighting parties, regardless of their own consent. Third, they have to be enforced by the same actors the law seeks to regulate, since there is no independent enforcement mechanism (yet).

Fourth, while prosecution of individuals *post facto* can be done, remedying an ongoing wrong often means more violence.

Fifth, the basis of validity of the laws of war has shifted from reciprocity to universal validity, while the laws themselves have remained fundamentally the same.

Sixth, the main actors in warfare have changed from States alone to a broader number of State and non-State actors, while the laws of war themselves have remained fundamentally the same.

Seventh, the margin of diversity in strength, opinion, number and technological advancement between fighting parties has increased tremendously, while the laws of war themselves have remained fundamentally the same.

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1 In 1868, codification started with the St. Petersburg Declaration. This will be elaborately discussed in Chapter II.

2 H. Lauterpacht, 'The Problem of the Revision of the Law of War', in: *British Yearbook of International Law* 1952, 29 (360), pp. 381-382.

§1.2 Change

Although warfare has been a constant presence in history, the way war is fought has changed over time. Even when restricting ourselves to the relatively short time span between the start of the modern laws of war in 1868 and our current day and age, significant changes have been witnessed. The classical model of two large armies marching toward each other and ultimately clashing on a wide open field far from civilians can be recognized to a certain degree in late 19th century warfare, but has little resonance with the current way in which war is predominantly fought. We can witness two main trends that are driving the fighting parties away from the classical model of open confrontation.

On the one hand, there are more technologically sophisticated parties choosing to fight from a distance. Laser-guided precision weaponry, high altitude bombers, remote controlled unmanned vehicles, a low acceptance level of one's own casualties in the public's eye and the strategic benefit of an opponent not having such sophisticated weaponry all tempt and make it possible to fight from a distance. This might very well be in the best interest of the fighting parties, but has not served the fundamental aim of the laws of war to minimize (civilian) casualties well at all.

On the other hand, there are fighting parties without this arsenal of sophisticated weaponry. They have solid grounds to do all they can to avoid an open fight. The opponent's high-end technology in the fields of reconnaissance and precision striking leaves them little option but to fight covertly. If, from a humanitarian point of view, one is lucky, these fighters have natural cover to hide behind: mountains, jungle, forests. However, in our day and age the cover found is often man made, often in highly populated urban terrain, and often among civilians. This might very well be in the best interest of the fighting party, but has not served the fundamental aim of the laws of war to achieve a clear distinction between combatant and non-combatant well at all.

The laws of war have undergone a similar development: from an open balance between two fairly comparable fighting parties to a focus on itself as a legal system. Traditionally, the modern laws of war were agreed to by States (and thus the potential fighting parties) themselves and its validity was based on reciprocity. One should not breach the laws of war since it entitles one's opponent to 'breach back'. Regardless of all diverging interests between fighting parties, they shared a common interest in having one's opponent adhere to the laws of war. Upholding those laws oneself was considered a reasonable price to pay.
All wars, unfortunately, produce incidents of breaches of the laws of war. The Second World War proved to be a prime example of this. It led to a significant shift in the approach taken towards responsibility in the laws of war. The laws of war no longer had a sole focus on States, but turned towards individual responsibility. Man was no longer willing to accept humanitarian atrocities. With regard to the laws of war, the underlying notion of reciprocity was replaced by universal validity of the laws themselves. Following this logic, the right to 'breach back' was terminated as

well by making reprisals no longer acceptable. This might very well appear to be in the best interests of mankind and of the laws of war, but has not served the fundamental aims of the fighting parties well at all.

Finally, the field of weapons technology also contributed significantly to changes in warfare and its relation to the laws of war. When the modern laws of war emerged, it was partially spurred by the large technological innovations of the time. Industrialization of society and mechanization of warfare increased the scale, speed, and kinetic force applicable to and in warfare. Technological innovation's crucial impact on the way war is fought has certainly not ended there, as the speed and progress of innovation itself has accelerated. Although industrialization and mechanization at that time dramatically widened the options available to those waging war, it looks in hindsight to have been a relatively modest development in the evolution of warfare. The laws of war offered principles by which the conduct of military actions at the time could be guided with the feasible options in mind. Within the margins of probability, standards were agreed to. However, over time, innovations have widened the margins of possibility and probability immensely. Except for prohibiting occasional, specific new means and methods of war, the modern laws of war regulating means and methods of warfare rest on the same basic principles they did when they were first drafted. With the margins widened and the principles the same, much more conduct is possible within the realms of legality. Within those margins of acceptable conduct, different humanitarian outcomes are possible and one might wonder whether, by making the laws of war more stringent, some of the fruits of technological innovation might be utilized for humanitarian benefits. As said, technological innovation has made things possible that were unimaginable at the starting point of the modern laws of war. This might very well be in the best interests of the fighting parties, but has not served the fundamental aims of the laws of war well at all.

§1.3 Simple complexity

In summary, for as long as there have been people, there has been fighting. Weapons soon followed the fighting, as did principles and rules. Organized forms of living together also developed rapidly. Over time, as organized ways of living emerged, fighting became war and rules became laws. The three basic elements of this book -war, weaponry and law- are thus fundamental to mankind and familiar companions to our history. This is not a shocking revelation; it is a quite simple, basic fact. It is also one of only two simple facts within this book; the other being that -with regard to war, weapons and law- everything else is rather complex.

All three elements are in constant flux. War is waged for different reasons, between different kinds of parties, and with different definitions of what constitutes 'victory'. Part of the reason warfare constantly changes is the constant innovation taking place in weapons technology. Law changes because changed circumstances demand different rules to safeguard the same principles. Law also changes because, over time, norms change and/or geopolitical power shifts to parties with different

standards from those set before. Warfare and technology in turn are adapted to comply with the laws of war. In sum, the main elements analyzed in this book constantly dance around each other in a complex choreography.

§1.4 The book

This book aims to analyze the way the laws of war and its effectiveness are affected by changes in actual warfare as a result of the main developments in weapons technology and military doctrine. By military doctrine I mean the entire political-military command structure ranging from a nation's grand strategy to field instructions for soldiers. Furthermore, I will discuss to what extent negative outcomes are caused by the changed ways of warfare and to what extent they are inherent to the system of the laws of war. Finally, it will offer some thoughts on the roots of the issues and potential directions in which one may go to find some answers to these questions raised within this book.

Each of the elements technology, warfare, doctrine, and law can be complex in its own right. Studying their interplay does not make them easier to understand. The choice to keep the book limited in its length has resulted in a work with a high density of information. My aim as author is to spur the thinking processes of the reader, not just to lay out my own. Hopefully, my efforts to stimulate will be more successful in provoking thought than in being merely provoking. The latter has never been the intent.

§2 Focused approach

Due to the complex nature of the topic, its main elements, their interplay and the numerous other factors influencing the matter, it is impossible to cover all issues in detail. Choices have to be made and a focused approach has to be taken. The focus of this book lies on the laws of war. As the author is a lawyer, this hardly comes as a surprise. The modern laws of war are subject to analysis and discussion. The circumstances under which they were drafted, the interpretations of their phrasing, the difficulties in applying them and the inherent tensions they show are all analyzed as aspects of the modern laws of war in the first part of this book. This mainly seeks to address two issues; the extent to which current dissatisfaction with the laws of war is due to the way in which the laws of war themselves are constructed, and secondly, the extent to which the dissatisfaction arises from irresolvable tensions inherent to the process of regulating warfare with international legal rules.

When this analysis of the modern laws of war is made, it can be used as the foundation for further analysis and discussion. This further analysis focuses on the most pressing changes in warfare occurring at the moment (in my humble opinion at least). The determinative factor in whether or not current developments are taken into account, next to their importance, is whether or not a technological innovation lays at their root. The filter is applied because new weaponry and subsequent changes in methods of fighting demand the attention of the laws of war. If a change

is perceived as negative, it is a human and logical response to direct complaints to the agents of that change. Furthermore, weapons attract a lot of attention due to the fact that they offer the most visible component of the violence applied in war. Finally, the omnipresence of technology in modern society means that many changes in current warfare have some technological innovation at their root.

This discussion of technology as a filter should not lead to the assumption that the second part of the book offers an analysis of weapons technology. It offers an analysis of changes in warfare due to technological innovation and only insofar as they are related to the basic (moral) principles protected by the laws of war. The end goal is to see whether the principles of the laws of war benefit from the changes in warfare or are harmed by them. It also allows us to investigate whether practical issues arising from non-compliance stem from new technology or from inherent tensions within the laws of war. The aim is to explore whether there are potential solutions and if so, in which direction they can be found.

§3 Research and rescue

§3.1 The Question

This paragraph lays out the research question and methods of research used. It 'lays out' rather than 'justifies' as this research merely offers -hopefully relevant, well underpinned, convincing and valuable- thoughts and does not claim to reveal an ultimate factual truth. The consequences of the introduction of certain weaponry and changing ways of warfare cannot all be foreseen. The effects of types of regulation on actual warfare cannot be tested in a laboratory under controlled conditions. Furthermore, the laws themselves change the conditions they aim to regulate, making it impossible to test their effects in a vacuum. All in all, it is impossible to treat this subject matter 'scientifically' in the sense of searching for an ultimate truth or fact of nature. It is possible to analyze the subject matter 'academically', that is: well-informed, open to new ideas while respecting the established base of knowledge, with a critical eye to all statements -including one's own- and with openness towards the sources used and ideas leaned on.

As with most research, the perspective changes as knowledge progresses. One might find answers different than expected, possibly rephrasing the question as one discovers more relevant notions to the subject matter. It is therefore quite common to rewrite the research question and present it as if it has always been the original topic of investigation. I, however, will not be following such a process and will show the evolution and change itself. At the start of the research the question was phrased as follows:

> *Does the Revolution in Military Affairs make reform of the current* ius in bello *desirable or necessary? If so, what are the main challenges that the reformed* ius in bello *should meet and how can it meet them?*

During the research, a few elements of the question were changed. First, the term 'Revolution in Military Affairs' turned out to be, as often with catchphrases, not highly suitable for academic purposes. As will be discussed in more detail in Chapter V, there seem to be almost as many interpretations of 'the RMA' as there are authors using the term. Furthermore, one can wonder whether there were more RMA's or no 'revolution' at all.
Replacing the term with 'weapons technology' would fail to cast the net wide enough. Weapons technology in itself is not the relevant factor, but rather its use and the way in which it changes warfare. Taking all this into account, I come to the following research question to be answered by this book:

> *Do the changed ways in which war is fought -instigated by technological innovation- make reform of the current* ius in bello *desirable or necessary? If so, what are the main changes in warfare challenging the* ius in bello*, what challenges do they pose and, if possible, how can the* ius in bello *meet them?*

In sum, the research itself has brought about new insights that led to changes in the original research question. However, the changes are relatively modest and one can recognize the core of the work done in both research questions. The first version shows the thought inspiring the research, the second already shows a glimpse of its fruition.

§3.2 The Answers

Now that the research question has been established, it is time to start offering the answers. However, it might be interesting to take a moment and look at how those answers were arrived at.
The assumption underlying this work is that it is necessary to first look at the laws of war themselves before one can judge the way they are influenced by practical changes in warfare. Only when the strengths, weaknesses, dilemma's and tensions already present within the laws of war are understood, it is possible to understand what changes in the way war is fought might mean with regard to the laws of war. Otherwise, one might fall prey to attributing certain issues to the influence of technological innovation when such an issue might as well be an inescapable element of the laws of war in general.
The body of the laws of war is varied and extensive. This book will not discuss them all. A selection has been made based on the relevance of the rules with regard to regulating (the use of) weapons technology. Appendix B contains an overview of the relevant laws of war taken into account when writing this book.

The regulations are not only scrutinized individually, but are also analyzed as a collective. A number of striking, recurring issues are distilled from that analysis and discussed in further detail. This work is necessary for us to be able to separate which tensions are inherent and perhaps even irresolvable; which tensions were laying dormant within the laws of war and have been brought to the fore by current

developments; and which tensions are truly new and created by current changes in the way war is fought.

This extensive analysis of the modern laws of war regulating (the use of) weapons technology paves the way to confront them with current changes in the way war is fought. As has been said, individual weapons or weapons systems are not the subject of discussion. Only when innovations in weapons technology bring about substantial changes in the way wars are fought are they taken into account. The focus of analysis lies on warfare's most substantial changes, reasoning that laws regulating an activity can be influenced and might need correction when that activity changes substantially.
Finally, it may be helpful to know that a choice has been made to focus on the principles underlying the laws of war, not on detailed aspects of the individual rules themselves. As such, this book does not contain recommendations for adaptation of specific rules and suggestions for how those new rules should be phrased. When starting the research, I did not think that current tensions were the result of the imperfect drafting of rules and could therefore be overcome with a quick fix. Conducting the research has actually strengthened this point of view. The laws of war do represent more than mere documentation and do indeed have a tangible effect on the practice of warfare.

§3.3 Method

When studying international law, military practice and academic writing on the relevant matters, there is no clearly defined methodology. There are no laboratory tests, no quantitative data analysis, and no cast iron laws to predict what the human response will be to regulation A or changed practice B. There are, however, sound reasoning, logical thought, collective wisdom, shared intelligence, and a considerable variety of creative brains working in the area. This work is built on these resources as presented in academic books, articles, presentations, discussions, seminars, symposia, discussions, talks, field reports by NGOs, journalistic accounts, evaluations carried out by the military, relevant statements by fighting parties, legal rules, the minutes of the proceedings leading to those rules, and subsequent commentary on them.

Part I of the book -the analysis of the modern laws of war- is based largely on the proceedings, commentary, drafts and Articles of the Hague Conventions. These Conventions turned the basic principles of the laws of war into a written document agreed to by a Convention of delegates from all over the world. In addition, all subsequent, relevant laws of war, the rules themselves, proceedings, commentaries and academic works on them have been researched.

Part II of the book connects current developments in the way war is fought to the legal analysis offered in Part I. I do not pretend to have become an expert on warfare, doctrine and technology. For those elements of the book, I have mostly referred to the studies available in the area. I rely on the work of esteemed colleagues and

academics who have shown significantly more brilliance in the subject than this book contains. A wide variety of aspects of modern warfare have been studied, from asymmetric warfare to artificial intelligence, from nanotechnology to weapons of mass destruction, from precision to risk aversion, from biological weapons to warfare through telepathy. Rest assured, not all these topics studied have made their way into this book. However, in order to make a good selection, much more has been studied than has been written about. When determining which elements are and which are not taken into account, the following questions have been of particular importance:

- is the current development instigated by technological innovation?
- does the current development substantially change the way war is fought?
- if so, does that change influence the degree to which a fundamental principle of the laws of war is upheld in practice?

Only when all three questions can be answered in the affirmative is the issue studied in this book. An example of a perhaps less obvious development within this book is the notion of casualty-transfer warfare. The technological instigation lies in the fact that technology makes it possible to increase the distance between attacker and target while remaining militarily effective. The dominant notion of large distance warfare (with remote control enabling the distance to be half the globe) substantially changes the overall picture of warfare. Previously, the only option was to place soldiers in the field. Their proximity to the target aided attempts to attack discriminately and abide by the laws of war. Today, policy makers and high echelon military have a much broader range of options including many effective over large distances. In practice, these choices heavily influence the resulting level of non-combatant death and destruction. This puts great pressure on perhaps the most fundamental principle of the laws of war: the duty to discriminate between combatants and non-combatants and to spare the latter as much as possible.
On the other hand, two perhaps more usual suspects -chemical and biological weapons- are not as such part of this analysis. Though the first selection question is answered affirmatively, the second and third are not. When a party chooses to use chemical and/or biological weapons, it is mostly done in the fairly conventional sense of striking an area. Whether one does this with biological, chemical, nuclear weapons or just a very large conventional bomb, the method of warfare is the same. The doom scenarios surrounding chemical and biological weapons are horrible, but as yet, not very realistic. Weaponizing these threats effectively is still a big obstacle. As long as real warfare is not changed substantially, the issue is not highly influential today. With regard to their legal merits, it is hard to envisage use of chemical and biological weapons in a way that does not breach the principle of unnecessary suffering and/or discrimination between combatants and non-combatants. Chemical and biological weapons do pose a horrible threat to mankind, but do not pose a tense issue with relation to the principles underlying the laws of war.

In sum, after having conducted extensive research in numerous fields claiming to be relevant to crucial changes in current warfare and weaponry, and having made a

careful selection based on the criteria mentioned above, a number of issues have been analyzed in greater detail and the analysis included in this book.

§3.4 Standing on Shoulders

As said, the book – especially its second part – stands on the shoulders of work from other authors; some giants, some giants to be. However, for as much research as there is available on all the aspects studied and analyzed separately, there is as little available on the subject as a whole. Connecting the themes of warfare and technology has been often done. Writing on threats to upholding the laws of war is plentiful. Reviews of the current laws of war assessing the current legality of the use of new weapons technology are easy to find as well. However, overviews combining all those elements like this work does, are harder to come by.

In addition, several authors have laid down their view on what the main trends in developing warfare are. Breemer specifically mentions the rise of smaller specialized forces, casualty aversion, precision weaponry and non-lethal weapons.[3] All of these aspects are analyzed in this book as well. Dunlap Jr. discusses precision weaponry, the increasingly complicated position of non-combatants, dual use high end technology crucial to warfare, shared tendencies of unconventional fighting parties in asymmetric warfare, privatization, and space warfare.[4] Except for the latter two, these topics are also elements in this book. The largest distinction between their work and mine is the central role the laws of war play.

The closest connection can be made to the impressive work done by Michael Schmitt as laid down in several articles and academic papers. The main developments he discerns are increased distance in warfare, precision weaponry, urbanization of warfare, unmanned systems, non-lethal weaponry, asymmetric warfare, increasing difficulty in discerning combatants and non-combatants, cyber warfare, privatization of warfare, weaponization of space, and the merging of technology and the human body and mind.[5] Apart from the latter three, all of these developments form recurring themes within this book. Schmitt discusses the military aspects and their history in greater detail than I will do. This book pays more attention to the evolution of the laws of war.

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3 J.S. Breemer, 'War as We Knew it: the Real Revolution in Military Affairs, Understanding Paralysis in Military Operations', Center for Strategy and Technology, Air War College, Air University: Maxwell Air Force Base, 2000, pp. 13-21.

4 C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999.

5 M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005; M.N. Schmitt, H.A. Harrsion Dinniss and T.C. Winfield, 'Computers and War: The Legal Battlespace', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2004; M.N. Schmitt, 'Humanitarian Law and Direct Participation in Hostilities by Private Contractors or Civilian Employees', in: *Chicago Journal of International Law* 2004, 5 (2), pp. 511-546.

Of course, the fact that authors share a vision on developments and view them from the same angle does not necessarily imply that they reach the same conclusions. To what extent the conclusions overlap and differ will be clarified throughout this book.

§4 Guide for reading

Readers come, hopefully, in all cognitive shapes and sizes. Depending on one's knowledge and time available to read this work, several reading approaches can be taken to suit different preferences. In service, I offer an overview of the Chapters of the work and their contents, first a note to the adventurous readers who start this book without any knowledge of the subject matter.

Readers entirely new to the subject might find it beneficial to continue reading at a slightly unusual place in this book: an appendix. Appendix B contains a plain overview of the laws of war relevant to the subject matter of this book. Before reading Chapter II in which they are discussed, one might glance at the rules themselves in order to avoid immediately being treated to my analysis of them. Other than this, readers new to the subject are advised to read the book in the order it is presented.

The second Chapter of the book contains an analysis of the laws of war insofar as they are relevant to its subject matter: (the use of) weapons technology. The regulations are scrutinized to test their solidity, their clearness, their room for interpretation and to uncover whether the practical outcome of the rule actually suits the purpose with which it was drafted. This is done in the order of the date of origin of the regulation. With this approach, developments within the laws of war over time can be witnessed, and recurring principles and issues distilled. Some cases are studied in a more elaborate fashion. These are the ones in which important issues come to the fore in a particularly illustrative manner.
The Chapter concludes by presenting an overview of the most striking features of the modern laws of war insofar as they are relevant to the focus of this book. Also, a number of general theories and/or observations of my own will be offered, analyzing in greater detail the reasons for the most striking tensions and the degree to which they are irresolvable.

The third Chapter is relatively short and offers a brief discussion on the place of the laws of war in the complex interplay between doctrine, technology, and law. This is designed to remind ourselves of the fact that a perfect reality constructed by legal norms on paper is not sufficient to guarantee perfect practice.

Chapters four and five deal with the current developments instigated by weapons technology that change the way war is fought. The developments themselves, their origins, the way they are instigated by technology, and the way those developments themselves change the way war is fought are all discussed. An analysis is then offered examining the extent the changed way of warfare benefits or threatens

practical compliance with the fundamental principles of the laws of war, and whether the current laws of war are still appropriate to the changed practice.

Chapter four deals with perhaps the most discussed feature of current warfare: the dominance of Asymmetric Warfare. As is discussed in Chapter four, some degree of asymmetry has always been present in warfare. The label might not be the best semantically, but being the catchphrase phenomenon that it is, it is now impossible to think of discussing modern warfare without it. Chapter four does indeed discuss it by focusing on the changes in current warfare brought to bear mainly by the 'unconventional' fighting party.

Chapter five brings us into more high-end technological spheres. It discusses the way modern warfare is changed by precision weaponry, unmanned systems, increased distance between attacker and target, cyber warfare, non-lethal weapons and the consequent phenomenon of casualty-transfer warfare -perhaps better known by the euphemism 'risk aversion'.
Chapter six contains the conclusions drawn from the research conducted. The conclusions will not offer concrete suggestions for altering the specific text of Articles within the laws of war. They will offer thoughts and opinions on where the largest issues, tensions and problems lie and what lies at the root of their existence. Suggestions are given and conclusions drawn on the laws of war as a whole in regard to the changed ways of warfare analyzed in Chapters four and five, while taking into account both the role the laws of war can play as discussed in Chapter three and the inherent issues within the laws of war themselves as examined in Chapter two.

§5 Good Readance

This book offers an overview of tensions within the laws of war, and between the laws of war and changed ways of warfare. It will deal with warfare regarding its major general changes and with the laws of war with respect to their fundamental basic principles. Nonetheless, the book is not meant to be highly theoretical or abstract. The work's aim is to serve both the academic world as well as the (military) professional facing the dilemma's discussed within these pages in practice. Without giving away too much from the conclusions, it can be said that the laws of war will never lead to humanitarily perfect practice, but it is realistic to maintain hopes that the laws of war have the ability to diminish human suffering. The possibilities of how this might be stimulated can be read within the remaining pages of this book.

Chapter II

The Laws of War

§1 Origin of the modern laws of war

This book is about the modern laws of war and their strengths and weaknesses with regard to the changes in warfare instigated by developments in weapons technology. But what are the modern laws of war? From which point on do we call the rules and regulations governing warfare 'laws' and refer to them as 'modern'? Although relevant, debates surrounding these particular issues are not the primary concern of this book. Its aim is to discover whether the modern laws of war still do a satisfactory job in regulating warfare. As such the term 'modern laws of war' in this work is fixed to refer to all laws of war created in or after 1868.

This begs the question: why 1868? In pinpointing a moment of origin for the modern laws of war, one is either open to accusation of arbitrariness in ignoring alternatives, or to falling victim to infinite regress. So, before I explain why I have chosen 1868, let me grant the critics their point: yes, there are (key) moments in history before 1868 that were important (crucial even) to the development of the laws of war. There are other points in history that one might build a strong case around. However, the arguments for 1868 are compelling.
The St. Petersburg Declaration of 1868 forms the first regulation of specific weapons technology with major international backing. Furthermore, it served as an appetizer for the Hague Conventions of 1899 in several ways. First, the mode of regulation chosen at St. Petersburg stood as a model for the approach adopted later at the Hague Conventions. Second, there are striking similarities between debates at St. Petersburg (and later at The Hague) and those involving current issues. They underscore the eternal dilemmas afflicting those trying to reach agreement on the regulation of weapons technology and warfare.

Having established what the 'modern laws of war' are, this Chapter will subsequently offer an analysis of their merits, challenges, trade-offs and pitfalls. Initially, I will discuss the regulations separately. For guiding purposes, a chronological overview of the regulations themselves can be found in appendix B. Some of those regulations and their history are analyzed in greater detail since they offer interesting case studies exemplary to recurring issues throughout the laws of war. To conclude the Chapter, I will draw some general conclusions regarding the fabric of the laws of war system and a handful of its striking characteristics. This offers increased insight into why and how the laws of war are challenged by current developments in the way war is fought (as will be discussed further in later Chapters).

§2 Declaration of St. Petersburg 1868[6]

§2.1 Context

The root of the St. Petersburg conference lay with Russian concerns about the effect of 'explosive projectiles'. Although widely used in the Russian army for several years, the latest improvements in the field of 'explosive projectiles' posed such a great danger to their own troops that the Russians preferred to stop using them altogether.
At the conference, the Prussian delegation suggested a broadening of the scope of deliberations. The Prussians wanted the Declaration to deal with military use of scientific discoveries in general as well as a larger variety of projectiles.[7] Britain and France, leaving the scope of the Declaration quite narrow and technology-specific, in turn significantly shortening the life span of the Declaration, however, blocked this proposal.

§2.2 Outcome

The Declaration contains a few issues that we encounter repeatedly in analyzing and critically assessing the modern laws of war.
The rule posed by the Declaration itself does not constitute its most significant contribution to the laws of war. This rule has proven to be too technology-specific and selective to stand the test of time. It is in the abstract, broad, non-specific (vague even) considerations preceding the rule that the Declaration offers significant influence.

Merits
The St. Petersburg Declaration has great merit in two different ways. First, the Declaration forms the starting point for later international conferences that resulted in the regulation of warfare. It paved the way for the 1899 Hague Conventions and familiarized the participants with the idea of regulating warfare through international agreements involving a large number of member States.
Second, the Declaration played a significant role in setting the tone of the modern laws of war. The non-binding general principles preceding the rule have proven to be very influential. Some of these principles were, in later agreements, even promoted to the level of binding rules. As an example, the familiar principle of the prohibition of 'unnecessary suffering and superfluous injury' can be found in the Declaration, which states:

[6] The St. Petersburg Declaration can be seen as the first substantial international agreement on the prohibition of specific weapons technology. Sixteen States convened in St. Petersburg at the invitation of Tsar Alexander II (reigned 1855-1881) and by 1969, nineteen States had signed the Declaration.

[7] A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 53.

> That the only legitimate object which States should endeavor to accomplish during war is to weaken the military forces of the enemy;
> That this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;
> That the employment of such arms would, therefore, be contrary to the laws of humanity[8];[9]

Criticism

This first document from the modern laws of war deals with weapons technology directly. It also shows us immediately the legislative pitfall regarding such regulation: the risk of being too technology-specific. At first glance, it might seem that the drafters succeeded in describing the projectiles concerned in a somewhat broader manner. In other words: they did not just mention the name or type by which the projectiles were widely known. The description of the projectiles focuses on their effects (being explosive), complemented with an alternative description of the composition of certain projectiles (charged with fulminating or inflammable substances) and a general restriction to the types of projectiles covered by this regulation (of a weight below 400 grams).

However broad this framing of the regulation might seem, it was still too specific to keep pace with the increasing speed of development affecting weapons technology. Of course, one might point at the intention of the regulation. One might construct a solid reasoning by analogy to extend the reach of the St. Petersburg Declaration and include new types of weapons technology. However, in times of war States tend to interpret rules limiting their actions in restrictive fashion. Restrictive to the scope of the rule that is, not to their own actions.

More generally speaking, when it comes to the laws of war, 'it can reasonably be interpreted to cover' is not enough. If a rule leaves room for interpretation according to which certain (use of) weapons technology does not fall within the scope of that rule, chances are that it will be considered allowed in practice. Even if such an interpretation seems less logical or reasonable than more limiting alternatives.

Conclusion

In conclusion, the greatest merits of the St. Petersburg Declaration lay in the process that led to it and in the general principles stated to support the rule, rather than in the rule itself. The conference and Declaration can now be seen as a successful 'pilot' for the modus (international conferences leading to binding regulation) and the contents (general principles) of what would soon become the modern laws of war.

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[8] The last phrase recognizes the most general of all principles in the modern laws of war, later so famously worded in the Martens clause: that of the prohibition to act contrary to the laws of humanity.

[9] Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight, Saint Petersburg, 1868.

§3 The 1899 Hague Conventions

The specific focus of this book lies with weapons technology. In this particular area, the leading documents of the laws of war remain the Hague Conventions of 1899 and 1907.[10]

§3.1 Context

When we look at the Conventions, it might seem that regulation of (the use of) weapons technology was of relatively minor significance. Largely, the Peace Conferences dealt with peaceful settlement of disputes and general limitation of armaments. Within the portions concerning the laws of war, only a handful of Articles refer to (the use of) weapons technology. The public opinion and press surrounding the Peace Conferences also paid relatively little attention to the regulation (of the use) of weapons technology. Instead, the focus was on peace: preventing the outbreak of war through several mutually agreed dispute resolution mechanisms.

At the conference, there were two leading reasons underlying the attempts to regulate warfare. The first was the desire to avoid having wars fought at all by establishing a court of arbitration and imposing States with the duty to first try to resolve an issue by peaceful means. The second principle was that, in the unfortunate case that States insisted on resorting to warfare, unnecessary suffering should be prevented.
Purely humanitarian concerns were voiced and called upon as reasons for putting these principles at the top of the agenda. If one thinks NGO pressure and media attention surrounding international conferences are a uniquely modern phenomenon, the history of the Hague Peace Conferences might offer some surprising insight.[11] There was broad press coverage with all sorts of pressure groups present, pressing their agenda by attempting contact with the delegates attending the Conference. This pressure was aimed more at preventing war than regulating how war should be fought.

At the time some even deemed the Hague Peace Conferences of 1899 and 1907 to be failures -the goals of arms limitation and an established system of arbitration replacing war in practice failing to be achieved. However, the outcome of the Conferences actually had significant impact on the regulation of (the use of) weapons technology. Since this book concerns the latter, the focus of this Chapter sits with those elements of the Hague Conventions of 1899 and 1907 that dealt with the regulation of (the use of) weapons technology.

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[10] The Russian Tsar Nicholas II (reigned 1894-1917) took the initiative for the Hague Peace Conference of 1899.

[11] A. Eyffinger, 'The 1899 Hague Peace Conference: the Parliament of Man, the Federation of the World', Kluwer Law International: The Hague, 1999, pp. 31-35 and pp. 342-343.

§3.2 The Outcome

The Hague Peace Conference produced an impressive amount of laws of war documents. However, only the regulations most relevant to (the use of) weapons technology are subjected to the following discussion. The relevant texts themselves can be found in appendix B.

§3.2.1 Hague Convention With Respect to the Laws and Customs of War on Land

Merits
When we look at this Convention on its own, it is quite hard to criticize given that there is little preceding it or fit for genuine comparison. The achievements of the Hague Conference were new, perhaps even revolutionary. It was also work of considerable substance, strong enough to remain relevant for over a century.

Criticism
Much of the criticism regarding this Convention falls into the domain of wider criticism regarding the modes of regulation and the laws of war in general. We will deal with those issues later.
One point worth mentioning is that the Convention appears to be random and at times incomplete in its organization. For every aspect mentioned and considered, one can come up with something equally sensible or relevant that was left out. Of course, this is understandable given that there was not yet a long tradition of codifying the laws of war. Furthermore, delegates had to be content with everything they could agree on and were unwilling to loose a contribution by pushing too hard for other areas of consideration to be codified. However logical, this patchwork approach does create a serious weakness within this Convention, the process selective without being systematic in what was and what was not taken into account. It exposes the laws of war to a high risk. States could claim conduct to be legal because it was not specifically detailed as part of the Convention whereas similar conduct was. Despite statements that the Convention is not all-inclusive and elements left out are not to be deemed legal per se, the *a contrario* argument is continually lurking in the shadows.

§3.2.2 The Hague Declaration Concerning the Launching of Projectiles and Explosives from Balloons

This Declaration seems perhaps the most archaic today of all the laws of war. In fact, even when we look back, the title of the Declaration has never reflected a widespread practice within warfare. The prohibition of 'launching projectiles and explosives from balloons' was not agreed on following public outcry over shocking destruction caused by the practice. This Declaration reflects one of the rather rare instances within the laws of war where regulation is based on theoretical possibility rather than the practical employment of (the use of) certain weapons technology.

The feeling that using the air for warfare was somehow 'unfair' arose at the same time: 'the Austrians were so shocked that there were calls for the use of balloons to be banned because it broke the rules of engagement.' [12] From the middle of the 19th century, the military use of balloons was extended to dropping explosives. For the most part, these attempts had very limited success. The unreliability of the method prevented aerial bombardment from being a genuinely practical option.
Thus, when the Declaration of 1899 was agreed upon, it banned a type of warfare that had failed to become an important piece of the military arsenal. It would take the revolutionary development from balloon to airplane to make airborne military operations truly efficient. The first seeds of this evolution were noticeable around 1899 and 1907, but not to the public eye. Even those aware of the experiments would have needed a good deal of faith to accurately predict the things to come. The vested military interest in this field, as well as the timeframe of its development, is well illustrated by the story of the Wright brothers when trying to find funds for their pioneering work in airplane engineering: 'Fortunately, … a few senior figures in Congress began to realise the military potential of flying machines, and by 1907 the now cash-strapped Wrights finally agreed to give a demonstration of their aeroplane.'[13]

So, when it came to warfare, the air was pretty much uncharted territory. It promised great benefit for those who could successfully utilize it first. This paved the way not only for experiments with aircraft, but for wild speculation. Or, as Watt puts it: 'As so often, actuality was far behind the imaginations of literature.'[14] Ironically, reality started catching up with those imaginations right after the Declarations of 1899 and 1907.

The 1899 debate
Perhaps the most striking feature of the 1899 debate is its brevity. The proposed Declaration was discussed at the end of a meeting, agreement was reached without difficulty and 'the minute of the meeting is but a page'.[15] The general prohibition 'of the throwing of projectiles or explosives of any kind from balloons or by methods of a similar nature', was brought to the fore and defended by the Dutch General Den Beer Poortugael:

> Does it not seem excessive to authorize the use of infernal machines which appear to fall from the heavens? I know well that when one is forced to make war, it is necessary to carry it on as energetically as possible, but that does not mean, however, that every means is permitted … We can foresee the use of projectiles or

[12] M. White, 'The fruits of war: how military conflict accelerates technology', Simon & Schuster: London, 2005, p. 199.
[13] ibid., p. 211.
[14] D.C. Watt, Restraints on War in the Air before 1945. In Restraints on War: Studies in the Limitation of Armed Conflict, M. Howard, Ed. Oxford University Press: New York, 1979; pp 57-77., p. 61.
[15] J.B. Scott, 'The Hague Peace Conferences of 1899 and 1907', The Johns Hopkins press: Baltimore, 1909, vol 1, p. 649.

> other things filled with deleterious gases, soporific, which, dropped from balloons in the midst of troops, would at once put them out of commission.[16]

Another major contributor to the debate, the American Captain Crozier, took a different stand. Of course, at the time aerial warfare was sufficiently imprecise to render the technology inherently indiscriminate. However, no one knew what future innovations might bring. The indiscriminate nature of aerial warfare might be overcome, the measure of discrimination then depending on its particular use in individual cases. If aerial warfare would be as controllable as warfare on land or at sea, what would then be the argument for its prohibition other than an arbitrary choice? Moreover, Captain Crozier foresaw that such types of improvements might even result in a beneficial humanitarian effect:

> If, however, invention removes these faults and balloons be subjected to control, their use may shorten war and reduce its evils and the expense it entails.[17]

Of course, even in a debate summarized in one page, there was room for an argument to defend the range of military options. It was made clear that the phrase 'or by methods of a similar nature' only referred to 'new means, not yet invented and similar to the use of balloons'.[18] This was aimed to guarantee that projectiles falling from the air, but launched from the ground did not fall within the scope of the Declaration.

The positive achievements in prohibiting new weaponry before its use are, however, slightly diminished by the pragmatic viewpoint mentioned in 'support' of the prohibition: that 'the different methods of injuring the enemy actually in use, were sufficient'.[19]

Finally, a crucial point was the restricted period of validity of the Declaration. Despite efforts to agree to permanent validity, a period of just five years was eventually agreed upon.[20]

Merits

When we look back at the Declarations on Balloons now, we might be tempted to accuse the delegates of agreeing to a backward prohibition bound to be soon overtaken by reality. However, as we have seen, from the perspective of the delegates in 1899 and 1907, even the agreed prohibitions could be judged as premature. The advocates of this first aerial warfare regulation acted before there was any real practical experience of its implementation, and against the scrutiny of those arguing that the theory was too complicated to ever be mastered for effective military use. As we know today, aerial warfare would soon become the most

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16 ibid., vol 1, pp. 649-650.

17 ibid., vol 1, p. 651.

18 ibid., vol. 1, p. 650.

19 ibid., vol. 1, p. 650.

20 A.P. Higgins, 'The Hague Peace Conferences and other International Conferences concerning the Laws and Usages of War: Texts of Conventions with Commentaries', Cambridge University Press: Cambridge, 1909, p. 488.

destructive and efficient means of waging war available. It would be unfair to judge the delegates with the benefit of this hindsight, however large the desire to go back in time and prevent significant suffering from occurring.

Criticism

By regulating it *avant la lettre*, the current critique on gaps in the laws of war regarding aerial warfare cannot be directed at their relatively late conception. As such our question must shift accordingly. Where did we go wrong?

The dilemma in regulating new weapons technology

The most serious critique of the Declaration reflects a wider and often recurring issue. In discussion, it is relatively easy to reach agreement on regulating (the use of) certain weapons technology before it becomes useful in practice. Later, when the technology is implemented and proven useful in warfare, it becomes harder to reach agreement on the restriction of its use. When the weapon is not being used its prohibition is of little relevance and relatively easy to agree upon, but when the weapon is used and proven effective, reaching agreement on its regulation to diminish suffering becomes more difficult. Parties are faced with the potential need to sacrifice effective strategy. This dilemma will be elaborated upon further in the next Chapter.

Expiring regulation

With regard to this Declaration, this dilemma's influence is also supported by its validity of only five years. The reason for this limitation was that aerial warfare was unknown territory. The technology was not well developed, more time for research and development necessary. The five year moratorium could be used to develop aerial warfare devices that could be of practical value. If such innovation was possible, States did not want to see it banned prematurely by creating a rash, pre-emptive prohibition within the Declaration. Or, as J.B. Scott put it:

> they were unwilling to renounce this picturesque and efficient means of extermination. The man in arms must be put *hors de combat*, and as long as war is permitted the tendency will be to cling to approved methods of destruction and to invent new and more efficient weapons.[21]

In renewing the Declaration in 1907, the Dutch delegation implicitly referred to this dilemma in advocating a solid new regulation of aerial warfare: 'Some morose spirits have said that the First Conference had adopted the Declaration on balloons only because many believed it without real effect in view of the slight advance in the science of aerostatics.'[22]

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[21] J.B. Scott, 'The Hague Peace Conferences of 1899 and 1907', The Johns Hopkins press: Baltimore, 1909, vol. 1, p. 650.

[22] J.B. Scott, 'The Proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 4, p. 148.

In 1907, the then already expired Declaration was renewed. However, the number of States in favor had declined, support growing for a less specific prohibition regarding aerial warfare. The technological developments were gathering pace, the prospects of useful means of aerial warfare growing by the day. The reasoning behind agreement being reached so easily before (its practical uselessness and the grim possibilities surrounding its inherently indiscriminate nature) was buried by innovation and the expectation of (more) discriminate techniques being available in the near future. With the promise of effective practical use came a reduction in the willingness to restrict it.

Instead, a more general regulation of aerial warfare was aimed at by adapting Article 25 of the Laws and Customs of Land Warfare prohibiting the attack or bombardment of undefended objects. The old Article had no restriction as to the means used for such an attack or bombardment, the amendment merely added 'by whatever means' to the Article. So, the implicit non-specificity was turned into an explicit one, the States then agreeing to regulate aerial warfare within the Laws and Customs of Land Warfare. Today it is perhaps hard not to associate the word 'bombardment' with aerial warfare, but in 1907, bombardment from land or sea was the norm. Bombardment from land and sea was regulated, it seeming logical to simply add bombardment from air to those general provisions. However, they had not anticipated the drastic differences that bombardment from the air would bear in comparison to the well-understood bombardments from land or sea.

Comparison to other means and methods

Another underlying reason for the attempted replacement of aerial bombardment specific regulations with a more general one involves a quite separate argument. To be further elaborated elsewhere in this book, it in short boils down to a logical reasoning of comparison. If bombardment of military objects from land and sea is allowed, on what grounds can aerial bombardment of the same objects be prohibited? Being bombed from a ship is not more humane than being bombed from an airplane or balloon. You should not prohibit A if equally (in)humane act B is allowed.

However, this reasoning does not take into account that A might be easier to use, cheaper or have a lower threshold for deployment. All in all, these aspects increase suffering by a quantitative multiplication. Aerial bombardment might not lead to worse suffering act by act, but it could well lead to much more of the same suffering overall.[23]

Although this amendment received support both in its own right and as an attempt to avoid renewal of the specific Declaration,[24] the debate was not over yet. Since the 1899 Declaration had expired in 1904, a proposal for renewal was on the table. The

[23] A.P. Higgins, 'The Hague Peace Conferences and other International Conferences concerning the Laws and Usages of War: Texts of Conventions with Commentaries', Cambridge University Press: Cambridge, 1909, p. 489.

[24] Most notably by the Russians, who supported the Declaration in 1899, but opposed to its renewal in 1907.

renewed Declaration was only agreeable if it was also limited in time. To avoid it running invalid again, it was agreed that no number of years would be set, but that the renewed Declaration would remain valid until the Third Peace Conference. Although it was clear the intention of the States involved was to frame a Declaration with a limited period of validity, the simple fact that a third Peace Conference was never convened means that the Declaration is technically still in force today.[25] With regard to the content and wording of the regulation, nothing changed. Eight years of innovation in what would become aerial warfare was not reflected in the renewed Declaration.

Grim future

Although the Declaration and its renewal might seem a positive outcome from a humanitarian point of view, the States involved were not fostering many illusions about the future. Despite the seemingly clear and specific prohibition, it was clear that aerial warfare would be used in practice once it was employable by the military. The Declaration is not the result of cynical politicians and diplomats trying to assure the public and outmaneuver the other States though, no-one covertly aspiring to be the first to successfully employ aerial warfare. The 'promises' of the use of aerial bombardments as soon as it was practically feasible were made very openly: "All scientific progress has always found an application in military art ... and it will become more and more difficult, as we have seen, to prevent balloons from being armed in their turn and using their arms".[26] This offers an extreme example of the dilemma in regulating new technology: in the debate on regulation, it is brought to the fore that regulations only (seem to) work for as long as use is impractical. As soon as the military benefit surmounts a given barrier, it will be used in practice, no matter what the regulation.

Some delegates clearly voiced their disappointment. They passionately argued humanitarian concerns, along with bringing to fore more pragmatic arguments aimed at those not convinced on just the humanitarian grounds. The pragmatic approach alluded mainly to the financial burden warfare was already posing on States before any extension to an aerial dimension. Prime examples of these arguments include those by Lord Reay:

> In the domain of armaments we know how difficult it is to apply a remedy, the evil being so widespread that it is difficult to know where to begin. Happily in the domain of aërial navigation the case is different and it does not seem impossible

[25] Next to its technical validity, it can be argued that it still has practical use today. 'While aerial bombing is subject to general rules of armed conflict, no laws govern air attacks per se. ... American rules of engagement are derived principally from the 1907 Hague Convention Respecting the Laws and Customs of War on Land.' T.W. Smith, 'The New Law of War: Legitimizing Hi-Tech and Infrastructural Violence', in: *International Studies Quarterly* 2002, 46 (3), pp. 335-374.

[26] Italian delegate Brigadier-General De Robilant, in: J.B. Scott, 'The Proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 4, p. 150.

> to prevent the evil because no nation has pushed so far ahead that it cannot retrace its steps.
>
> In addition, financial considerations require us to do our utmost to check an increase of military and naval expenses which already constitute a crushing burden for all nations, an increase which will not fail to be felt if it becomes necessary to add to the budgets an item for the development of aërostatics.[27]

Despite these rhetorical efforts, States were not willing to either do more in the field of regulation or be more serious about the promises they had already made. One might even weigh the failure to prevent aerial warfare as more important than the achieved restrictions regarding warfare on land and sea.

However, this would rest on the premises that, one, it would be practically possible to agree to restrict warfare to within particular arenas[28] and, two, that restricting warfare to land and sea would be more humane than adding aerial warfare. This is not the place to argue for or against these premises (that would require a book on its own). I simply wish to draw attention to the extremely complicated answers these types of question demand. As far as the analysis of the debate is concerned, the problem was even alluded to at the time, again by Lord Reay:

> Of what use will our efforts be to lessen the suffering caused by war if we call into being a new scourge, more terrible in its effects than the instruments whose field of action we seek to limit.[29]

Conclusion

In analyzing this debate, the dilemma inherent to regulating new technology is as striking as the contrast in attitudes displayed toward the new and unknown revolution in warfare approaching them. With regard to the dilemma, one senses that they felt the time for regulation was upon them, no State already having vested interests in the area and the temptations of possible military use still confined to theory and speculation. On the other hand, the absence of practical experience is used as an argument against regulation. One should not regulate what one does not understand. While a call for regulation is logical for those expecting a practical outcome worse than with existing military possibilities, without evidence of that practical outcome, the fear remains ungrounded. A more humane form of warfare may be the actual result, or one that proves to be no more (in)humane than the existing military possibilities. Combined with the argument that conservative minds should not be allowed to hinder human progress and innovation, this reasoning offers a strong counterweight to the supported prohibition of weapons technology

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[27] J.B. Scott, 'The Hague Peace Conferences of 1899 and 1907', The Johns Hopkins press: Baltimore, 1909, vol. 1, p. 654.

[28] And if that would be possible, why not agree to settle disputes on the even smaller stage like once the Horatii and Curatii settled the score for their homelands.

[29] J.B. Scott, 'The Hague Peace Conferences of 1899 and 1907', The Johns Hopkins press: Baltimore, 1909, vol. 1, p. 654.

whose merits and/or harm remain unproven.The other clear dividing line between the delegates and their reasoning is reflected in their underlying inclinations. On the one hand, we have the hard-line humanitarians, their feelings represented in the statements of Lord Reay. From a humanitarian point of view, the matter is quite clear: prevent suffering by preventing all that causes suffering. If it is not possible to do it all at once, by banning war or limiting armaments, than take all you can by trying to establish the most stringent regulation possible on all means and methods of war. The finer nuances in the comparison and analysis of means and methods (e.g. that aerial war might shorten conflict and thus cause less suffering while conversely probably leading to considerably more suffering per act) are less relevant. They only pave the way for less stringent regulation and a more open attitude towards new means and methods of warfare, in turn attempting to make human suffering more acceptable.On the other hand, we have the more pragmatic minds. They are focused less on an ideal as an ultimate goal, but on the process. They emphasize probable human conduct in response to certain regulations. More important than certain fundamental values is the balancing of those values with the interests of those in power. For every statement there is an exception, for every solid conclusion a nuance. Although mostly rationally correct and representing feasible logic, this attitude is in danger of eroding the morality of the laws of war: if every proposed instance of regulation can be reasoned away, there is the possibility of ending up with nothing.

In sum, the first group runs the risk of creating a humanitarian reality only existing on paper, whereas the second group risks giving in too much to the apparently undeniable truths about mankind and the difficulty of controlling it, possibly failing to regulate altogether as a result.This is not the place to take sides with either one of the extreme positions, nor to conclude with the cliché that the truth must lie somewhere in between. The interplay between the two defendable extremes does not offer a clear compromise representing the road best taken. It does however highlight the dilemmas described within this book. In the case of the regulation of aerial warfare debate in 1899 and 1907, it brings us to the dilemma elaborated upon further later in this Chapter: the less useful a new form of weapons technology, the easier it is to prohibit its use. The more destructive it proves to be, the more difficult it is to prevent that destruction by legal means.

§ 3.2.3 The 1899 Hague Declaration II Concerning Asphyxiating Gases

Criticism

Although the Declaration itself is short and clear, the list of comments on it and its effects are not.

First of all, the Declaration gives us a clear account of the patchwork character of the laws of war, containing a number of instances of double prohibition. It is a prime example of a very technology-specific regulation targeted at technology whose use would have been prohibited anyway. The use of asphyxiating or deleterious gases would have been outlawed by general rules of warfare like Articles 23(a) and (e) of the Hague Convention With Respect to the Laws and Customs of War on Land.

Article 23(a) prohibits 'employ(ing) poison or poisoned arms'. It would not be hard to argue that asphyxiating gases are covered by this Article. The same goes with

respect to Article 23(e), which prohibits 'employ(ing) arms, projectiles, or material of a nature to cause superfluous injury'. With regard to this Article, the issue goes deeper still. Firstly, the Declaration fails to add anything further to the regulation offered by Article 23(e), the unnecessary repetition causing the kind of regulatory pollution that many consider problematic in itself. The main argument to agree to the Declaration is in fact the principle laid down in Article 23(e) itself: the view that such gases would cause unnecessary suffering.

This stresses a crucial point within this book: in regulating one thing specifically, one runs the risk of giving the impression that what is not mentioned explicitly is less important or 'less worth prohibiting'. Even if one states that such interpretation is incorrect and contrary to the laws of war, I would like to stress that in times of war, States will use any room for interpretation available. With regard to the practices of warfare, a door that is slightly ajar is as good as wide open.

§ 3.2.4 The 1899 Hague Declaration III Concerning Expanding Bullets

This rule is very limited and highly explicit but still stands. There is a lot to say on the Declaration, but not on its contents. This Declaration is as interesting for what it covers as for what it does not cover. The debate leading up to the Declaration offers prime insight into the difficulties surrounding the regulation of a specific form of weapons technology comparable to other previously allowed forms. It offers us keen insight in the regulatory dilemma between phrasing rules in a technology-specific and clear way; or by drafting rules based on broad notions, covering more instances but running the risk of lacking clarity.

The debate on the prohibition of the use of expanding bullets was, despite its narrow focus on a detailed and relatively small aspect of weapons technology, quite prolonged. In this debate, perhaps more so than in other debate from the Hague Peace Conferences, the specific interests of States came to the fore. However, arguments fueled by self-interest are not necessarily logically invalid. Most of the arguments, points of view, paradoxes and dilemmas witnessed then are still dominating the current debate regarding regulation of (the use of) weapons technology. This in turn makes a thorough analysis of this particular debate especially worthwhile.

The facts
To properly understand the debate on expanding bullets, one has to go back to St. Petersburg 1868 and the Declaration prohibiting the use of dumdum bullets. The dumdums were developed after 'regular' bullets were deemed ineffective. However, the new bullets' 'explosive' or 'inflammable' effect upon impact was viewed as causing unnecessary suffering, a ban strived for and agreed upon accordingly.
A similar reasoning lay behind the fight for a ban on expanding bullets. Not just piercing the body, they had a second effect upon impact: exploding into pieces or flattening, creating excessive damage.

Apples and Oranges

The British, enthusiastic about bullet innovation, opposed the proposed prohibition. Their point was that, in assessing the practical consequences of such a prohibition, States were comparing apples with oranges. Prohibition of the use of dumdum or expanding bullets would not lead to the use of 'regular' bullets of comparable caliber. The new types of bullets were not popular because of the added injury they caused, but because of their effectiveness against the ineffectiveness of regular bullets of regular caliber.[30] In practice, the choice was between special (dumdum or expanding) bullets of regular caliber or regular bullets of a larger caliber. The latter would cause even more damage than the special bullets of regular caliber. According to the British, an error of reasoning was at the root of the 1868 St. Petersburg ban on dumdum bullets, and now threatened to surface again in banning expanding bullets.[31]

Attempts to reach a compromise, led by the Dutch, had little success. On the one hand, the British were assured that the prohibition only covered wars fought among States party to the Hague Conventions and the proposed Declaration. This reference to reciprocity was further extended with the express statement that using this type of bullet against 'savages' was not a problem.[32]On the other hand, the British were assured that they could use their newly developed, fully coated bullet. Only the partially uncoated bullets would fall under the prohibition.[33]

The British were however, not persuaded and restated the fundamental point that the use of small caliber bullets without coating[34] caused no more suffering than fully coated bullets of a large caliber. If one assumed that States would use the ineffective coated small caliber bullets, one ignored any notion of military utility and necessity. Such an attitude was, according to the British, purely utopian.

In short, the British deemed the proposed prohibition randomly discriminate against a specific type of bullet -a type that the British had invested heavily in and had a large stock of. In addition, the proposal left open the possibility of using other bullets (coated ones with a larger caliber) that caused an equal level of damage and suffering.

Regulating effect or bullet-type

The United States supported Britain's critique and added that the proposed text prohibited too much. The US proposed a draft regulation aimed at certain effects, regardless of what bullets or weapons were used to cause them, instead of

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30 G.F.W. Holls, 'The Peace Conference at the Hague and its Bearings on International Law and Policy', The Macmillan Co.: New York, 1900, p. 93.

31 In addition, the dumdum bullets were banned based on a misconception, according to the British delegates. The perception of horrible effects ascribed to dumdum bullets were based on a German report on scientific experiments with bullets which were in effect quite different in nature from dumdums, but mistakenly identified as such. ibid., p. 93.

32 ibid., p. 93.

33 ibid., p. 93.

regulating a certain type of weaponry based on a detailed description of a bullet type.

This argument made a lot of sense in connection to the 1868 St. Petersburg Declaration and warfare's practice after that. The preamble of the Declaration stated very broad humanitarian terms, but the regulation itself was quite technology-specific, focusing on bullets containing explosive or inflammable materials. Ironically, this argument posed by the US complemented advocacy of the proposed prohibition on expanding bullets. A fair number of the proponents, although admitting that expanding bullets were not literally covered by the St. Petersburg Declaration, viewed their use as a violation of the Declaration's aim and against the laws and customs of war in general.[35]

According to the US, the foundations laid in the St. Petersburg Declaration should be built upon. They wanted a prohibition introduced for bullets that did more (in terms of damage and suffering) than necessary for being an effective means of putting enemies *hors de combat*.[36] The type of bullet or the manner in which their functionality exceeded mere immobilization of the enemy should not matter. The idea behind the St. Petersburg Declaration had not changed despite its manner of regulation proving ineffective. Therefore, the Conference attempted to avoid making the same mistake again by drafting a technology-specific rule.

In the words of the US delegate Captain Crozier:

> The general principle … was well stated at St. Petersburg in 1868, viz., that justifiable limits would be exceeded by the "use of arms which would aggravate uselessly the sufferings of men already placed *hors de combat*, or would render their death inevitable." … It is now desired to extend the prohibition … what is the object to be kept in view? Evidently to forbid everything, which, in the direction of cruelty, goes beyond necessity. And what is necessary? The Declaration of St. Petersburg says: "It is sufficient to place *hors de combat* the greatest number of men possible."[37]

Paying tribute to the general principle, Captain Crozier continued by stating 'the weak point of the Article: it confines the prohibition to a single class'.[38] As an alternative, the US proposed an amendment to rephrase the prohibition: 'The use of bullets inflicting wounds of useless cruelty, such as explosive bullets, and in general all kinds of bullets which exceed the limit necessary for placing a man *hors de combat* should be forbidden.'[39]

An additional argument against the technology-specific regulation was the effect of the prohibition in the future. By banning a certain type of bullet, the law of war would not be flexible regarding future innovation in weapons technology. If an

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35 A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 63.

36 J.B. Scott, 'The proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 1, p. 80.

37 ibid., vol. 1, pp. 79-80.

38 ibid., vol. 1, p. 80.

39 ibid., vol. 1, p. 80.

innovation in the field of expanding bullets eventually led to effective bullets causing less damage and suffering, the laws of war would prohibit its use automatically and, in effect be counter productive to humanitarianism. In the words of Captain Crozier: 'Now, it is quite possible that a bullet may be invented that expands uniformly and that consequently would not produce needlessly cruel wounds. It would not be necessary, then, to forbid its use.'[40]

Furthermore, technology-specific regulation always raises the issue of equal treatment. If a bullet was invented that was not expanding, flattening, or exploding, but caused excessive damage and suffering in another way, the laws of war would not prohibit its use.[41] Captain Crozier painted a very clear picture of the 'pragmatism' in the field of weapons technology innovation: 'In devising means to increase the shock they will naturally examine the prohibitions which have been imposed, and they will find that with the exception of the two classes, explosive bullets and bullets which expand or flatten, the field is entirely clear.'[42] He continued with a number of already feasible examples where bullets escaping the prohibition could be constructed that would cause the same or even more excessive damage and suffering. To sum up the US argument: 'There is always danger in attempting to cover a principle by the specification of details, for the latter can generally be avoided and the principle be thus violated.'[43]

US proposal vs. accepted text

As said, the US proposed to state the rule on principle instead. The amendment they proposed was not subject to the technology-specificity criticism. However, the fact that the US proposal did not share the ultimate weakness of the adopted text, does not necessarily mean it would have represented a better option. Before coming to such a conclusion, we have to analyze the weaknesses of the proposal itself before comparing it to the merits of the adopted text.

Criticism of the US proposal was also brought to fore in the 1899 debates. The US proposal was deemed too vague, its insufficient range making it unworkable and, in (warfare) practice, lacking in any real restrictive power. The Dutch General den Beer Poortugael stated it as follows:

> It is a question of a general statement of a necessary limit. Now what is understood by this necessary limit or by needlessly cruel wounds? We do not know; a criterion would be necessary in order to be able to determine it. We must be able to say: here is a bullet entirely different from that which has been adopted

[40] ibid., vol. 1, p. 83.

[41] G.F.W. Holls, 'The Peace Conference at the Hague and its Bearings on International Law and Policy', The Macmillan Co.: New York, 1900, p.101.

[42] J.B. Scott, 'The proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 1, p. 80.

[43] ibid., vol. 1, p. 81.

> heretofore. There must be a specified limit and not a general limit. Otherwise, no result will be reached.[44]

With regard to the argument concerning future developments in weapons technology, the well-known counterargument that one should not regulate the unknown was tabled, as the Dutch delegate General Den Beer Poortugael stated:

> 'It seems that it is very difficult to condemn in advance a bullet that is not known. … The formula of the Commission has done away with one means; that is already much, we cannot do away with all those which perhaps will be invented in the future.'[45]

In addition, Russion delegate Colonel Gilinsky argued: 'At St. Petersburg in 1868, something already in existence was under contemplation … We desire to do the same here: To prohibit the use of a certain category of bullets which have already been manufactured. We do not know what is going to be invented. The inventions of the future will perhaps render a new prohibition necessary.'[46] [47]

Procedural decision

Ultimately, the debate ended in a rather strange fashion. The US had proposed an alternative text for the Declaration. After extensive and detailed debates, including caliber discussions down to the half millimeter, and whether 'sufficient to put an enemy *hors de combat*' should refer only to the ordinary soldier and 'permit soldiers of exceptional bravery to advance'[48] or should provide for bullets that also stopped the latter, it had become time to put the proposals to a vote. With all parties having passionately reasoned and defended their stance with highly logical arguments, it was hard to predict the outcome of the debate. The order of vote was all important. The ordinary custom of parliamentary procedure -to vote on the farthest-reaching amendments first- was not followed. This was important here, the proposed US amendment felt to go beyond the original proposal. If no agreement was reached on it, one could revert to the original text which had less impact and was easier to agree on. In the end, the original text of the Commission was put to a vote and accepted, leaving the US amendment to the historical records.

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44 ibid., vol. 1, p. 82.

45 ibid., vol. 1, p. 82.

46 ibid., vol. 1, p. 83.

47 This last statement contains in it much of the arguments usually offered for regulation focusing on effects in stead of specific technology: 'we do not know what will be invented', … 'inventions of the future might require a new prohibition'. However, the conclusion drawn from the logic is radically different. Where proponents of effects-driven regulation conclude that the unknown future requires open norms flexible enough to encompass new developments producing the same unwanted effects, Colonel Gilinsky concludes that one should not judge what one does not know and therefore restrict oneself to prohibiting proven wrongs.

48 J.B. Scott, 'The proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 1, p. 84.

The dilemma between technology-specific regulation and broad notions

The tension seen between the two opposing stances above is not due to a conflict between humanitarian values and the military self-interest of States. The tension arises from a clear dilemma that we have seen before in the laws of war -the dilemma between technology-specific regulation and broad notions. One cannot judge what one does not know, therefore the regulation focuses on well known, specific types of weapons technology whose effects one wishes to ban from the battlefield. However, since history has shown the difficulty in reaching agreement on banning a weapon that has proven very useful to the military, others strive for a more general ban focusing on effects rather than the weapons technology used to produce them. The counter position argues that this is too vague, causing the regulation to be useless in practice. The effects-driven rule rests on broad notions (e.g. 'unnecessary suffering') that fall prey to interpretation by States as it best suits them. Furthermore, problems arise in finding proof for alleged breaches of these laws of war. A ban on certain technology only requires proof that the technology has been used. When the regulation focuses on broad, vague terms describing unwanted effects, one risks getting stuck in the mud of semantic debate. Detailed, lengthy discussions on what did and did not occur on a specific day on a specific battlefield and whether or not particular events do indeed fall within the scope of these broader notions are often the result.

From this perspective, the choice seems to be between two unsatisfactory options:

- a clear prohibition with a relatively short-term practical validity that will in time be overruled by technological innovation: regulation with an expiration date.
- a prohibition that is flexible enough to cope with new technological innovation, but pays the price of being based on broad, multi-interpretable terms that cause practical difficulties in delivering evidence. The prohibition thus often fails to settle political debate, rather pushing it away from abstract notions toward concrete instances and leaving room for States to interpret the terms of the agreement as they see fit at that time: regulation *à la carte*.

Since both forms are unsatisfactory, it is quite common to use them cumulatively and risk the paradox of double prohibition. With regard to the debate on expanding bullets, we have already seen how Article 23(e) of the Laws and Customs of War on Land (the prohibited employment of arms, projectiles, or material calculated to cause unnecessary suffering[49]) should alone be sufficient to ban the use of expanding bullets on the battlefield, since, in addition to putting the enemy *hors de combat*, they cause damage and suffering beyond that necessary to legitimately disable the enemy's fighting capability.

The value of the eventually proposed technology-specific Article could then be questioned. That it clearly and unambiguously prohibits a specific example of conduct already generally prohibited by the broader principle is of benefit. Its disadvantage lies in the risk posed by regulating some specific examples in line with

[49] A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 77.

the principle while leaving others to be covered by the general principle alone. In the worst case, States will reason that other, not specifically regulated acts are not covered by the general principle. If the prohibition does include the matter in question, why is it not specifically mentioned? In a less grave case, the specifically regulated case would be used as a litmus test against which all other acts of war would be measured, thereby deriving from the strength of the original principle. These problems highlight well the often-recurring issue of double prohibition inherent to the patchwork nature of the laws of war.

§3.2.5 Concluding Remarks on the 1899 Peace Conference

Although the ultimate goal, preventing future wars, and the secondary goal, general arms limitation, weren't reached, it would be wrong to judge the 1899 Hague Peace Conference as a failure. Focusing on the regulation of (the use of) weapons technology, we can say that, though being relatively small in number, difficult obstacles were overcome and much achieved. Of course, valid criticism can be given and inconsistencies pointed out, but on the whole, the outcome was solid. Still forming the basis for today's laws of war, we can state that the laws of war drafted in 1899 seem, for the most part, to have stood the test of time.

With regard to the debates, exchange of opinions, and clashes of different views on regulating warfare, I think the 1899 Hague Peace Conference can justifiably be seen as revolutionary. Not only for the agreement reached on difficult issues between a large range of States harboring different world views and interests, but also for the high quality of the debates and the wide range of nuances proposed regarding possible solutions and their (unintended) consequences. The weaknesses in the regulation agreed to during the 1899 Hague Peace Conference are, at least in my view, not the reflection of a lack of ability to draft regulation. I feel they rather represent a quest for balance between opposing but equally logical arguments and visions on the effects of certain (forms of) regulation.

The debates held during the 1899 Hague Peace Conferences offer virtually all of the important points of view, arguments, counterarguments, reasoning, logic, dilemmas and paradoxes concerning the laws of war that reflect the most pressing issues in today's debates. One could argue that this highlights a failure to achieve anything since 1899. Such a view, however, would be incorrect. Rather, it shows that the relation between law and war has some inherent difficulties, some paradoxes and dilemmas that seem irresolvable.
In my view, there is no final solution to overcome these difficulties. Theoretically imperfect regulation that diminishes suffering in practice might well be the highest achievable. Paradoxes and dilemmas are not there to be solved, but to be balanced.

§4 The 1907 Hague Conventions

§4.1 Context

The 1899 Peace Conference ended with a number of clear achievements in addition to some unfinished, ongoing business. The differences revealed in the often fierce debates had not led to insurmountable tensions. Promises were made to review the matters that had not been agreed upon and to make a further attempt to reach agreement on those matters. Those promises were kept and, in 1907, a second Peace Conference was held -again in The Hague.[50]

Looking back, the positive results of 1907, as in 1899, can be judged to have had long-standing influence on the means and methods of warfare. Its accomplishments have been impressive, although certainly not all encompassing. The representatives of States present at The Hague in 1907 were certainly aware of it themselves. They concluded the Peace Conference with the clear intention of continuing their work. Unfortunately, the First World War dealt a heavy blow to all peace initiatives and belief in the possibility of regulating warfare.

§ 4.2 Outcome

§ 4.2.1 The 1907 Hague Convention IV Respecting the Laws and Customs of War on Land

Only minor changes were made to the 1899 version of this Convention. The results of the one significant change worth discussing have proven ambiguous. Article 23(e) was changed into 'to employ arms, projectiles, or material calculated to cause unnecessary suffering' by replacing 'of a nature' with 'calculated to'.[51]

On the one hand, from a humanitarian perspective, this was a positive change since it now enclosed means that do not intrinsically and inevitably cause unnecessary suffering, but do so in fact upon their application. On the other hand, the word 'calculated' refers to some sort of intention from the one using the means, creating an opening for denial of culpability when unnecessary suffering occurs and is claimed to be 'not calculated', that is unintentional and unforeseen.

§4.2.2 The Hague Convention VIII Relative to the Laying of Automatic Submarine Contact Mines: Case Analysis

The debate regarding the proposed prohibition of the use of sea mines is an excellent example of the complexity of debates surrounding the regulation of (the

[50] For the 1899 conference, the Russians took the initiative. For the 1907 conference, it was US President Theodore Roosevelt who took initiative in 1904.

[51] Article 23 Convention Respecting the Laws and Customs of War on Land and its annex: Regulations Concerning the Laws and Customs of War on Land, The Hague, 1907.

use of) weapons technology. It shows the tension between solid arguments based on humanitarian concerns and the harsh reality of military necessity.

The British proposed a total ban on the use of sea mines. The British did not contest that sea mines were effective or militarily useful, but there was great concern for non-combatants becoming their victims. Or, to put it another way: there was fear that neutral shipping during wartime would be endangered and trade put at risk. If a sea mine does not disable the enemy, it still lays around in the ocean. A sea mine is not able to distinguish an enemy from a friendly warship, a neutral merchant, or a civilian sailing the ocean.

As Santiago Pérez Triana stated:

> Of all the engines of modern war, there is none comparable, in the horror it inspires or the devastation it inflicts, to automatic mines. There is something infernal about these apparatus which, hidden like traitors under the water, spread destruction and death without any risk to those who have laid them, without presenting a common danger to the combatants, which seems to take away from war the aspect of murder, where the assassin stabs his victim suddenly and in the dark. It is pitiable to think of the mass of courage marching on the foe … of men thrilling with patriotism and ready to fight, who are crushed, annihilated, and overwhelmed by a murderous agency laid by an absent enemy.[52]

However sea mines were too useful for an agreement on a total ban to be achieved. Nonetheless, in order to meet the humanitarian concerns, a compromise was ultimately reached. It was agreed that laying sea mines in open water with the 'sole object of intercepting commercial shipping' would be prohibited.[53]
Furthermore, the use of anchored mines was limited to those that became harmless after breaking loose. With regard to unanchored sea mines, it was agreed to only allow the use of those becoming harmless after a maximum period of one hour after leaving the control of the party using them. The use of torpedoes was restricted to those becoming harmless within an hour of missing their target. The British argued that a total ban would still be preferable and that humanitarian concerns should outweigh any military necessity or usefulness. As Sir Ernest Statow stated:

> I do not ignore the fact that there are two contrary opinions on this subject, both of which are supported in the Commission. On the one hand, it is possible to maintain that the employment of these engines, one of which could, within the space of a few seconds, send a thousand persons to death, should be entirely forbidden; on the other hand, there is a current opinion in favor of the theory that

[52] J.B. Scott, 'The Proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 4, p. 451.

[53] Article 2 Convention Respecting the Laws and Customs of War on Land and its annex: Regulations Concerning the Laws and Customs of War on Land, The Hague, 1907.

> the more terrible war becomes in its effects, the more will populations restrain their belligerent passions and the less will war, once begun, continue.[54]

However, Baron Marschall Von Bieberstein made it very clear that the argument for military usefulness cannot be lightly set aside to advance humanitarian causes:

> It is of the first importance that the international maritime law which we desire to create should only contain clauses the execution of which is possible from a military point of view -is possible even in exceptional circumstances. Otherwise the respect for law would be lessened and its authority undermined.[55]

It is clear that Von Bieberstein is talking about more than balancing humanitarian ideals with the harsh realities of warfare. It is not enough to frame a law of war in such a way that it can be reasonably expected for the fighting military to keep to the rule in most cases. The rule must be practical even in 'exceptional circumstances'. Any rule that fails to meet that standard is counterproductive and harms the entire body and concept of the laws of war.
Von Bieberstein is alluding to more than the practical possibilities and impossibilities the military face in adhering to the laws of war during wartime. From a military point of view, a total ban on the use of sea mines could certainly be executed in practice. If sea mines are not manufactured or bought in, their use is no longer a matter for consideration. Von Bieberstein is not talking about whether the military is able to execute the law, but whether it is willing to. Where we quote him as saying 'should only contain clauses the execution of which is *possible* from a military point of view', we could equally read 'acceptable'.

Dilemma regarding military necessity
This case illustrates a returning dilemma within debates on the laws of war. There is always a clear tension between humanitarian concerns pushing to limit the possibilities of action in warfare, and military utility and/or necessity. Of course, it is not given that one or the other must adopt the top, absolute position; there is a considerable grey area in between. But the closer one gets to the extremity of making military utility/necessity the top priority, the closer one gets to the following dilemma:

If a rule of the laws of war has to be subject to military utility/ necessity,
it can only genuinely regulate conduct that has no military use. However, with such conduct having no use to the military, it will not be used in warfare and as such does not need a law of war to regulate it.

Of course, one can point to historical events where atrocities were caused by actions that had no military use, necessity or logic and where a rule prohibiting such conduct could have had significant impact. This rather poses a new question though. If, in

[54] J.B. Scott, 'The Proceedings of the Hague Peace Conferences: Translation of the Original Texts', Oxford University Press: New York, 1920, vol. 4, pp. 381-382.
[55] ibid., vol. 4, p. 385.

times of war, the perpetrators were not hindered by concerns of utility, necessity, or logic would they then have been hindered by such a law being in place? It is interesting to see that awareness of this issue can also be found within the debate. To quote Von Bieberstein again:

> No one will resort to this instrument of warfare unless for military reasons of an absolutely urgent character.[56]

An even more clear statement can be found in the words of Mérey von Kapos-Mére:

> Now, in my opinion, no State, no navy will make use of mines -of those engines that are dangerous not only for the adversary but also for neutral navigation and even for him who makes use of them- unless in case of an imperious military necessity. … what … seems to be an exception would in reality be the rule.[57]

In sum: one prohibits conduct that goes against humanity, and would never be resorted to unless in extreme cases of military necessity. However it then follows that there is an exception to allow it in extreme cases where the military were 'left no other option'.

Paradox of double prohibition

Another paradoxical matter relating to the debate surrounding the proposed ban on sea mines involves the key argument for their prohibition (relating to a feature of the technology) already rendering it prohibited under another fundamental law of war: the principle of distinction.

Although this principle was not explicitly codified during the 1899 Hague Peace Conference, it was part of customary law. The 1868 St. Petersburg Declaration referred to it by stating the general principle 'That the only legitimate object which States should endeavor to accomplish during war is to weaken the military forces of the enemy'. Article 25 of the 1899 Hague Convention Respecting the Laws and Customs of War on Land rests on this principle when stating that 'the attack or bombardment, by whatever means, of towns, villages, dwellings, or buildings which are undefended' is prohibited.

Of course, one could defend the call for a ban on sea mines by stating that it is better to have a codified, specific ban than having to rely on a broad rule of customary law. My point, however, is not that the proposed ban on sea mines was irrelevant. The point is that the paradox of striving for a ban on grounds that are already covered by general principles frequently recurs within the laws of war. This in turn leads to the laws of war consisting of a variety of overlapping rules with different focuses.

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[56] ibid., vol. 4, p. 385.

[57] ibid., vol. 4, pp. 437-438.

Dilemma regarding new weapons technology
A third striking feature of the debate is the reoccurrence of the new technology dilemma which is prolific throughout weapons technology regulation debates from 1899 to the present day. We have encountered it several times already in this Chapter and the previously drawn conclusions apply here as well.

Fortune telling
Fourth and last, we see the struggle regarding 'time' between technological development and regulation. Although other cases dealt with elsewhere in this book offer more clear examples, the debate regarding sea mines can be seen as 'pioneering' in this struggle.[58] In debates on the regulation of new weapons technology, time poses a problem in two ways. First, the demands set on the use of the technology often require adaptation of the weapons in stock. This requires time and money, often leading States to ask for a period of time in which the regulation will not have full effect -allowing them time to adapt while still having all their fighting options available.
Second, no one knows what the future will bring. The new technology might be improved in such a way that current objections are removed, suddenly leaving earlier agreed regulations seeming stringent. This leads States to call for a fixed period of time after which the regulation is no longer effective. In practice, the weapon tends to become more effective and useful in further development, making it even harder to come to an agreement to restrict its use.

Conclusion
The 1907 debate on sea mine regulation led to the adoption of the 1907 Hague Convention Relative to the Laying of Automatic Submarine Contact Mines.
In the two World Wars, the Convention was breached on many occasions. In other cases, the Convention was not breached literally, but conduct occurred that clearly went against the Convention's intention. New types of mines were used that did not technically fall under the categories mentioned in the Convention. The debate on the prohibition of sea mines ultimately led to regulation via focus on specific weapons technology. Weapons with the same effects that are not '(un)anchored automatic contact mines' or 'torpedoes' are not covered by the Convention.[59]

Technology-specificity is accompanied with a wide margin of discretion for the fighting parties. Their intentions are relevant and have to be proven, their duties conditioned to situations that 'military exigencies permit'. The weakening influence of these two areas on the regulation was well understood at the time. The British, who had to accept this compromise instead of their desired total ban, made a reservation to the Convention stating:

[58] G.F.A. Best, 'War and Law since 1945', Oxford University Press: Oxford, 1994, p. 302.
[59] A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 103

> the mere fact that this Convention does not prohibit a particular act or proceeding must not be held to debar His Britannic Majesty's Government from contesting its legitimacy.[60]

This might seem like stating the obvious, since the Convention does not claim to render legitimate all that is not prohibited by it. However, in the light of the debate it must be seen as stressing their dissatisfaction with its eventual outcome: a rather weak regulation with a lot of room for parties to interpret it as it would suit them best.

§4.2.3 The 1907 Hague Convention IX Concerning Bombardment by Naval Forces in Time of War

Merits
Where Article 25 of the General Code of Law Regarding Land Warfare is based on an 'action-based' conception of the object-to-be bombarded (or protected), the Convention on naval bombardment shifts the focus to a 'status-based' approach. In the first, it is crucial whether an object, at the time of targeting, is actually defended or not. With the latter, the key issue shifts to whether the object, defended or not, is suitable for military use at any time, currently or in the future.

Criticism
At first glance, the body of the laws of war being expanded with a new Convention Relating to Naval Bombardment might seem to be an improvement. However, the Convention actually proves to be restating the general principle of discrimination already present in the general code of law regarding land warfare. Furthermore, it then creates a new exception to the rule that in effect actually diminishes the original limits that were placed. Of course, the new focus does not eradicate the protecting effect of the general laws of war, but it does lower the threshold for bombarding targets and opens the possibility of bombarding undefended objects provided one can argue them to be of military value. As said before and as will be stated again, with respect to legal argumentation, a door slightly ajar is often as good as one left wide open.

§4.3 Concluding Remarks on the 1907 Peace Conference

Where in 1899, much was done for the law regarding land warfare, 1907 saw the focus shift towards warfare at sea. Both the Convention Regarding Automatic Submarine Contact Mines and, of course, the Convention Concerning Bombardment by Naval Forces were substantial achievements. However, it proved impossible to come to an agreement on a more general code of laws for naval warfare comparable to that established for land warfare in 1899. This came as a great disappointment to many of the representatives present at the 1907 Peace Conference.

Furthermore, the agreement reached successfully in other areas was achieved with significantly more difficulty than in 1899. The hopes were high but the spirits less so,

[60] ibid., p. 110.

the particular interests of individual States more prominent. The first signs of the tensions that would soon lead to World War I were visible in the debates in 1907, it becoming more difficult to reach consent to widen the scope of self-restraint that States were willing to subject themselves to.
In conclusion, however, although the results were less impressive than in 1899, the 1907 Peace Conference was far from a step backwards. Given its accomplishments, it can certainly be considered a further advancement down the road of subjecting the practice of warfare to the legal norms of humanity.

The culmination of all these influences –legal, idealistic, diplomatic, realistic- from both Hague Peace Conferences is embodied by the now famous Martens' Clause.[61]

§5 Hague Draft Rules of Aerial Warfare 1923

Containing 62 Articles and covering a wide range of topics regarding aerial warfare, this set of rules initially seems impressive. However, aerial warfare and the laws of war can hardly said to be a match made in heaven. States did not reach agreement on the regulation of aerial warfare at an early stage. The 1899 and 1907 ban on the use of balloons did not prevent breaches from occurring as soon as 1911-1912 when Italy used balloons for reconnaissance and bombing. Both World Wars also displayed the military power of airplanes, culminating in the most destructive bombardments ever where nuclear bombs were delivered through the air.[62]
The tragedy of the relationship between the laws of war and aerial warfare is illustrated by the fate befalling this very document: the 1923 Hague Rules of Aerial Warfare never entered into force.

Dilemma of regulating new technology
The by now familiar dilemma regarding the regulation of new weapons technology comes painfully to the fore again with regard to the 1923 rules of Aerial warfare. In this case, the dilemma blocked regulation of the matter altogether. This was not due to disagreement about the need for regulating aerial warfare. There was no doubt about its destructive potential. The First World War had suggested that effective regulation was needed quickly. Where in 1899 and 1907 there had been opposition against prematurely regulating aerial warfare, a lack of knowledge of its destructive capabilities could no longer be used as a legitimate argument against regulation in 1923.

However, the knowledge itself had become the reason for opposing regulation. The clear damage and suffering witnessed in the First World War was evidence not only of the need for regulation, but of aerial warfare's huge military potential. In an insecure international environment, States were reluctant to give up such powerful weapons - particularly those having already invested a great deal in their development.

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61 The clause itself will be analyzed in §10 of this Chapter.

62 A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 139.

The Articles

A second way of evaluating the 1923 Draft Rules on Air Warfare is by looking at its contents. Despite the fact that the rules never entered into force, they reflect the thought of the time on regulation. The draft consists of 62 Articles, of which Articles 18-26 are relevant to this book.

A few Articles are worth analyzing in greater detail. Article 18 poses a highly technology-specific prohibition on the use of 'tracer, incendiary or explosive projectiles'.[63] This merely extends the prohibitions already in force regarding land warfare to aerial warfare. The explicit reference to the St. Petersburg Declaration in the Article makes this quite clear. A lot has been said already on the pros and cons of technology-specific regulation. Suffice to say the Draft Rules on Air Warfare faced the same difficulties.

Article 21 does something rather peculiar. Instead of offering a prohibition, it explicitly condones specific conduct: using aircraft for distributing propaganda material among the enemy population.

The draft rules' most important element regards the regulation of aerial bombardment. The currently well-known principles of targeting can also be found in Articles 22 and 24. In short: bombing civilians and civilian targets is prohibited. Only the bombing of military targets is allowed. The draft rules explicitly deal with both sides of this coin. Article 22 explicitly prohibits bombardment 'for the purpose of terrorizing the civilian population, of destroying or damaging private property not of military character, or of injuring non-combatants'.[64] This, however, renders certain bombardment illegal because of its *purpose* and not its effects. Terrorizing the civilian population, damaging non-military objects and killing or injuring non-combatants is not in itself illegal. It would only be considered illegal if brought about intentionally. The root of the prohibition is an aversion to certain effects, the regulation not banning the effects per se. It bans them only when they are the result of a deliberate act aiming to achieve those effects. The dictate of military necessity states that it would be too much to ask to render the effects illegal regardless of the purpose of the bombardment causing them. Indeed, prohibiting the effects in all cases would lead in practice to a ban on air warfare. It would be impossible (certainly with the state of technology in 1923) to employ bombardment in such a way that one would be absolutely certain no civilian would get hurt or their property damaged.

Article 24 suffers from a lack of clarity. The text seems clear: 'Aerial bombardment is legitimate only when directed at a military objective, that is to say, an object of which the destruction or injury would constitute a distinct military advantage to the belligerent.'[65] In addition, it is probable that, when drafting such a text, everyone in the room had a clear understanding of what would fall under this umbrella and what

[63] Article 18 Rules Concerning the Control of Wireless Telegraphy in Time of War and Air Warfare, The Hague, 1923.

[64] Article 22 ibid.

[65] Article 24 ibid.

would not. Even without a precise and unmistakably clear description of prohibited conduct, the 'if it quacks, walks, talks like a duck; it is a duck'-logic would have played a big part in decision-making. However, the issue lies with the qualification of specific conduct in practice. It is a qualification surrounded by vested interests: the interest of having your enemy judged negatively on its conduct and of being exonerated of blame yourself. Without an ultimate, powerful, independent, impartial, and undisputed arbiter available to settle these matters of international law, there is no clear dividing line between law and politics in the international realm. If it quacks, walks, talks and even looks like a duck, it might just be an elephant if enough powerful States say that it is.

This difficulty arising from the dilemma between specificity (thereby excluding what is not mentioned) and all encompassing broad notions (which suffer from their vagueness) is commonplace within the Draft Rules of Air Warfare. Article 24(1) as shown above is immediately followed by Article 24(2) stating a list of military objectives to which legitimate bombardment is restricted. This raises the difficulties relating to specific regulation: semantic debates on whether or not an object fits the category and reasoning that new, not mentioned objects do not fall under the regulation since they are not specifically mentioned.

Article 24(3) states that non-military objects not near military objects may not be attacked. It lays down the rule that legitimate military targets may not be bombed if too close to civilians for the attack to be discriminate. The fact that most laymen now know the term 'collateral damage' proves that this take on targeting rules would not come to reflect the common practice. Article 24(4) shows us directly why not: civilian objects in the neighborhood of legitimate military targets are allowed to be bombarded if 'there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment, having regard to the danger thus caused to the civilian population.'[66]

So, here we are again: bombarding civilian objects is first prohibited in Article 22, then again in 24(1), further specified in Article 24(2), restated in 24(3) and then nuanced in 24(4). History shows that the practice of warfare has taken a shape molded by Article 24(4). This is not because these rules never entered into force -the rules that do apply are very similar to these. It relates again to the principle of the door ajar regarding the practical value of the laws of war: fail to close the door properly and you invite it to be kicked wide open.

The reasons for the latter are clear, understandable and inherent to human nature. When push comes to shove in the midst of the fog of war, fighting for survival under enemy fire, the laws of war will be stretched to breaking point. Whether it is the quacking duck or the elephant, it will be shot first and examined in the light of the law later, if at all.

[66] Article 24 ibid.

§6 1925-1945

The interbellum was a difficult time for the laws of war. On the one hand, the horrible events of the First World War and the remaining tension in global politics made it very clear that progress in the laws of war was highly desirable. On the other hand, the same factors, unresolved bitterness from the First World War and continuing fragility of international relations, made it all the more difficult for States to accept limitations to their means and methods of warfare. Such limitations are only acceptable when one trusts potential adversaries to also comply with them, and trust was scarce at the time.

This is not to say that nothing happened. Numerous international meetings in various places were held on the subject. Treaties were drafted and Declarations were solemnly pledged to. The Versailles Treaty even presented limitation of armaments as 'punishment' for the Germans.
Nonetheless, it proved quite difficult to regulate much further than the agreements of the Hague Peace Conferences. It would take another episode of damage and suffering on an enormous scale to reach the next major achievement in the field of the laws of war. Of all the work done in the interbellum, only one development is truly important to the scope of this book. It is discussed below.

§6.1 The 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare

Paradox of double prohibition
The Protocol is focused on specific kinds of weapons technology. This technology-specific approach was chosen due to the horrible effects of the gases and bacteriological weapons. However, this brings us to the first clear paradox of this regulation: the paradox of double prohibition. The reason for drafting an explicit prohibition is the principle itself: preventing excessive damage and suffering from being caused. One can see the risk of this specification detracting from the general principle: a gas not falling under the specific provisions of the Protocol could be deemed 'less suspect' even though it could cause equally unnecessary suffering.
The laws of war will never be in force without disagreement. However, it can hardly be said that a shift away from discussions of unnecessary suffering and damage to a semantic debate about whether weapons fit given descriptions is really in the spirit of the laws of war.
The patchwork style of this Protocol -restating an already existing prohibition on certain gases before adding a new one regarding bacteriological weapons- would serve as blueprint for later regulation. Therefore, the paradox of double (or even triple or quadruple) prohibition cannot be said to be an exception, but rather a solid, recurring element of the laws of war.

All criticism set aside, the merit of this Protocol is clear: when it is applicable between States and when the weapon in question falls under its scope, the Protocol clearly prohibits its use, without exception.

§7 The 1946 International Military Tribunal at Nuremberg

The Second World War put a lot of pressure on the modern laws of war project. All the sides involved were guilty of breaches in the laws of war. However, the fact that norms and laws are breached does not necessarily suggest them to be invalid or useless. It can in fact help reinforce their (moral) validity. A parallel can be seen with the prohibition of murder in national law systems: nobody argues that the rule prohibiting murder is invalid and useless simply because murders still occur. Significantly though, in cases where a murderer is caught and the murder proven, the norm is upheld by means of legal punishment. With regard to international law in general and the laws of war in particular, we are touching on their Achilles' heel. There is no standing institution, no impartial arbitrator to punish those who breach the laws of war. The scale and graveness of the breaches of the laws of war in World War II pushed the credibility of the laws of war to the limits. Breaches so grave and common had to be responded to; failure to do so dealing a heavy blow to the credibility, validity and utility of the laws of war.
Action was taken by establishing the International Military Tribunals at Nuremberg and Tokyo. By erecting them, the laws of war matured to the next level: the level of a body of legislation that was not only solemnly pledged to, but also enforceable before a tribunal with the power to punish (some of) those who dared to breach it.

Restating the norms
The tribunals were not established institutions, but ad hoc creations with a single and specific purpose. As such, their jurisdiction had to be established *ex post*. Their statutes restated the norms, the laws of war, which would be upheld. The Charters of the tribunals were not meant to replace the existing laws of war. They restated many of those laws. In addition, they declared that the norms they upheld should be considered part of (customary) international law. This was based on the argument that all civilized nations considered them to be so at the outbreak of the war.

The Charters
The Nuremberg Charter establishes jurisdiction over three categories of crimes: crimes against peace, war crimes, and crimes against humanity. For our purposes, the war crimes category is the most relevant. The Charter defines it as follows:

> War Crimes: namely, violations of the laws or customs of war. Such violations shall include, but not be limited to, murder, ill-treatment or deportation to slave labor or for any other purpose of civilian population of or in occupied territory, murder or ill-treatment of prisoners of war or persons on the seas, killing of

> hostages, plunder of public or private property, wanton destruction of cities, town or villages, or devastation not justified by military necessity;[67]

The Principles

'The Nuremberg principles' have become a catchphrase within the field of the laws of war. The principles were soon strenghtened by the UN General Assembly, which in its Resolution 95(1) of December 11th 1946, states:

> The General Assembly ... affirms the principles of international law recognized by the Charter of the Nürnberg Tribunal and the judgment of the Tribunal; Directs the Committee on the codification of International Law ... to treat as a matter of primary importance plans for the formulation ... of the principles recognized in the Charter of the Nürnberg Tribunal and in the judgment of the Tribunal.

The Judgments

Next to a restatement of the norms of the laws of war in their statute, the tribunals judged and sentenced those suspected of breaching the laws of war. These verdicts are another important aspect of the laws of war development. For the first time, the norms were applied to individual practical cases. In doing so, the idea of individual criminal responsibility was also firmly established. Earlier documents on the laws of war only made reference to a State's responsibility for the breaches 'it' had committed. War crimes, however, cannot be committed without the actions of individual persons. The tribunals made clear that each individual has to account for his own behavior. One cannot be exonerated by claims of merely serving one's State or obeying superior orders.[68]

Criticism

Firstly, a common critique of the tribunals has to be restated: they were not impartial. It is not that they discriminated against suspects based on the side for which they had fought. The tribunals simply did not deal with suspected breaches from the allies at all. Breaches of the laws of war by the allied forces went unpunished having not been legally evaluated by an independent arbitrator.

Furthermore, the moment was seized to advance the laws of war without an international convocation of States there to establish the rules through deliberation and consent. From a procedural perspective, one can question whether this is the proper way to establish binding norms.

The phrasing of the Charter contains a number of striking elements that are, as shown earlier in this book, quite common within the body of the laws of war.

Firstly, the paradox of double prohibition shows itself once again. Reference is made to the existing laws and customs of war in general, next to an explicit list of specific crimes. The list seems not to be a general selection of relevant laws and customs of war, but tailored to the expected crimes with which defendants were to be charged.

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67 Article 6(b) Charter of the International Military Tribunal, Nuremberg, 1945.

68 Principle IV Principles of International Law Recognized in the Charter of the Nüremberg Tribunal and in the Judgment of the Tribunal, 1950.

This emphasis on selected parts of the laws and customs of war poses the danger of an overshadowing of the remaining legislation

Secondly, a weakening of the stance immediately follows a powerful and clear statement concerning the illegality of specific conduct: the explicit possibility of exonerating oneself by claiming a military necessity underwrote the action taken. Certainly, regulation of conduct in warfare has to strike a balance between humanitarian goals and the harsh reality of warfare and military necessity, but that does not diminish the risk posed by a general clause of exoneration through 'military necessity'.

The third category, 'crimes against humanity' consists largely of forms of aggression against civilians already prohibited under the laws and customs of war. Crimes against humanity involves conduct not directly related to military effort, whereas 'war crimes' cover breaches that are more or less a 'byproduct' of legitimate military activity. The distinction cannot be made too rigidly, but since both categories fall under the jurisdiction of the tribunals (Nuremberg, Tokyo and later tribunals), the importance of a clear division could be regarded as rather moot.

Conclusion
It is easy to understand the fame of the tribunals, especially that of Nuremberg. They have had a tremendous impact on the laws of war. The largest achievements lie in the advancement of already existing principles of the laws and customs of war. Furthermore, they established individual responsibility for violations of the laws of war. In all, they empowered the laws of war paper tiger by actually holding individuals accountable for their actions and allowing legal judgment to then be passed on them. The ultimate verdict and the convicted war criminals execution by hanging have made a lasting impact on history.
With respect to the scope of this book and the regulation of (the use of) weapons technology, the tribunals did little to extend the previous work. They did, however, affirm established principles and contributed to their further clarification. By interpreting the law in concrete cases they made it clear that the laws of war were much more than hollow words of courtesy between States. They were a set of rules to which each individual should adhere, or at least those individuals on the losing side.

§8 1949 and 1977 Geneva Conventions and Protocols

The most significant texts of the laws of war are the Hague and Geneva Conventions. The Hague Conventions, inspired by the innovations in weapons technology and the increasing economic burden of keeping up in the arms race, mainly focused on State armies fighting each other and the regulation of military conduct therein. Of course, attention was paid to persons *hors de combat*, the treatment of prisoners of war and civilians, but the achievements were relatively minor when compared to the work done in regulating military activity.

The Second World War left the whole world heavily traumatized in its wake. The systematic killing and torture of civilians and other maltreatment of non-combatants in general left an incredible impression. The gross display of inhumanity humans had proved themselves to be capable of called for a response. The moral indignation had to be translated into legal terms. The tribunals did this by applying the existing norms to specific cases and prosecuting those responsible, although there was a tangible sense that the laws themselves needed work. After the Hague Conventions' focus on diminishing the suffering of combatants on the battlefield, it was now time to regulate the treatment of all people outside the lines of the battlefield, of the 'victims of war'.[69] Civilian suffering during the Second World War had been greater than ever before.

Without underestimating the enormous importance the Geneva Conventions had for the laws of war, this focus makes their content less relevant to the scope of this book. The (use of) weapons technology is not the core element of its regulation. The additional Protocols of 1977 to the 1949 Geneva Conventions do have a larger bearing on the subject, but all remain in the shadow of their main concern: the treatment of those who are not or no longer taking part in the actual hostilities, as an ultimate attempt to, by means of the law, "detotalize" warfare.

The Conventions

The 1949 Conventions work mostly by specifying, clarifying and broadening the protection of specific categories of persons and objects like units marked for hospital use, the wounded, prisoners of war, and civilians. This regulation has an indirect influence on (the use of) weapons technology: it is prohibited to harm these persons and objects without exception. It is not a technology-based or effects-driven regulation, but a status-based regulation. Whether bare hands or weapons of mass destruction are used is irrelevant. Issues of unnecessary suffering or proportional damage being inflicted are not important. Maltreatment of certain buildings, units or persons is, quite simply, absolutely out of the question. The Conventions do contain derogatory clauses of military necessity, but they do not touch upon the core protection of the mentioned categories.

Thus, without focusing specifically on (the use of) military technology, the Geneva Conventions offer a powerful mode of regulating it. The rights of the protected categories are not negotiable. The debate, however, remains whether something or someone falls within the legal category protected by the Conventions.

The Protocols

Part III, section I of the first Geneva Protocol, titled *'Methods and Means of Warfare'* (Articles 35-42) and Part IV, section I *'General Protection Against Effects of Hostilities'* (notably Articles 48-56) are most relevant to this book. For the most part, they reaffirm the principles stated in the Hague Conventions before offering some elaboration. For instance, Article 35 restates the principles that fighting parties do not have an unlimited right to choose means and methods of warfare and that

[69] A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 195.

weapons causing superfluous injury or unnecessary suffering are not permitted. The following sections then go on to describe in greater detail the already existing general principles, taking particular account of occurrences in both World Wars and the Vietnam War. This is done most clearly in Articles 48-56. They offer a detailed account of targeting rules based on the principle of discrimination between military and civilian targets (and the obligation not to attack the latter). Moreover, the Protocol introduces new elements to the laws of war. A good example is Article 35.3, prohibiting the use of weapons that are determined or likely to cause widespread, long-term and severe damage to the environment.

Offering a discussion of the Protocol as a whole is nearly impossible. It covers a wide array of elements, much of the regulation also deeply rooted in earlier regulation that has already been discussed. What follows instead is an Article by Article overview of the aspects of the first Geneva Protocol of most relevance to the scope of this book -the regulation of (the use of) weapons technology. Again, the Articles themselves can be found in appendix B.

§8.1 Part III, Section I - Methods and Means of Warfare

§8.1.1 Article 35

Merits

On the positive side, this principle significantly broadens the scope of environmental protection within the laws of war. The chance of a certain action falling under this principle is larger than under the preceding ENMOD Convention, which will be discussed in §9.3. The absence of a general 'military necessity' escape clause also makes the regulation more powerful.

Criticism

There are, however, a few points of criticism to note. Firstly, the regulation contains a significant number of vague and multi-interpretable terms. The combination 'widespread, long-term and severe' poses a heavy burden of proof. All these matters have to be decided upon before it can be alleged that illegality has occurred. Once that can be established, the issue of foresight comes into play. Luckily, the principle goes beyond a statement of intention. Proving that environmental damage was intentional and not the mere by-product of another aim is merely impossible. Fortunately, the more objective 'may be expected' clause is included. No proof has to be offered of what went on inside the heads of the decision-makers. The principle dictates that reasonable expectation of the damage that would occur -whether the main goal or not- is sufficient for the laws of war to have been breached.

Despite the fact that some cases will also fall under the ENMOD Convention, the scope is broad enough to escape the paradox of double prohibition.

§8.2 Part IV, Section I - General Protection Against Effects of Hostilities

The status-based type of regulation used is very powerful. It aims at preventing effects and casts its net wide: 'damage, injury, loss of life'. The regulation's focus is

the protection of categories of persons and objects in general against all negative effects of warfare. Of course, as such the regulation suffers from broad and multi-interpretable notions. This carries the risk of turning debates on the right or wrong of conduct into a battle of legal semantics. Of course, the prohibitions are subject to a weighting of interests and are up against the logic of military utility. However, this type of regulation has more chance of overcoming these challenges. As soon as damage or harm is done to the categories covered by this type of regulation, the burden of proof shifts to the party arguing that his conduct is in accordance with the laws of war.

On the legislative side, one can say that the focus has clearly shifted. The laws of war are no longer set by States as equals among each other. No longer do the game's main players set its rules. The original focus resembled chess players discussing how to use and dispose of the pieces and agreeing on it among themselves. The new focus shifted away from the players to the actual pieces on the board. Clear protection of the pieces became the principle. Derogation of protection became the exception that had to be explained. States were no longer the sole driving forces behind the development of the laws of war. Non-governmental organizations came to the fore. They fueled public opinion, using that energy to try to force States into an agreement extending the protection to all those involved in or affected by combat. The picture changed. War went from an exceptional occurrence inherently free from rules but attempting to introduce them, to an unfortunate and temporary disruption of peaceful normality. The latter suggested that the rules valid in peacetime should be preserved as much as possible.
In light of this development, the eradication of the principle of reciprocity was a logical step. War was not an lawless situation where the parties involved could set some restrictions to soften the hardships. War was something that had to be prevented and, if for some reason the prevention had failed, should be a situation differing as little as possible from peacetime in terms of the legal protection offered. Humanity set the rules, not the players of the war game. A breach of rules was therefore no longer mainly a wrong done to the enemy. In the old logic, this even granted the enemy the right to respond in kind, breaching the same laws of war himself to even the score. One breach from either side would make it an even shared tie: 1-1. In the new view, a breach was first and foremost an affront to humanitarian principles, to mankind. A violation of the laws of war granted no rights whatsoever to a 'counter-violation' or 'reprisal'. Doing so did not equalize the score or restore the balance. It would double the negative score against humanity: 2-0.
However logical and morally attractive this kind of reasoning sounds, it also brings some unintended consequences, which will be discussed later. They had the possibility to change the score of the war game altogether.

§9 1945 and beyond: a patchwork of Documents

The Geneva Conventions of 1949 and the additional Protocols of 1977 are the landmark achievements of the post-Second World War era. However, many other

documents were established that contributed to the modern laws of war. In so far as they are relevant, they are discussed below.

§9.1 1954: Hague Convention for the Protection of Cultural Property

During World War II a lot of items of cultural heritage were destroyed. In response to this enormous loss of cultural property, this Convention was established. The Convention regulates (the use of) weapons technology in an indirect manner. The central principle of the Convention -the protection of certain categories of property- was not introduced in 1954, and had in fact been long established.[70] However, those older statements of the principle could not prevent extensive breaches of it in the Second World War.

The Convention starts out with the almost absolute protection of cultural property: 'For the purposes of the present Convention, the protection of cultural property shall comprise the safeguarding of and respect for such property'[71] and 'The High Contracting Parties undertake to ensure the immunity of cultural property under special protection.'[72]

The means and methods used to damage or destroy cultural property are irrelevant. In other words: the Convention is not technology-specific. Next, the regulation is not effects-driven: the Convention speaks of 'safeguarding', 'respect' and 'immunity' from hostility. It is not to be touched by an enemy State, regardless of the effects. Placing military units near one's own protected cultural property is also prohibited, even if it does not actually lead to any damage to the property. Two types of exceptions immediately follow the forceful prohibition. If one's cultural property is used for military purposes by the enemy (which is in itself a violation of the laws of war), the protection ceases.[73] But even if the cultural property has absolutely no military use whatsoever, its damage or destruction could be in accordance with the laws of war 'in exceptional cases of unavoidable military necessity, and only for such time as that necessity continues.'[74] The fact that the military necessity clause is phrased in restrictive terms allows an opening to derogate from the protection of cultural property. And like Cato the Elder had his Carthago-mantra, I would like to restate that, in the laws of war, there is little difference between the almost closed and the wide open door. Either way, it is easy to get through it if you need to.

In assessing the Convention, one could also point to the paradox of double prohibition again. As a basic tenet of the laws of war, the prohibition of the attack of non-military objects had long been established. The objects specifically protected by this Convention are non-military by nature. As stated before, the risk occurs that

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70 E.g. in the Hague Conventions.

71 Article 2 Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 1954.

72 Article 9 ibid.

73 A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 372.

74 Article 11.2 Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 1954.

other objects -which are solely protected by the general principle and not by an additional specific protection- are perceived as being 'less important' or 'less protected'. In practice, it might lead to a lowering of the threshold for what constitutes military necessity. Ironically, the worries accompanying this unintended and unwanted weakening of the general principle of the laws of war are the exact same reason behind the Convention. The feeling that it is worse to attack a museum of national history or an ancient royal castle than to attack a civilian housing unit is the basis for specific Conventions like the one on protection of Cultural Property. In attempting to address specifics that were felt in need of extra protection, other areas may well have inadvertently been placed in greater danger.

§9.2 1972: Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

The Convention reflects an important mode of regulation. In essence it is a disarmament Convention. It poses absolute bans on certain means and methods of warfare. It does try to balance military benefit and humanitarian concerns. It prohibits biological weapons in general for the sake of humanity. Potential military benefit is deemed irrelevant. Furthermore, it obliges States to destroy biological weapons they already have. All in all it is a very clear rule. Use is prohibited under all circumstances, albeit implicitly.[75] As such, there is no sense in allowing States to possess and/or produce those weapons. Since the prohibition is aimed at specific technology categorically there is little sense in leaving room for further development. Or, as the preamble to the Convention states: 'Determined for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons.'[76]
However, the Convention does have one loophole through which the absoluteness of the ban can be nullified. In fact, that loophole is as absolute as the original ban itself. The Convention does not contain exceptions to its specific rules, but it does contain one exception to bypass the entire Convention. Article XIII (2) states:

> Each State Party to this Convention shall in exercising its national sovereignty have the right to withdraw from the Convention if it decides that extraordinary events, related to the subject matter of the Convention, have jeopardized the supreme interests of its country.[77]

[75] As Detter rightly points out, there is no explicit prohibition of the 'use' of biological weapons. However, no use can be made without violation of the Convention. I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p. 260.

[76] Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, London, Moscow, Washington, 1972.

[77] ibid.

Enforcement
A last notable and distinctive feature of the Convention is the support of its provisions by an enforcement structure. Most laws of war, as we have seen, are restricted to offering regulation. They state the rules, but do not stipulate what to do in case of a breach. Righteous morality alone can be a powerful guiding force, but there will always be some parties in need of a little more persuasion. We all agree that we should not eat the cake that does not belong to us, but if we get hungry and no-one's looking, then the temptation may just be too great.
The 1972 Convention is accompanied by a verification system that is potentially far-reaching, although this system was not established until the 1991 Review Conference.[78] This marks a significant step towards the laws of war no longer being perceived as 'rules of the game' established between the players. Instead they come to be seen as regulation reflecting the just moral code to which one should always adhere -even under the extreme circumstances of war.

Merits
The obvious strength of the Convention is its rigidness. It goes beyond merely prohibiting certain uses of biological weapons if they cause specific effects. Since it also bans production and possession, States will be less tempted and have less opportunity to use them and thus breach the laws of war, even under extreme pressure or in the face of defeat.

Criticism
The first cause for critique lies in the Convention's rather vague terms. The exception clause in particular cries out for clarification. Since the clause has never been called upon in practice, it is all the more difficult to decipher its true meaning. Its framing indicates that a State can 'withdraw from the Convention' in cases of exceptional, extreme urgency. Nothing is said about a State having the right to use biological weapons in such a scenario. Furthermore, it is questionable whether the time needed to start production of these weapons would be compatible with such a sudden situation of duress.[79]

Further grounds for concern lie with the arbitrariness of the justification for the ban when compared to other laws of war. It might very well be that certain biological weapons are equally or even less harmful than allowed non-biological weapons. Taken a step further, the Convention can be accused of bias in favor of powerful States. A nuclear power, for instance, can wield enormous destructive power not available to most other States. The possibility for the latter to match that power by using –relatively cheap- biological weapons is taken off the table where the equally destructive nuclear (and/or Conventional) options remain. This phenomenon can be logically explained by a desire to achieve much more extensive regulation (and prohibitions) in the area of warfare, embracing every step forward for the sake of humanity. However, it entails the risk of eroding the moral and legal power of the

[78] I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p. 261.
[79] ibid., p. 391.

laws of war by threatening its perceived impartiality and sole responsibility to the interests of mankind.

Third and last, the prohibition on development raises discussion. One could object that this hampers the human innovative spirit. It blocks roads without knowing where they might lead. It might lead to a biological weapon able to temporarily disable enemies without permanent damage. Such critique is impossible to invalidate. However, a number of arguments can be given against it. In conducting research for new weapons technology, the tendency is mostly to look for 'a bigger bang for the buck'. The chance that the road would lead to more destructive weapons is larger than the chance that it leads to a 'humane weapon'. Next, a 'more humane weapon' probably lowers the threshold for using it. This makes it uncertain whether the total net result would be humanitarily beneficial. Of course, research and development are not the same. Even under a prohibition of development, research can achieve discoveries that hint at new possibilities. However, under this Convention, one would have to go through an entire process of seeking international agreement on altering the Treaty before use might be allowed. This reduced expectation of return on investment serves to discourage research and development aimed at weaponizing bacteriological agents.

Conclusion
When we regard State practice, the technology-specific but absolute ban stated by this Convention has turned out to be fairly successful. Of course, bacteriological weapons have been used, though not on a wide scale. It has been restricted to isolated cases in which States also breached the laws of war a number of other ways as well. Public outcry over such incidents is great and discussions of response in kind scarce. Biological weaponry is developed although it does not seem to be an R&D priority for the military of major States. Its threat is currently perceived to be largest in relation to non-State actors, since the base ingredients for biological weapons are easily available in the forms of their peaceful application (medicine, fertilizer etc.). A genuine calculation of the size of this risk is yet to be determined. Most debate arises over whether the non-State actors are capable of genuinely effective weaponization of the biological agents they can acquire and if so, how easy/difficult this process would be.

§9.3 1976 UN Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques

The Convention is the immediate result of the concerns arising from developments in (weapons) technology: techniques that modify the environment. The use of these techniques by the Americans during the Vietnam War received much criticism and provoked a call for regulation.[80] Eventually, the ENMOD Convention was agreed to. Article 1.1 shows us its main ruling.

[80] D.G. Marr, The Technological Imperative in U.S. War Strategy in Vietnam. In The World Military Order: the Impact of Military Technology on the Third World, M. Kaldor and A. Eide, Eds. Macmillan: New York, 1979; pp 17-48., p..32.

First of all, it has to be made clear that the Convention is less effects-driven than one might think reading its title. Not all technology that in effect causes damage to the environment is covered by the Convention. The Convention focuses on the technological modification of the environment as a weapon in itself, as Article 2 shows.[81]

The mode of regulation is thus not effects-driven and not truly technology-specific either. It does not list specific means of warfare, but focuses on a method. It regulates a certain type of conduct –namely modifying the environment as a method of warfare- regardless of how it is actually carried out. The regulation as framed has great potential: it does not matter what tool is used or what specific effects are caused. If one modifies the environment as a method of warfare, one is breaching the laws of war. However, the text contains a number of vague terms that can lead to interpretational debate: 'widespread, long-lasting or severe effects'. Moreover the condition that actions must be 'deliberate' is its weakest link. That an act has occurred might be difficult to prove, let alone that the intention behind it was deliberate. The risk of turning legal evaluation of the morality of conduct into a semantic debate on legal technicalities is thus embedded in the Convention.
On the other side, there is no 'military necessity' escape clause. The Convention might in some practical instances suffer from the paradox of double prohibition (e.g. when only a civilian population would be hurt by environmental modification) but it does not have to do so per definition. It covers extensively a category of potential cases that would not be prohibited without the Convention having entered into force.

§9.4 1980 UN Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects

The 1980 CCW Convention and its Protocols is a landmark in the modern laws of war in relation to the regulation of (the use of) weapons technology. Despite the extensive nature of the CCW Convention and Protocols, they do not alter the existing fundamental principles of the laws of war. They reaffirm many of them, further regulating specific instances in a more clear, detailed, and strict manner. This results in a regulation that on principle covers all (use of) weapons technology. Within this it offers a variety in levels of strictness and detail in relation to the separate regulation of specific types of weapons technology. The trees in the forest all share the same kind of roots, but their height and thickness of their leaves varies.
As the title of the Convention already shows, it is rooted in two fundamental principles that have been essential to the modern laws of war: prohibition of the causation of superfluous injury (also known as 'unnecessary suffering' or 'excessively injurious') and the obligation to discriminate between combatants and non-combatants with attack on the latter prohibited ('indiscriminate effects'). This makes the entire CCW Convention another classic example of double prohibition. Although

[81] A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 408.

this does not render the regulation useless, it remains important to realize that it does create problems. Stating a general principle before elaborating on some specific areas of it carries a risk that other, not specifically mentioned areas will be seen as less important. The acts in question that are not elaborated on risk being seen as 'less forbidden' or 'not really forbidden at all'. Fortunately, the fact that the CCW Convention and Protocols cover a large amount of all possible weaponry reduces this risk a great deal.

Of course, the CCW Convention and Protocols do not render any earlier statements of the laws of war obsolete. Those instances not covered by the CCW are still covered by the general principles. In sum, one has to conclude that the CCW is an acknowledgement of the particular weaknesses of the different modes of regulation used in the laws of war. It tries to remedy this by accumulating multiple regulation modes regarding the same matters. The general principle's meaning is merely worked out in greater detail for those types of weaponry on which agreement can be reached.

The text of the Convention
The preamble to the Convention restates the fundamental principles on which it rests:

> that the right of the parties to an armed conflict to choose methods or means of warfare is not unlimited, and on the principle that prohibits the employment in armed conflict of weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.[82]

It also emphasizes the validity of the existing laws of war and restates the Martens' Clause with regard to acts of warfare not explicitly covered by international agreements. The provisions of the Convention itself only offer formal legal rules on the validity, acceptance, and denunciation of the regulations found in the Protocols.

1980 CCW Protocol I: Protocol on Non-Detectable Fragments
Today, the practical relevance of non-detectable fragments remains very small. The phrasing of the rule is quite solid. Within it there is only one real risk for interpretational discussion: That it must be the 'primary effect' of the weapon to injure by fragments escaping detection by X-ray. A general escape clause of 'military necessity' is not incorporated into the Protocol.

Dilemma of regulating new weapons technology
It might seem obvious that this kind of horrible weaponry should be forbidden. The idea of a body being violated by the intrusion of tiny materials that are undetectable by X-ray and carry a terrible threat of damage and illness is unbearable. However, not much more than this horrible image actually called for such a ban. First of all,

[82] UN Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, 1980.

there was no indication that a State was actually developing such weaponry, let alone using it. There is also the difficulty involved in proving a breach of the Protocol, since the fragments would hardly be detectable. It should not be surprising that the lack of the weapon's practical significance forms an important explanation for the existence of the Protocol. As we have seen before, the dilemma regarding new weapons technology dictates that prohibition of scary futuristic weaponry is easier to agree on when it has no root (yet) in military practice. Weapons with proven horrible effects, as well as military benefit, are much harder to agree upon.
The Protocol itself contains a peculiar paradox. If the use of the fragments causes excessive damage and suffering, its use would already be prohibited on the general principle of numerous documents within the laws of war. If the fragments did not cause excessive damage or suffering and were considered unacceptable purely because of the unpleasantness of the concept (small undetectable pArticles entering the body), should prohibition still apply? Could its use possibly be more humane than other -not forbidden- uses of weaponry, perhaps by temporarily placing an enemy *hors de combat*? One might also wonder why the use of these fragments is forbidden when other, equally damaging weaponry, is allowed. In the most cynical form: one is not allowed to insert X-ray undetectable particles into a human body, but one may blow the body itself into particles undetectable by any means.

1980 CCW Protocol II: Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices
The 1980 CCW Protocol II does not go so far as to prohibit the use of the means mentioned in its title. As Article 3 makes clear, it prohibits their use in cases against civilians. In other words: it restates the prohibition of indiscriminate use already in force. It specifies this prohibition with regard to three specific categories: mines, booby-traps, and 'other devices'. These categories are defined along with the term 'indiscriminate use'.
The Protocol is yet another example of the double prohibition paradox. The matters regulated by the Protocol would not be unregulated without it. The Protocol works out a general principle for specific methods to a level of detail at which States could agree.

Of course, the true value of this specific Protocol only lasted until 1996, when it was amended and the regulation elaborated and intensified. These changes are discussed further below.

The Protocol is not very technology-specific. It does not matter what techniques are used to construct a mine or booby-trap. In fact, the mentioning of 'other devices' stresses the absence of technology-specificity. Even if one is sufficiently creative to come up with a mine or booby-trap-like device not recognizable as a mine or booby-trap, one should not be rewarded by escaping the regulation. In such a case, the invention fits neatly into the 'other devices' category, characterized by being

'designed to kill, injure or damage and which are actuated by remote control or automatically after a lapse of time'.[83]

The value of the Protocol lies in its effect on the burden of proof. Relying solely on the principle of non-discrimination would lead to difficult debates on the legality of specific instances. A mine is laid and left alone. The army that has placed it has little control over its consequences when it explodes. It does not decide whether a combatant or a civilian is hit by it. It is debatable whether the risk of hitting a civilian should be carried by the army deploying the mines or by the civilian entering the area. The Protocol elaborately regulates the circumstances in which the weaponry is deployed and places the burden of proof on the army that deploys the mines. That army has to prove its innocence. Usually, the legal world does not require parties to have to do this. However, in cases like this it forms a countermeasure against the overwhelming power an army has in comparison to innocent civilians and the difficulty those civilians have in trying to take preventive measures against becoming a casualty.

1980 CCW Protocol III: Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons

The third Protocol follows the rationale of the second. It does not contain an absolute prohibition, but prohibits use against civilians and/or civilian objects. The regulation is effect-driven and aimed at 'any weapon or munitions designed to set fire to objects or to cause burn injury to persons through the action of flame, heat, or a combination thereof, produced by a chemical reaction of a substance delivered on the target.'[84]

Behind the abstract notion of 'incendiary weapons' lies the very concrete public outrage over the use of napalm by the US army in Vietnam. The images of its effects were horrifying. The idea of being inflamed causes larger moral objections than the idea of being shot.

At first, the goal was to ban 'incendiary weapons' entirely. However, this was blocked – mainly by the US and USSR. The argument against a total ban was in fact humanitarian in nature: use of 'incendiary weapons' could, in some cases, replace more conventional bombardment with explosives causing larger collateral damage.[85]

The value of the third Protocol lies in its extensive regulation regarding the use of 'incendiary weapons'. It makes their use suspect beforehand and places the burden of proof on those using them.

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[83] Article 2.3 Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), Geneva, 1980.

[84] Article 1.1 Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), Geneva, 1980.

[85] A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 517.

1995 CCW Protocol IV: Protocol on Blinding Laser Weapons
Protocol IV regulates the use of 'blinding laser weapons' with regard to civilians and combatants. It is technology-specific and effect-driven. It covers 'laser weapons, specifically designed … to cause permanent blindness to unenhanced vision'.[86]
In other words, causing permanent blindness by other means than laser weapons is not covered by the Convention.[87] By the same token, using laser weapons for other military purposes is not covered by the prohibition of the Protocol either. Even when this 'other military use' of laser weapons causes blindness as a collateral effect, it is still not prohibited as Article 3 of this Protocol expressly states. These somewhat curious provisions are based on humanitarian grounds: the use of laser technology as part of weapons systems for targeting, aiming, and guiding purposes has enabled the military to achieve far greater accuracy in attack. This reduces civilian suffering compared to a strike made under equal circumstances without the help of laser technology.

As an exception to what is starting to appear as a rule, this Protocol hardly suffers from the paradox of double prohibition. It does not regulate technology already covered by other regulation. And although suddenly suffered permanent blindness can hardly be said to not constitute a horrible injury, the use of blinding laser weapons cannot be simply placed under the umbrella of 'unnecessary suffering'. Surrounding the Protocol is a somewhat uneasy debate on the correct assessment of actions blinding enemy combatants with laser weapons. Aside from the argument as to where blindness as an injury stands in comparison to losing several limbs,[88] there is the rationale that blinding laser weapons can very effectively place an enemy *hors de combat* without killing him. A wounded person remains in combat as long as he is able to handle his weapon and aim it. Although a blinded combatant can still fire his weapon, the psychological shock of suffering the injury often effectively puts the combatant *hors de combat* and offers a good chance to disarm and imprison him. The argument flowing from this rationale is that blinding laser weapons represent a humanitarian improvement in battlefield conditions. They enable the disablement of enemies by 'merely' blinding them instead of having to shoot and kill them.
This is not the place to continue the debate described above. However, in analyzing this Protocol, the debate should not be left out. It points at yet another paradox: that the result of regulation based on humanitarian concerns might well lead to more fatalities overall.

1996 CCW Amended Protocol II: Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices
The use of mines, booby-traps and the like has always received a lot of attention. Some perceive it as inherently unfair to try to kill an enemy without running any risk yourself. This voids the notion of engaging war with 'heroic' connotations of possible

[86] Article 1 Protocol on Blinding Laser Weapons (Protocol IV), 1995.
[87] Although it might fall within the scope of other regulations of the laws of war.
[88] Which, e.g. as a result of a bombardment or mortar attack, is allowed under the laws of war.

sacrifice and chivalrous face-to-face combat. It disrupts the ideal that, when aiming to kill a fellow human being, one should at least pay him or her the respect of looking him or her in the eye. Or, in modern terms, without giving some warning[89] before coming in for the kill. In addition, the images of children maimed by leftover mines or even booby-trapped toys speak volumes. These types of means and methods find themselves at the centre of an emotional debate. The fact that the amended Protocol followed 16 years after the original one might not press the point. The fact that the amended Protocol itself would already be followed a year later by the Ottawa Convention does. However, the Ottawa Convention –discussed below- does not rid this amended Protocol of any meaning or legal validity. Likewise, the amended Protocol itself does not –technically- replace the original 1980 Protocol. Although the general intention with regard to new documents of the laws of war is to do just that, the old documents often remain in force, often for the benefit of States party to the old document but unwilling to sign and/or ratify the new version.

The amendments

The largest difference between the amended Protocol and the original lies in the focus of protection. Where the original amendment focused on the protection of civilians, civilian objects, and use in populated areas, the amendment includes protection of combatants as well. In other words, the amendment poses stricter regulation of mines, booby-traps and 'other devices'. It narrows the scope of their deployment. The protection of combatants is effectuated by banning certain types of devices categorically. The original Protocol did contain a few absolute prohibitions for a small number of booby-traps,[90] but in the amended Protocol, the list is longer. Furthermore, the scope of the Protocol is broadened by the specific inclusion of non-international armed conflicts and UN-missions. The amended Protocol also contains more detailed technical descriptions of the means and methods of warfare it seeks to regulate. There is a long list of clearly described definitions about what constitutes which kind of weapon. The need for detailed description of the weapons' mechanism of operation was probably caused by the diplomatic difficulties in reaching agreement. As a positive side-effect, it protects the Protocol from becoming technology-specific and subsequent semantic debates about whether something is technically a mine or not that could diminish its value.

The fact that the Ottawa Convention followed proves a lack of total satisfaction with the amended Protocol. Next to the usual critique on the lack of inspection and enforcement measures, the criticism focused on the absence of absolute prohibitions regarding remotely delivered mines and mines not automatically disabled after a set period of time.[91] We will see later whether the 1997 Ottawa Convention resolved these matters.

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89 E.g. by flying over with a heavy bomber making a lot of noise.

90 Article 6 Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), Geneva, 1980.

91 A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 518.

The amended Protocol expresses the same logic as the original but phrases it more sharply. Rephrasing a regulation in stricter terms is a logical response to the original regulation being ignored in practice. However, it seldom seems to help. If telling someone that his actions are not allowed does not stop him, telling him they are *really* not allowed is likely to achieve little other than a further erosion of authority.

Paradox of double prohibition

Parts of the amended Protocol suffer from the paradox of double prohibition. As we saw in the analysis of the original Protocol, the protection of civilians is based on the general principle of discrimination. Many of the prohibited cases are already included under the general prohibition to cause superfluous injury or unnecessary suffering, a principle explicitly mentioned again in the amended Protocol itself.[92] Furthermore, in terms of the detailed descriptions of devices' modes of operation, one could argue that many of them are by default treacherous and/or perfidious and thus already prohibited.

Perhaps the largest contribution lays in the public attention the revision got and the close public scrutiny afforded those who disregard the Protocol. Furthermore, the more detailed and strict regulation shifts the burden of proof even more to those deploying mines and booby-traps. These absolute bans offer a significant contribution to the body of the laws of war. They leave no interpretational escape routes for those employing the techniques to claim that they did so in compliance with the laws of war.

2003 CCW Protocol V: Protocol on Explosive Remnants of War

The logic behind the 2003 CCW Protocol V lies in the same humanitarian concern as mines pose. Explosive Remnants also remain dangerous and cause casualties long after the battle has finished. The explosives themselves are not the problem. Their use might very well be completely legal during battle. However, when the battle is over, failing explosives are still lying around, potentially maiming or killing innocent victims. Due to the often colorful appearance of these remnants, many of those victims are innocent children. In the same vein as those used in anti-mine lobbying, these images understandably increase public indignation and outrage.

The Protocol mainly poses an obligation to clean up your own mess when the fighting is over. Whatever ordnance you deployed or carried with you to the battle area, you are responsible to 'mark and clear'. Whether it is retrieved or detonated on the spot, you should ensure it is gone before you leave. In essence, the regulation is focused on an unintended consequence of the use of explosives. When deployed, the goal is to project kinetic power on a target. The fact that the explosive becomes an unexploded remnant means something went wrong. The Protocol pragmatically seeks to address an issue in war that does not stem from a military doctrine or clear intention, but from technological failure.

[92] Article 3.3 Protocol on the Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, 1996.

Merits
The Protocol offers us an interesting mode of regulation. It is not the technology itself that is regulated. The Protocol explicitly refers to Conventional ordnance that normally one is allowed to use, but that has not been deployed or that should have exploded but has failed to do so. The Protocol does exclude certain types of technology, but merely because they are already covered by other Protocols. There is no specific way of using the technology mentioned: there is no restriction on a specific use of certain technology while other uses are allowed. The regulation is not effects-driven either. It does not matter whether the remnants explode or not and if they do, whether they cause any harm. Lastly, it has no eye for intention, few States intending to drop a bomb in the hope that it will not explode.

§9.5 1993 Chemical Weapons Convention (CWC): Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction

According to the preamble, the 1993 CWC complements the 1925 Geneva Gas Protocol and shares its goals. It also shares roots with the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction. The clear difference lies in the type of technology covered and, not without meaning, the explicit extension of the 1993 CWC to 'use' of the weaponry as well. In the 1972 Convention, such a prohibition could only be implicitly -albeit logically- deducted from the regulation.

Merits
The biggest advantage is the regulation's total coverage. It focuses beyond the specific matter it wants to prevent, taking a broader view and regulating the process potentially leading up to the relevant event. Taking such a pragmatic stance, the laws of war can work to help fighting parties resist the temptation to breach their material principles, even making it practically impossible to do so by assuring that the necessary means are unavailable to them.

Criticism
The biggest threat to effective regulation of this kind lies with the nature of the type of technology it covers. The chemical substances used are mostly of a 'dual-use' character. There is nearly always a peaceful application (quite often beneficial to mankind e.g. in the area of medicine) of the chemical which is allowed under the Convention. The Convention will thereby never completely succeed in blocking access to the building blocks of chemical weapons. This is especially true when the amount needed for the peaceful application is also sufficient for its violent use. Indeed, the Convention explicitly allows possession of these amounts, provided that they are for purposes 'not prohibited under this Convention'.[93]

[93] Article II.1(a) Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, Paris, 1993.

Another weak spot is allowing the use of agents deemed for 'protective purposes'. It is quite logical that a breach of the Convention should not lead to an absolute military advantage for the party breaching it. Therefore, logic dictates that States should be able to create, produce, and possess 'antidotes' or other measures to protect themselves against such a breach by an adversary. However, in order to develop such protective agents, one has to know against what one should seek protection. This in turn means that one has to study the offensive application of chemical agents in order to develop adequate protective measures against them. The line between studying chemical warfare in an offensive or protective sense is in itself difficult to draw and is blurred even more by allowing the development of protective measures. This harsh trade-off is a potentially devastating one.

These issues with the regulation certainly did not go unnoticed at the time of drafting. To countervail the possible loopholes and strengthen the clear intentions underlying the Convention, an extensive report and verification mechanism was established immediately and the independent 'Organization for the Prohibition of Chemical Weapons' created. This organization represented a new landmark in the laws of war. State compliance with the rules was not just entrusted to the States themselves. A balanced set of norms was laid down to establish an enforcement mechanism that was in place before States could even act (let alone breach) within its sphere of application.[94] Going a step further, the rules even submit a State's legal operations (e.g. development of chemical medicine) to a verification procedure to make sure the use remains peaceful. They acknowledge the risks of certain legal conduct by placing in it reference to the potential for breaches of the laws of war.

The enforcement mechanism does rest heavily on the assumption that States party to the Convention file truthful reports. Nevertheless, this trust is encapsulated by establishing methods for uncovering lies. In the case of more traditional laws of war, one could, at the last moment, use an allowed explosive in an indiscriminate manner and thus breach the laws of war. In the case of chemical weapons, one would have to deceive other States and breach the laws of war many times in developing, producing, stockpiling, transporting, mobilizing, and eventually deploying it before one could be capable of causing the atrocities the Convention seeks to prevent.

§9.6 1997 Ottawa Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction

The 1997 Ottawa Convention has become one of the most famous documents of the laws of war established in modern times. It is the result of more than States alone reaching agreement, but of a large (media) campaign fueled by non-State actors like NGO's and powerful individuals. Images of children maimed by stepping on anti-personnel mines spurred public support for the cause, although the original Protocol had already prohibited such means and methods of warfare. The broad collection of

[94] I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p. 211-213.

arguments spurring this process is clearly stated in the preamble. Parties are 'determined to put an end to the suffering and casualties caused by anti-personnel mines, that kill or maim hundreds of people every week, mostly innocent and defenseless civilians and especially children, obstruct economic development and reconstruction, inhibit the repatriation of refugees and internally displaced persons, and have other severe consequences for years after emplacement'.[95]

Certain aspects of the Convention clearly differ from earlier Protocols. Previously, the focus lay solely on prohibiting certain uses of mines, respectively prohibiting all uses of certain mines. Many laws of war follow this rationale: whether 'certain kinds of uses' or 'the use of certain kinds' is prohibited, the focus is on the *use* of the means and methods of warfare under regulation. The obvious logic is that States agreeing to the regulation should trust one another to fight in accordance with those rules. Conversely, the States themselves demand the trust of others with regard to their own integrity to not use the prohibited means and methods. Manufacture or possession of weapons in these cases is not the focus of the regulation. The States pledge not to use it, regardless of whether they possess it. Furthermore, in the 'unlikely' event of a State breaching the laws of war and deploying the prohibited means and methods, the breach should not be to that State's advantage. The others should have the capability to respond in kind.[96] Even though such a response might be clearly illegal, the argument has lost little of its political power. Its combination with the argument has proved a strong one: that a ban should be strengthened by the deterrence of a credible 'response in kind' threat.[97]

The process

There is another highly significant development surrounding the Ottawa Convention that sets it apart. The Convention crowns the work of a coalition of non-State actors striving for a ban on the use, trade, and manufacture of anti-personnel mines. The approach they chose to achieving that ban went further than an international Convention. In the years leading up to the Ottawa Convention, their aim was to target individual States and persuade them to (unilaterally) pledge not to produce, trade, or use anti-personnel mines. They did this with considerable success. By the end of 1997, 31 States had placed a unilateral moratorium on exporting land mines.[98] We are now quite familiar with Conventions and Treaties being concluded after the influence of intensive international lobbying from highly informed and powerful non-State actors. However, the fact that State governments were no longer the sole intermediary between individuals and international law marked a significant change. The phenomenon is relatively recent, especially within the laws of war field. Although lobby groups were present, they aimed their efforts at the States'

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95 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, Ottawa, 1999.

96 Either by way of 'reprisal', or by the fact that the breach by party A would offer him a decisive advantage not to be leveled by allowed means and methods of warfare.

97 Reciprocity is discussed more detailed in §3.1 of Chapter III.

98 A. Roberts and R. Guelff, 'Documents on the Laws of War', 3rd ed., Oxford University Press: Oxford, 2000, p. 645.

delegates. The States were the only parties capable of waging war and the only ones bound by the laws of war. It was, if you will, a members-only club with its own rules for a game that only they were allowed to play. The Nuremberg tribunal phased out this last element of reciprocity some 75 years after the modern laws of war had been born. The Geneva Protocols of 1977 then recognized new actors playing a part in warfare and codified their protection as part of the laws of war. However, deciding what those laws were remained the States' exclusive privilege. Of course, the Red Cross had been highly influential in forwarding the 1949 Conventions and 1977 Protocols, their success achieved largely through their diplomatic stance and modest position towards the States involved.[99] In reality they facilitated and seduced more than they mobilized and pressed.

Currently, with non-State actors dominating the humanitarian debates, a paradox arises. While the non-State actors undoubtedly raise awareness for humanitarian concerns, the results of their work might inadvertently endanger the humanitarian benefits they seek.

The States on whose compliance and thus the eventual humanitarian outcome depends are no longer dominant. This might lead to new laws of war reflecting humanitarian concerns more than ever before. While looking great on paper, lowering the regard for military necessity brings great risk. In sum, it boils down to the following: the more 'realistic' the laws of war are, the smaller the chance of breaches despite their less 'humane' form in the paper world. The more 'humane' they are on paper, the less 'realistic' they risk being, and in turn the larger the chance that they might be breached. The term 'paper world' is a deliberate reference to the abstract nature of the realm of legal rules -a realm away from the actual effects of the legislation. What matters is what happens in practice. Does the less humane body of rules with fewer breaches do a better job of preventing suffering and atrocities from occurring? Or is a more humane body of increasingly intrusive rules more effective, despite the fact it is breached more often?

The contents

Much that has been said earlier on the original and amended Protocols of the CCW regarding mines, booby-traps and other devices can also be applied to the Ottawa Convention. Most of the anti-personnel mines available would already be prohibited due their inability to be deployed discriminately. The mine cannot feel whether a soldier, goat, or child applies the pressure that triggers its detonation mechanism. Furthermore, it is precisely that indiscriminateness of the weapons technology that fosters public unrest and the call for a total ban on its use. The paradox of double prohibition is thus also clearly present in the Ottawa Convention.

In the case of prohibited use of certain types of weapons, an uneasy question arises. If all use of a weapon is prohibited and the only reason for possessing it is possible deterrence, then why not simply ban all possession? This would prevent anyone from using it and thus from breaching the laws of war. When one follows this logic,

[99] C. Moorehead, 'Dunant's Dream: War, Switzerland, and the History of the Red Cross', 1st Carroll & Graf ed., Carroll & Graf: New York, 1999.

one has to explicitly include it in the laws of war by prohibiting possession in addition to production and trade. This is precisely what the Ottawa Convention achieves.

This achievement should not be underestimated. The mere fact that such an extensive prohibition is rare in the laws of war is ample proof. One could of course cast doubts on the intentions of States agreeing to such a broad prohibition. The most cynical view would claim that some States agreed to discontinue the use of mines to disarm their adversaries while covertly continuing to produce and possess mines themselves. If necessary, they could then be pulled out of the hat at a strategically convenient moment. Another explanation could be that States, in 1997, viewed mines as an outdated element of their arsenal and were able to replace their military function with more sophisticated weaponry not covered by the Convention. This fits nicely in with the dilemma of regulating new weapons technology. It is fairly easy to achieve a ban on weapons in which States see little military value (either not at all or not anymore). Furthermore, States possessing the new replacements haven and added advantage over less technologically advanced and/or poorer States. Their weaponry is suddenly deemed illegal while the new technology sits out of reach.

The most positive view would be that States came to the conclusion that the use of anti-personnel mines was contrary to both the principles of the laws of war and our moral conscience. Since it is impossible to look inside the heads of all the delegates and find out the true reasons behind their agreement to the Convention, all plausible explanations could, in theory, be true. However, those just mentioned are probably too extreme and one-sided to be realistic. It is more likely that a combination of factors were in play. The necessity mine use had declined following innovations in weapons technology that offered many new alternatives to achieving the same tactical goals. The negative effects of mine use, like civilians becoming casualties long after conflicts themselves had ended, became increasingly visible and more pressing on public opinion (the so-called CNN-effect) moving against these occurrences being allowed to continue. Furthermore, earlier attempts to regulate the use of mines (the original and amended Protocols to the CCW) had failed in painfully obvious fashion. This made it more difficult for opponents of an extensive prohibition to voice sound arguments against it. Practice had shown little improvement after the adoption of both Protocols. It was clear that more drastic measures were necessary if a serious attempt to stop civilians from becoming victims was to be made. This combination of factors created the setting for the far-reaching regulation of means and methods of war that the Ottawa Convention achieved.

As we have seen earlier, merely sharpening a rule already in place offers no guarantee of practical success. However, the Ottawa Convention goes further than adding a strengthening 'really' to a prior message telling a child not to touch the cake. The Convention makes a serious attempt to take the cake away completely, which would be as difficult practically as it is easy metaphorically. Of course, earlier documents of the laws of war already stipulated destruction of available arsenals and prohibition of stockpiling, production and trade with regard to biological and

chemical weaponry. However, those cases concerned weaponry that, fortunately, was much less commonly used by States than the anti-personnel mines were.

§ 9.7 2008 Convention on Cluster Munitions

The youngest addition to the laws of war discussed in this book is the 2008 Convention on Cluster Munitions. These munitions are one of the most controversial weapons ever deployed in practice. In opposition to the trend of precision weaponry, cluster bombs form a blunter axe. By nature, the course of the explosive bomblets or submunitions cannot be controlled as effectively as when they are delivered separately. A container bomb opens up to release smaller bombs over the area below. These smaller bombs do not always explode. It is hard but not difficult to imagine children playing with the brightly colored, unexploded submunitions and getting killed or injured as a result. It is thus quite easy to understand why cluster bombs became such a focus of humanitarian attention.
The prohibition itself is quite clear and absolute. Further production is to be halted and, according to Article 3, all existing cluster bombs are to be destroyed as soon as possible and certainly not later than eight years from ratification of the Convention.[100]

Merits
The merits of this Convention are direct and clear: it prohibits cluster munitions no matter what. No escape clauses and no vague terms. Article 1.2 of the Convention even states a description of what are regularly called 'cluster munitions' to prevent clever relabeling from rendering the regulation void.[101] In addition, it prohibits the possession, production and development, thereby going to the root of the problem.[102] Its scope is limited, but within that scope, the regulation is strong.

Criticism
One might argue that the paradox of double prohibition is again in play. Protecting non-combatants from the indiscriminate dispersion of submunitions falls under the principle of distinction. Furthermore, the 2003 CCW Protocol V on Explosive Remnants of War arguably covers the element of unexploded ordnance.

§10 The Martens Clause

The Martens clause is discussed here separately, since it is highly instructive to the debate and tensions surrounding the laws of war. The dilemma between positive law and moral imperatives become quite clear when analyzing the clause and its interpretations. Although it does not pose a clear rule regarding means and methods of war, it is perceived by some as a regulation enabling the laws of war to deal with

[100] Article 3.1 Convention on Cluster Munitions, Oslo, 2008.
[101] Article 1.2 ibid.: "Paragraph I of this Article applies, mutatis mutandis, to explosive bomblets that are specifically designed to be dispersed or released from dispensers affixed to aircraft."
[102] Article 1.1.(b) ibid.

instances outside specific regulation. To correctly assess the laws of war, it is crucial to understand the true meaning and effect of the Martens clause, which reads:

> Until a more complete code of laws of war has been issued, the high contracting parties deem it expedient to declare that, in cases not included in the regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity, and the dictates of the public conscience.[103]

These famous words are at the core of the laws of war, as well as the centre of a tense debate. Since the framing of the clause at the 1899 Hague Peace Conference much has been said about it -about its interpretation, its origins, and its meaning in practice for the laws of war.
Despite the fact that some renounce it as a diplomatic *douceur* without substantial meaning or relevance in practice,[104]I believe the Martens clause to have had a more substantial influence on the process of the laws of war and their practical implementation. However, the opposite extreme -the view that through the Martens clause the uncodifiable dynamics of warfare and the humanitarian reaction to them are somehow incorporated in the laws of war- [105]might prove to be more of an idealistic wish than the clause's real value.Since the Martens clause is -or might be, depending on ones interpretation of its meaning and valuation of its significance- a crucial element of the laws of war, it is important to review it here. The clause has the potential to be a strong open norm placing a heavy dictate of humanitarian concern on the means and methods of warfare. This potential makes it essential to evaluate the practical relevance of the clause and the true strength of its position. This is because any valuation of the scope and strength of the entire laws of war, especially with regard to (the use of) weapons technology, has the potential to be significantly influenced by the degree to which this potential is realized.

F.F. Martens
One cannot write about the Martens clause without first paying attention to the person and personality behind it: Fyodor Fyodorovich Martens (1845-1909). Martens, a Russian lawyer and diplomat from Estonia, can be seen as the individual with the single greatest influence on the Hague Peace Conferences and their outcomes. His influence was so great that many contemporaries ascribed him the role of initiator of the Peace Conference itself,[106] although he was unaware of the upcoming convocation before it reached the press and the general public. When Martens got the news he was irritated by it despite being one of the leading legal scholars and authors in the peace movement. As a realistic diplomat he thought the chances of

[103] J.B. Scott, 'The Hague Peace Conferences of 1899 and 1907', The Johns Hopkins press: Baltimore, 1909, pp. 369-371.
[104] G. Schwarzenberger, 'The Legality of Nuclear Weapons', in: 1958, pp. , pp. 10-11.
[105] B.V.A. Röling, 'International Law in an Expanded World', in: 1960, pp. 37-38.
[106] V.V. Pustogarov, 'Our Martens: F.F. Martens, International Lawyer and Architect of Peace', Kluwer Law International: The Hague, 2000, p. 182.

success were slim and that the entire project would do more harm than good.[107] This view proved to be too pessimistic, in no small part, rather ironically, to the hard work and intelligence that Martens himself brought to the Peace Conferences. His work for the Peace Conferences had, unknowingly, already started in 1874 when Martens was the Russian delegate at the Brussels Conference where the International Declaration concerning the Laws and Customs of War was drafted.[108] This Declaration never entered into force and the whole undertaking was viewed as a complete failure. However, the 1899 Convention With Respect to the Laws and Customs of War on Land drew heavily on the work done in Brussels. The similarities between the documents were in fact so great that following the 1899 Convention's successfully adoption, Marten's himself noted in his diary: 'I myself did not expect such a brilliant success. The Brussels Declaration –my beloved child- has been adopted.'[109]

Eventually, the efforts of Martens were deemed so great that both the delegates and the general public came to refer to him as 'the soul of the Hague Conference.'[110] Martens was able to combine in one person the two opposing attitudes found amongst many of the delegates. On the one hand he represented the idealistic minds striving for as humanitarian a code as was possible, inspired by thoughts of perpetual peace and the end of innocent suffering. On the other hand, he embodied the spirit of hardened politicians, officers and diplomats who took a realist(ic) view but were willing to adopt humanitarian restrictions on warfare as long as they left enough room for effective combat. Their acts and utterances were fueled by expectations of feasibility and estimates of what the other States would deem acceptable.
Martens was no cunning diplomat whose sole concern werre Russian interests.[111] Neither was he a zealot for the humanitarian cause. As such, when interpreting the Martens Clause, one cannot point to a clear intention from its author. In this light it is more striking still that Martens himself, in his diaries showing his pride in his achievements and joy over the advancement of humanitarian concerns, never paid much attention to his own clause -let alone hint at a possibility of the clause opening up the laws of war for non-codified humanitarian dictates.

Context of the Martens Clause
The clause was not proposed to be part of the Convention on its own merits. A general, open ended, even slightly vague statement of the values of humanitarian principles overriding State military options, now common within the laws of war, was not so in 1899. The fact that it is so common today stems directly from the

[107] ibid., p. 158.
[108] V.V. Pustogarov, 'The Martens Clause in International Law', in: *Journal of the History of International Law* 1999, pp. p. 125.
[109] As quoted in: V.V. Pustogarov, 'Our Martens: F.F. Martens, International Lawyer and Architect of Peace', Kluwer Law International: The Hague, 2000, p. 178.
[110] ibid., p. 175.
[111] ibid., p. 171.

incorporation of the Martens Clause in 1899, its restatement in 1907,[112] and its many restatements since.

The direct reasoning behind the clause was a major disagreement between smaller States, led by the Belgian delegates, and the larger States. The Articles on duties and rights of occupying powers formed the centre of the controversy. The smaller States saw an inherent bias in favor of the larger States -small States never realistically able to become an 'occupying power'[113] Belgium argued that only the duties of occupying powers should be part of the Conventions, not the rights. After having come a long way in reaching agreement on many aspects of the laws of war, this controversy threatened to implode the entire Peace Conference and nullify what had been achieved.[114] In the end, this delicate matter was settled by the diplomatic qualities and instinct of Martens. The clause was framed and incorporated in the preamble in such a way that both parties could be appeased. The smaller States received enough reassurance regarding the humanitarian position of those living under occupation, while the larger States were given enough interpretational leeway to feel that their military options had not been overly restricted. The solution was greeted with great enthusiasm and the Convention was saved.[115] This relief at the Convention being saved led to the clause being broadly embraced without paying too much attention to any possible, farther-reaching implications in the future.

With this context in mind, it is not hard to see why the later disputes and debates on its interpretation, worth, and practical value became so fierce and delicate. The tension did not arise at a later point, but rather stood at the root of the clause's framing itself. So, yes, Martens had a great passion for the humanitarian concerns. And yes, his goal was to achieve regulation that improved conditions for innocents during warfare and reduced the level of overall suffering. But he was no zealous peace activist. He was a representative of the Russian government with a long record in the diplomatic and political arena. He knew the sensitivities of the matter and, as such, was more focused on building bridges between delegates voicing opposite opinions than fanatically arguing his own viewpoint. The Martens clause certainly does have a wonderful humanitarian ring to it, but it was not a goal in itself to include the clause in the laws of war. It was a very clever intervention from an intelligent diplomat that effectively saved the day, the debate and the larger regulatory effort. When it was adopted, it merely served the goal for which it was intended: a subtle solution to a complex diplomatic problem that had arisen from the debate. Whatever later interpretations might ascribe to the clause, it cannot be said to have been put there because of those reasons.

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[112] The clause, in numerous textual variations, has been part of most of the legal documents in the field of the laws of war ever since the Hague Peace Conferences, e.g. the Additional Protocols to the Geneva Conventions, the 1980 CCW; also: ibid., p. 177.

[113] Note that the Convention was based on reciprocity between States party to the Convention. Occupation of other territory was not covered by it.

[114] V.V. Pustogarov, 'The Martens Clause in International Law', in: *Journal of the History of International Law* 1999, p. 126.

[115] ibid., in, p. 127.

Interpretations of the clause

The importance of the clause is not solely derived from its phrasing. The fact that the same words, or variation of them, have been restated over and over again in numerous documents of the laws of war has contributed much to its fame and perceived value. Furthermore, it has received a lot of attention in academic literature on the laws of war[116]and is a favorite of humanitarian activists.[117] However, each restatement of the clause is accompanied by the underlying interpretational debate.[118] The fact that many States have agreed to restate it and re-endorse it over and over again does little to harmonize the opinions on what the clause entails. On the one end, there is the narrow interpretation that the clause merely reminds us of the humanitarian spirit of the laws of war. The goal is protection of the innocent and the reduction of overall suffering. The laws of war do not represent an exhaustive list of all the rules that apply. The clause then serves to counter *a contrario* reasoning: that all that is not explicitly prohibited by the laws of war is therefore allowed.[119]

The other end of the scale is the broad view that the clause upgrades non-codified moral principles to a codified status.[120] The emphasis is placed largely on the words: 'laws of humanity, and the dictates of the public conscience'. It is said to make the non-specified principles and rules to which every moral being should agree part of positive legislation, incorporating and "positivising" a naturalist legal view into the laws of war.[121] Unfortunately, there is no supreme legal body available to offer authoritative interpretation of the clause and its meaning within the body of the laws of war. The closest thing we have is the International Court of Justice. Despite the fact that it paid attention to the clause in its advisory opinion on nuclear weapons, it did not determine *the* valid interpretation of the clause. It referred to the Clause several times, restated its importance and seemed to attribute more meaning to it than the narrow extreme described above. The ICJ stated 'it has proved to be an effective means of addressing the rapid evolution of military technology'.[122]

Next to the lack of decisive and authoritative interpretation or lack of clear choice for one interpretation, another aspect of the advisory opinion shows a striking lack of clarity in determining the meaning of the clause. When one takes a look at the individual advisory opinions of the judges, one can find a number of different

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116 E.g. I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p. 375.

117 E.g. R. Ticehurst, 'The Martens Clause and the Laws of Armed Conflict', in: *International Review of the Red Cross* (317), pp. 125-134.

118 ibid., p.126.

119 See also A. Cassese, 'The Martens Clause: Half a Loaf or Simply Pie in the Sky?', in: *European Journal of International Law* 2000, 11 (1), pp. 187-216, p. 189.

120 E.g. A.I. Poltorak and L.I. Savinskii as quoted in: A. Reshetov, International Law and Crimes Against the Laws and Customs of War. In The Nuremberg Trial and International Law, G. Ginsburgs and V.N. Kudriavtsev, Eds. Martinus Nijhoff: Dordrecht, p. 169.

121 A. Cassese, 'International Law in a Divided World', Oxford University Press: Oxford, 1986, p. 191.

122 I. (Organisation), 'Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons', International Court of Justice: The Hague, 1996, p. 257.

interpretations of the clause.[123] It must be taken as a clear sign of ambiguity when even the most esteemed legal minds fail to reach a clear and unanimous conclusion. With the ICJ not giving us a definitive answer, we are left with academic writing and official statements from States party to Conventions containing the clause. Not surprisingly, these also fail to offer a definitive answer. The most popular interpretations are well described by Cassese in his clear and elaborate analysis of the Martens Clause.[124] He arrives at what is probably the most logical conclusion on the legal position of the Martens clause -its place and role within the body of the laws of war. It is not the magical cement to fill every gap within the codified laws of war with high moral standards. Neither is it just a safety net against *a contrario* reasoning. It does not extend the number of sources of the laws of war. The clause's value lies in its guidance on our interpretation of the rules of the laws of war. When there is doubt on the meaning of the rules, the benefit should be given to the interpretation 'consonant with general standards of humanity and the demands of public conscience.'[125]

To some extent, these interpretational debates are unimportant. The possibilities behind the real nature of its ongoing presence are many. A clever diplomatic trick, a crowbar to break open the door for natural law and moral codes, a protection against too legalistic *a contrario* reasoning, a safety boat for the laws of war to bridge gaps between (technological) developments in warfare means and methods and the ability of States to agree on their regulation, or a PR trick for diplomats and politicians to pay lip service to humanitarian concerns, in the technical legal rules, making sure they had enough room to stay in the business of fighting wars. What truly matters is what is done in practice. It is evident that the clause is not always upheld. Every breach of the principles of the laws of war is also a breach of the spirit of the clause. Numerous cases are born each day in which States fail to act in accordance with 'the laws of humanity, and the dictates of the public conscience.' However, the mere fact that a rule is breached does not automatically render it void.

On the other hand, in advocating its own policy, every State claims morality and humanity to be on its side. Actions are defended because pressing humanitarian needs called for it. The public conscience demands that against certain acts 'we cannot stand idly by.' However, claiming to act on high moral standards is not the same as a validation of the Martens clause. Those moral claims were valid long before the clause and would be present now with or without it.
When it comes to State practice, the answer is also inconclusive. As with most moral norms and legal rules, there is no absolute obedience. There are many instances in which lip service being paid leads many to believe the spirit of the clause is being genuinely upheld. We have seen before that, in the legal arena, the clause serves as interpretational guidance. It stresses the humanitarian point, making States aware of

[123] See also: R. Ticehurst, 'The Martens Clause and the Laws of Armed Conflict', in: *International Review of the Red Cross* (317), pp. 125-134., pp. 128-129.

[124] A. Cassese, 'The Martens Clause: Half a Loaf or Simply Pie in the Sky?', in: *European Journal of International Law* 2000, 11 (1), pp. 187-216.

[125] ibid., p. 212.

the spirit underlying the laws of war. State practice thus does not support any interpretation of the clause exclusively. The clause is just another part of the laws of war, playing its part in the complex web of political agenda's, legal rules, public sentiment, moral norms and coincidences that determines the means and methods used in warfare and the consequences that human beings both suffer and gain from it.

In my view, the true value of the Martens Clause lies in an area other than formal engagements in law or politics. It fails to turn the positivist attitude underlying the codified laws of war, based on agreement between States, into a more naturalist approach. It fails to protect individual human beings from war related suffering by means of a moral code, regardless of whether or not it is caused by means and methods that States have agreed to permit. The clause, however, does remind everyone looking at the laws of war of the most direct link between the positive legal rules and the moral rules underlying them; that the humanitarian principles of the laws of war are more important than their technical details. That in applying the laws of war, the difference is not made in attributing money to party A over party B based on a detail in a contract, but in the killing, wounding or protecting of human beings.

By inserting language usually found in solemn pledges into the legal documents, first in the preamble and later in the Articles themselves, the clause serves to emphasize the special character of the laws of war. Its ambiguity (leading to a wide array of interpretations) should not be taken to undermine it. For even in its ambiguity it shows a defining characteristic of the laws of war; the ambiguity of codifying highly moral standards into legal rules and the risk of that those rules may then overrun the original standards with the potential for adverse results.

§11 Conclusion

I have reviewed the documents of the laws of war insofar as they are relevant to the regulation of (the use of) means and methods of war. We have seen isolated issues, but we have also seen that many dilemmas, paradoxes and tensions return over and over again throughout the documentation. Furthermore, we have seen changes in the contents of the laws of war over time and in the process of their development itself.

After the Second World War, development of the laws of war accelerated. This resulted in numerous new documents, a fair share of which have been discussed in this Chapter. When comparing them to the earlier stages of the modern laws of war, there are both similarities and differences. The differences can be roughly divided into two categories. First, the process leading up to changes in the laws of war has changed. As described above, non-State actors have claimed their part, a shift occurring in the character of the laws of war as a result. It is shifted from being a body of 'rules of the game' determined by the players and valid only amongst them. It evolved into a matter of general public concern, staking its claim on universal validity. Leaving aside the principle of reciprocity, the laws of war have become a set

of universally binding rules for all players, no matter what those players think of it. This increases the humanitarian spirit but brings a risk of detachment between the rules and the players. It is much easier to break somebody else's rules than it is to break your own.

The second shift can be found in the creativity and intrusiveness of the regulation. This should not be seen as a radical break, but as logical steps in a gradual process. At the start, the rules are less intrusive towards those who should comply with them. When practical success is limited, steps are taken to sharpen the rules, to try and achieve the intended effect by other means. The jurists become more creative and the regulation more pressing, elaborate and intrusive. However, as many differences as one might care to point out aside, the continuity is at least as striking. Despite the increase of intrusiveness and creativity, all the subsequent documents of the laws of war still rest on the same basic general principles stated in the preamble to the 1868 St. Petersburg Declaration and 1899 Hague Conventions: States have no unlimited choice in use of means and methods of warfare; civilians should not be targeted, nor fall victim to indiscriminate attack. Nothing beyond rendering an enemy *hors de combat* is permitted, causing unnecessary suffering or superfluous injury is prohibited.

Furthermore, the modes of regulation are still the same, interchanging one after the other when the predecessor is deemed unsatisfactory. Perhaps most importantly, the main dilemmas and paradoxes signaled many times in this book keep returning as a constant factor, leaving the impression they might be inevitable and inherent to the difficulty of regulating as extreme an event as warfare.

In sum, we have seen that many regulations serve to prohibit things already prohibited by the general principles of the laws of war. Those *doublures* are no coincidence, since the principle is often restated as grounds for the new, more specific regulation. This is closely connected to the different modes of regulation found in the laws of war. To remedy the disadvantages of one mode, the matter is often regulated once more using a different mode of regulation. Most notably within the body of legislation, this is represented by the dilemma between ruling by broad general principles or by detailed technology-specific regulation.
These matters are further complicated by the recurring catch 22 in trying to regulate new technology. Regulating the unknown is too soon, waiting until all is known might prove to be too late.
Finally, the ever-present tension between humanitarian concerns and military necessity has been seen to surface time and time again. The laws of war always run the risk of exceptions to the rule and interpretational leverage being exploited. Every door that is left slightly ajar is likely to be kicked open in practice. The next Chapter will deal with analyzing these important main characteristics of the laws of war in their entirety.

Chapter III

Analysis of the System of the Laws of War

§1 Analysis of the body of laws of war as a whole

The previous Chapter offered an analysis of the modern laws of war separately. It showed that many of the rules face the same dilemmas, paradoxes and tensions. The inherent issues are far from isolated errors, rather being – perhaps unavoidably- woven into the fabric of the laws of war.
Before one can assess the threat posed to the laws of war by the changes in warfare associated with technological innovation, one has to analyze the laws of war as a system. One has to understand the common dilemmas and difficulties the laws of war face on application in practice. This Chapter will draw on the general lessons learned from the previous Chapter's analysis.

§2 Modes of regulation

Nature of the modern laws of war
Our current laws of war system can be well described, although largely codified, as fragmented. It consists of numerous Treaties, initiated by a variety of actors and adhered to by a varying numbers of States. There is also considerable variety in the modes of regulation between (and sometimes even within) the Treaties. Furthermore, the codified laws of war are spread over multiple Conventions, Treaties and Declarations. Finally, the body of customary laws is equally extensive.[126]

Even when we place our sole focus on the regulation of (the use of) weapons technology, there remains a large variety of rules and regulations to be taken into account.
For analytical purposes, the regulation of (the use of) weapons technology can be categorized into three main regulatory modes: rules regarding a specific form of weapons technology, rules regarding particular human behavior, and rules regarding certain effects caused by the use of weaponry.

§2.1 Rules regarding specific forms of weapons technology

A good example can be found in Article 23(a) of the 1907 Hague Convention IV Respecting the Laws and Customs of War on Land:

> In addition to the prohibitions provided by special Conventions, it is especially forbidden - *(a) To employ poison or poisoned weapons;*[127]

[126] A recent study into this field consisted of 3 volumes and a total of 5066 pages: J.-M. Henckaerts, 'Customary International Humanitarian Law', Cambridge University Press: Cambridge, 2005.

[127] Article 23 Convention Respecting the Laws and Customs of War on Land and its annex: Regulations Concerning the Laws and Customs of War on Land, The Hague, 1907.

This rule is technology-specific *par excellence*, targeting a specific type of weapon: poison itself or a weapon treated with poison. Although the rule obviously seeks to prevent a certain outcome from being realized (people getting poisoned), it fails to focus specifically on that outcome. We see that a poisoned weapon is never allowed -not even if it being poisoned causes no additional effect over a non-poisonous direct equivalent. Even, theoretically, if the poison had no effect whatsoever on a victim (e.g. an insufficient dose), it would still not be allowed.[128] Equally, the provision does nothing to stop similar effects being caused by non-poisonous weapons.

The advantage of this type of regulation is its clear-cut bluntness: it categorically prohibits the use of a certain weapons technology. If a weapon fits the description, you are not allowed to use it, period. There is no room for debate on proportionality or military advantage. There is no weighting of circumstance -just plain prohibition.
The bluntness does also carry a disadvantage. This type of rule is suitable to prohibit forms of weapons technology which effects are undesirable in (almost) all cases. However, the large majority of weaponry can be used in a variety of ways, some that are acceptable, some that are not. A knife can be used in atrocities beyond normal human comprehension, but can equally be used to disable an enemy swiftly and painlessly. The use of this type of regulation to ban knives altogether would seem ridiculous.

The price paid for this type of regulation's clarity is the narrow scope the rule is left with. The rule only covers one specific kind of weapons technology. New inventions with similar or worse effects can avoid prohibition from this type of rule. Furthermore, legal debates regarding the rule can be reduced to a discussion of semantics -whether or not a specific weapon falls under the definition involved.
Whether we debate definitions or the proportionality of a weapon's effect on military advantage might strike some as irrelevant to the bigger picture. However, in my view, debating proportionality keeps the reality of warfare and its victims in the foreground. Debating definitions, conversely, could lead to unwelcome dehumanization of the laws of war, moving away from the very people they serve to protect.

§2.2 Rules regarding particular human behavior

To illustrate this type of rule, I would like to refer to Article 23(b) of the 1907 Hague Convention IV Respecting the Laws and Customs of War on Land:

> In addition to the prohibitions provided by special Conventions, it is especially forbidden - *(b) To kill or wound treacherously individuals belonging to the hostile nation or army;*[129]

[128] Although in such a case we might have a debate on whether it would be poison in the first place.

[129] Article 23 Convention Respecting the Laws and Customs of War on Land and its annex: Regulations Concerning the Laws and Customs of War on Land, The Hague, 1907.

The focus of this rule is the word *treacherously*. The type of weapon involved is irrelevant. Whether you plan to invite the entire enemy army to a ceasefire celebration before bombing it, or invite an enemy general to a ceasefire dinner to strangle him: Article 23(b) prohibits it.

Clearly, the rule does take into account a certain effect: if a treacherous action fails to kill or wound an enemy, Article 23(b) is not relevant. However, this demand of effect is too marginal for it to be seen as the focus of the rule. The rule successfully prohibits a specific type of human conduct. Of course, it says nothing about equally bad or worse conduct that is not considered treacherous. That will have to be something for other rules of the laws of war to deal with.

The advantage of this type of regulation is its absolute technology-independence. It is less vulnerable to developments in technology or technical debates on the precise nature of weapons.

However, there is a weakness lurking regarding interpretation of the definition. One can debate indefinitely about whether specific human conduct is 'treacherous' or not. However, in reality, this type of problem represents an area of weaknesses unavoidable in any type of regulation.

Its bluntness is a more significant problem. This type of rule covers every case in which the specified human conduct occurred. As such, this type of rule is only suitable for human conduct that should be prohibited under all circumstances. Although there are examples of such conduct, this occurs far less than conduct deemed horrible in some cases but acceptable in others.
Most conduct that is suitable to be prohibited without exception is directly connected to specific effects (e.g. torture, rape and genocide). However, the effect aimed at by this regulation is death or injury, which is in itself not prohibited by the laws of war. This regulation aims at the conduct itself, regardless of its specific effects. Thus, one runs the risk of casting the net too widely and prohibiting conduct that could produce humanitarily acceptable (or even beneficial) effects.

§2.3 Rules regarding certain effects caused by the use of weaponry

The 1907 Hague Convention IV Respecting the Laws and Customs of War on Land, also offers a fine example of a rule focused on effects in Article 23(e):

> In addition to the prohibitions provided by special Conventions, it is especially forbidden - *(e) To employ arms, projectiles or material calculated to cause unnecessary suffering;*[130]

The most striking advantage of this type of regulation is its 'independence', its sole focus on a certain effect.

[130] Article 23 ibid.

For starters, it is independent of technology. All 'arms, projectiles or material' are covered. This type of phrasing intends to cover the entirety of weapons technology. It covers those known at the time of draft in addition to whatever the future may bring. Of course, if one is a very imaginative lawyer (as lawyers often are), one could start a debate on whether a certain weapon is indeed an 'arm', a 'projectile' or a 'material'. It is my view, however, that such reasoning has no place in practice. The clear intention of this mode of regulation is to prevent a certain effect from occurring in any case, not prohibiting the effect when inflicted with one weapon and allowing it with another.

Second, it is independent of human conduct. There are no conditions stated for a certain action. However, this Article does show a clear flaw in this respect. It states that it has to be 'calculated' to cause unnecessary suffering. The word 'calculated' weakens the rule. It demands a specific mindset. The intention to cause unnecessary suffering has to be present. Of course, it is a legal habit to soften this demand by redefining intention as 'should have known' or 'willingly taking the risk of', but the condition must still be met.

The problem with this type of clause is that it creates a vast grey zone between the scarce cases of pure black or pure white. We have to note, however, that this type of clause is not inextricably linked to the mode of regulation focusing on prohibition of a certain effect. If one replaces the words 'calculated to cause' with 'that cause' in Article 23(e), this problem would be solved.

We see here the circular difficulty involved with many complex legal issues: solving one problem often means nothing more than uncovering the next. In this case, the next problem is the word 'unnecessary'. The problem is similar to that with 'calculated'. Perhaps it seems more suitable to be objective, an attempt to leave less grey between the black and white. In practice though it comes down to a complex proportionality test: the suffering has to be weighed against the military advantage gained by the action.
This cornerstone of the laws of war offers a great opportunity for lawyers to engage in endless debate. It poses a risk to the soldier who misjudges military advantage. However, without it, the law might not play a role in war at all. To rule out all arguments of military necessity and aim for straightforward adherence to humanitarian concerns would, in this case, refer to a ban on all suffering. However noble a cause, it would render war illegal *tout court*, turning the 'laws of war' into the 'laws on war' and the *ius in bello* into the *ius ad bellum*. The latter structure deals with the conditions under which one is allowed to wage war. The first should be restricted to guiding the warfare itself, regardless of whether the war is in itself legal or not.

Effects-driven regulation will not necessarily always face this shortcoming. Their can be effects that, in the proportionality test, can never be outweighed by military advantage. Some effects might not even have any clear military advantage whatsoever. Those effects can be prohibited unconditionally (e.g. the effect of rape). However, I have deliberately not chosen such an example, it representing the exception

and not the rule. Most of the laws of war considered as effect-driven cover issues that are not as clear cut as those easily prohibited unconditionally. In most cases the proportionality test is necessary for prohibition agreement regarding an effect to be reached. In striving for a more absolute ban, one will ultimately encounter a blockade based on the following reasoning: 'Yes, we would like to prevent the effect from happening and we will do our utmost not to cause it, although there might be cases when refraining from an action unfortunately causing this effect would mean refraining from achieving a significant military advantage -in turn causing greater overall harm by prolonging the war unnecessarily.'

§3 Dilemmas and Paradoxes

In the previous Chapter, we reviewed a number of dilemmas and paradoxes inherent to specific documents within the laws of war. Understanding these issues is the key to a solid understanding of the laws of war and how they relate to current issues.

§3.1 The paradox of double prohibition

As we have seen in a number of previously described cases, what I would like to call 'the paradox of double prohibition' is a recurring theme.

It comes down to regulating a certain (use of) weapons technology in such a way that it increases legal specificity without changing the laws of war's broader scope.
A good example is the prohibition of the use of a specific weapon that would already be deemed illegal by other legislation (e.g. it being inherently indiscriminate in its application). Of course, this paradox of double prohibition is certainly not unique to the laws of war. We can point out examples in other legal areas. What is so striking here though, is the tug-of-war effect between the different approaches to regulating warfare, the push and pull influence responsible for many of the paradoxical problems we have encountered.

I should be quite clear that I am not suggesting the paradoxical nature of the laws of war to be disastrous. It is certainly completely understandable how they have arrived at this point. It might even be unavoidable and/or beneficial. Whatever the case, it is striking enough to merit analysis of whether the double prohibition paradox poses problems for current applications of the laws of war.

Characteristics of the paradox
The mere fact that a certain act is prohibited by more than one legal rule is not enough to call it a paradox. If one bombs an area with biological weapons, it is against both the ban on biological weapons and the ban on area bombing. According to the rule one could still conduct area bombing with non-prohibited weapons though, or use biological weapons in a direct man-to-man fight. As such, both rules have their own merit. The paradox arises when a new rule does nothing more than specifically prohibit something already relevant to a more general prohibition.

The cause of the double prohibition paradox is often very understandable: general prohibitions are often accompanied by a number of exceptions. Those exceptions are mostly phrased in general terms, the most famous example being the demand of proportionality (demanding a balance between strict adherence on the grounds of humanitarian concern and legal deviation from the rule on grounds of military necessity).

In other cases, the prohibition demands factors and interests to be weighed, leaving room for interpretation accordingly. Take the principle of mandatory discrimination between combatants and non-combatants. Ongoing academic debates include whether civilian workers in an armaments factory are legitimate targets or not.[131] Such room for interpretation might stimulate more specific rules to prevent interpretation paying less (or more) attention to humanitarian concerns. In other cases, history has shown undesirable situations defended by the acting State by claiming that their conduct fitted within the legal framework (at least it did according to its own interpretation of the general conditions). In those cases, it is understandable that attempts are made to 'improve' the law by specifically prohibiting certain actions, rather than trying to convince others in line with a stricter interpretation of the pre-existing regulation.

However, in doing so, one risks entrapment in the swamp of legal technicalities. It is impossible to incorporate every possible variation of a practical situation with the potential to fall within the scope of a certain Article. Let alone that one could foresee what new developments might arise and, in turn, how they might be most beneficially bought within the regulation's scope. The first weakening effect this has on the laws of war lies in the *a contrario* reasoning I have elaborated upon already. By regulating one thing in detail, one also puts emphasis on the fact that other, similar things are not given the same level of attention. This leaves room for the assertion that the other, not specified aspects are less important or regulated less stringently.

The second problem area is the date of expiration it places on the regulation. By regulating in more detail and trying to describe all probable (technology-)specific instances falling within the scope of the rule, the rule looses the flexibility to adapt to new developments in warfare and weaponry. With these risks in mind, it is important to stress the relative lack of benefit in prohibiting what is already prohibited.

Lack of Enforcement

Another, more disputable incentive for creating a double prohibition is the lack of enforcement mechanisms surrounding the laws of war. Unfortunately, the laws of war *are* breached in practice. Such a breach has no automatic consequences. There is no agency enforcing the laws of war. Of course, there is the principle of reciprocity - canceling the protection of combatants from a State violating the laws of war. This is effectuated through a reprisal, the adversary 'allowed' to 'breach' the laws of war in

[131] M. Walzer, 'Just and Unjust Wars: a Moral Argument with Historical Illustrations', 2nd ed., Basic Books: New York, 1992 p.146.

reciprocal fashion, albeit under strict conditions. Leaving aside the debate on whether these principles are still valid or should be outdated by the Nuremberg principles and UN Charter,[132] reprisal offers a solution, albeit an unappealing one for those aiming solely at minimizing overall humanitarian suffering. From the perspective of the laws of war, we see a journey from bad to worse: one breach allowing another in a rapid race to the bottom of humanity.

Other forms of 'punishment' depend on the political will of other States. One might intensify the war, or other States might join in against the breaching State. However, next to the usual problems in reaching consensus in international politics, this really only leads to more war, rather than making the existing war more humane. Moreover, clear breaches of the laws of war are often caused by hugely powerful or rogue/ dictatorial States. In the case of a powerful State, it is very hard for other States to successfully take enforcement action by military means. One might put hope in the doctrine of individual responsibility and desire to bring all individuals concerned to justice. This can be done within the national legal system of the concerned State itself, or by holding defendants responsible under international law. However, this process is still in a relatively early, fragile stage and will probably remain there so long as the most powerful State at present is not party to the ICC.
In the case of a weaker rogue State, the regime can often only be held responsible at the risk of harm to innocent civilians. The risk that a threat of enforcement to such a regime leads to escalation is also considerable, putting a heavy price on enforcement action by States wishing to uphold the laws of war.

With few options for effective enforcement of the existing rules and a persistent feeling that one 'has to do something', one might then turn to redrafting or expanding existing legislation. Attempts might be made to expand on prohibition in more detail or with stronger wording. Such a process is very understandable from the perspective of political logic. In addition, there is the satisfaction in working to ensure that the breaching of humanitarian principles does not go unnoticed. In reality however, it does little more than picture the laws of war as being something of a tragedy, which it certainly does not have to be. If a State fails to obey an order that prohibits certain conduct, would it then kowtow to an order that 'really prohibits' it? If the laws of war are mostly a paper tiger, drawing a few extra teeth highlights its weakness rather than its strength.

Is the paradox avoidable?
As said before, the paradox does not have to be problematic per se. Although we have seen that there are significant downsides when it arises, it does not follow that it is at all possible to avoid the paradox. When confronted with the potential downsides of double regulation, advocates might reverse the argument and state that the specification stresses the importance of the prohibition. The more grounds on which it is prohibited, the more urgent the prohibition appears. Furthermore, the

[132] S. Levinson, Responsibility for Crimes of War. In War Crimes Law Volume I, G. Simpson, Ed. Ashgate Dartmouth: Aldershot, 2004; pp 369-398., p. 372.

law should not turn a blind eye to differences in conduct. Indiscriminate use of a kitchen knife might be equal to indiscriminate dirty bomb use when it comes to technical legal principle; the practical results of both actions differ enormously. This difference paves the way for a difference in regulation. The indiscriminate use of a dirty bomb calls for a specific prohibition to stress the importance of preventing it from becoming a reality.

Following this logic one could point at the desirability of double prohibition, taking the disadvantages into account but valuing the benefits more than the risks. However, this acceptance does not necessarily prove the paradox unavoidable. In an attempt to avoid the paradox, one could restrict the laws of war to basic principles alone. Or the opposite: removing the principles from the laws of war, making the laws of war solely an elaborate body of detailed regulation on weaponry or conduct instead.
Realistically though, this option represents impossibility. It requires an eye on the future, demanding creativity and foresight from lawyers exceeding that of the researchers, engineers and military thinkers combined. Either that, or one has to adopt a 'wait and see' policy where prohibitions are only set after an occurrence in practice. Such an approach might be very suitable in some legal areas, but in the field of the laws of war, the cost of human lives would significantly outweigh the benefits of such a pragmatic regulatory approach.

Reinforcing the general principles of the modern laws of war is a more feasible option. This would mean returning to a mere handful of principles. Having codified them, the specification should be left to legal practice. In time, however, it is likely that the need would be felt to agree upon certain interpretations and give those interpretations a more stable status. Since one is hard pressed to find a regulation in the laws of war that is not based on one of the basic concepts, one could argue that the entire body of the laws of war *already* consists of just a handful of general principles -albeit complemented by a large variety of agreed upon interpretations and specifications. So, to eliminate the risk of a *lex specialis* being abused to deduct an *a contrario* easing of another prohibition, one has to pay the price of having no specifications at all. Thus still enabling the justifications of certain conduct based on different interpretations of those general principles.

Theoretically, the paradox can be avoided by reframing the laws of war. However, the negative effects of the paradox will still be felt in practice. Even without interpretations of the principles being an element of the laws of war, those interpretations will still be used to determine whether or not the laws of war are breached. Public opinion will respond differently to different acts of war, fueling debates on comparison between different conduct and whether or not situation A is as bad as situation B. Furthermore, the fundamental principles of the laws of war (e.g. the principle of proportionality) themselves do not offer definite 'do's and 'dont's and in turn leave considerable room for debate. Every occurring event has to be valued and weighed on its own merits, thus unavoidably leading to debate with

room left for differing interpretations. The paradox can be banned from the texts, but in legal practice is truly unavoidable.

This paradox in the laws of war can and should not be avoided or eradicated. Rather, because the paradox is such an inherent part of the laws of war, one should be alert to its occurrence. At all times, its downsides should be examined carefully in the adaptation of new regulations or changing of existing rules. Forbidding again explicitly what is already prohibited in general should offer a clear improvement to the practical effects of the laws of war.

§3.2 The Dilemma between technology-specific regulation and broad notions

In analyzing the different documents of the laws of war, the degree of technology-specificity presents another recurring issue. Roughly speaking, there are two alternatives when it comes to regulation: detailed and pinpointed at very specific cases, or casting a wider net, encompassing a larger number of cases in lesser detail. When it comes to regulating technology, this general dilemma is extended with an extra dimension regarding technology-specificity. We have seen that, in the laws of war, no general choice has been made and consistently applied. Specific conduct is often covered by multiple rules reflecting both types of regulation.
Of course, this dilemma is not exclusive to the laws of war. All fields of regulation harbor a tension between clarity and scope.
The basic logic of both options is simple and needs little elaboration. Many rules are drafted because of outrage over a specific case. The first reaction is to prohibit reoccurrence. The most effective and clear method is to ban the specifics of that case. No one can doubt the contents of such a prohibition or try to worm their way out of it by bringing new interpretations to the table. However, a similar case caused by a slightly different set of circumstances would then not be covered, thus creating an unsatisfactory state of regulation. The logical response is then to focus on what makes the case so cumbersome and prohibit that element, no matter what the modus operandi responsible for creating it was. Casting the net wider by using regulation covering more cases makes the regulation inevitably couched in vaguer terms. Those vaguer terms give room for different interpretations, and, in turn, the opportunity to build legal arguments defending conduct that goes against the spirit of the regulation. It is a phenomenon we see time and time again in all legal areas.

The modern laws of war reflected this dilemma from the very moment of their inception. The 1868 St. Petersburg Convention was drafted in response to outrage over the use of very specific types of bullets. However, this outrage was based on the use of that technology going against broad principles, not yet codified, but perceived as morally pressing, firmly established elements of customary law. The 'explosive projectiles' under concern were effective in taking out enemy combatants. However, they did so in a manner 'uselessly aggravating their sufferings'. The basic and broad principle of unnecessary suffering was the underlying spirit of the Declaration. The Declaration itself only contained very specific regulation, going into a level of detail

that even included the weight of the projectiles. The latter was done to ensure compliance with the underlying principle. The fact that the Declaration was needed (i.e. that these horrible projectiles were actually being used) was deemed as evidence of general principles of customary law being insufficient to prohibit unnecessary suffering. As such, specific rules were called for.

The specific rules in themselves contain two major risks. First of all, their scope is quite narrow. Other weaponry causing equal or worse unnecessary suffering is not covered by it, although it would clearly go against the general principle underlying the Declaration. One could certainly still point out the remaining validity of the general principle, despite the call for more specification coming as a direct result of it being considered insufficient.
Second, the specific regulation has a natural date of expiration. Developments in technology follow each other rapidly. Compared with the rather slow process of (international) lawmaking, the chances are that technology has already surpassed regulation by the time it is agreed upon. Furthermore, the regulation itself can function as motivation for further military R&D. States can be spurred to find other solutions that are not illegal under the laws of war but will fulfill the same military function. Of course, that might lead to a humanitarian improvement. If the new technology can fulfill its military purpose without the humanitarian losses of its predecessor, it represents a significant move forward. However, if this is not the case and the new effects remain comparable or even worse, the highly specific regulation will fail to address the issue. The changes will have placed the new technology outside the bounds of the legislation.
This dilemma places us within a vicious circle of unsatisfactory outcomes, despite the various elements in themselves being both logical and understandable. Some things should not be allowed because they are wrong. The moral reasons why they are wrong can be expressed in a handful of general legal principles. Practice will show breaches of those principles. It is then quite logical to blame those breaches on a combination of poor moral standards and shortcomings in the regulation. By elaborating the general principles into more specific, dedicated rules, the room for debate is decreased. Furthermore, the breaches become morally and legally condemned *ex post* by the new rules. The changes serve to set an example and reconfirm the moral value of the general principles.

The next step is a legal formalization of the debates on practical conduct. The moral debate is replaced by a debate on whether alleged breaches fulfill the technical requirements of the specific regulation. If the threat of conduct perceived as morally wrong escaping regulation occurs, the original general principles are taken off the shelf and put into play.

Conclusion
However logical the process described, the paradox's continuous occurrence does not seem beneficial to the laws of war and parties' practical compliance with them. After a few loops in the cycle, the conclusion has to be drawn that neither one of the

extremes or the dynamic of the cycle itself help the effectiveness of the laws of war in keeping warfare as humane as possible.

§3.3 Dilemma of Regulating New Technology

In the previous Chapter, we have seen this dilemma as a frequent companion. In some debates it assumed the focal point, in others a more lurking presence supporting other arguments against the proposed regulation.
The crux of the dilemma is an opposition to regulation of new weapons technology on the basis of too much remaining unknown. One should wait and see what the developments bring before making a then informed judgment on the technology. However, once we have waited and seen what it is capable of, it seems to get rather more difficult to come to an agreement on regulation. The States using the technology do not want to loose the right to use it.

Cycle of the dilemma
In order to fully understand this dilemma and analyze its effects in regulatory attempts, we have to take another, less noticeable but equally crucial layer into account. In essence, we see logic in it being much easier to ban technology of which the military uses are still uncertain. The 1980 prohibition on the use of 'non-detectable fragments' is a good example. No State was developing such weaponry, nor was any added military value really expected from it should it be bought to bear. Whether it was the horrible images surrounding the idea or a diplomatic trade-off that spurred the adoption of the regulation, the fact that no-one concerned really expected military gain made the prohibition easy to agree to.
In short, we can discern three main layers in the dilemma regarding regulating new weapons technology:

1) banning weaponry that is not in use and has not persuaded party leaders of its military value, is easiest to do;
2) banning weaponry that is not in use but has persuasively promised military value is hard to do. This is supported for the most part by arguments for avoiding regulating the unknown -its effects might improve humanitarian conditions on the battlefield. This is an argument that supposedly does not apply to weaponry as described ad 1);
3) the not prohibited and to be further developed weaponry described ad 2), once its full military use and humanitarian consequences have been revealed and are open to legitimate evaluation, is hardest to regulate when the proven military use is beneficial, whatever its humanitarian effects.

Based on these key rationales, we can already conclude that the law's efforts to effect an absolute ban on new weapons technology should come at an early stage. As soon as military benefit is promised, regulation is difficult to achieve. When one wishes to base regulation on a solid valuation of all the pros and cons and a valuable comparison with already regulated means and methods, the law holds its horses at the risk of them breaking loose and running wild.

The first layer: banning the unknown and unexpected

Before we can fully understand the dilemma, we need to look at the logic underlying each layer individually. The first layer seems understandable from a diplomatic/ political point of view. Objection to the prohibition of something you weren't planning on doing or using anyway seems unlikely. If some theoretical weapon (be it from premature scientific suggestion or mere science fiction) offers a strong and horrifying image to the public and banning it does not interfere with your plans, it is sound logic to approve of a prohibition.

With regard to the diplomatic trade-offs mentioned earlier, banning the useless could offer an added PR bonus at the negotiation table. In agreeing to prohibit weaponry you weren't developing or planning on using anyway, you can show the world your humanitarian face. It enables you to claim that progress is being made within the laws of war. This buys you time and bargaining space away from prohibiting weaponry that is perhaps less offensive to the public eye, but all the more practically relevant to your forces. By banning what you did not want to use anyway, there is more room to allow the weapons that meaningfully extend your arsenal and expand your deployable destructive force in warfare.

Another effect is that, in banning it, you buy assurance against assessing the weapon's effectiveness wrongly. When, contrary to your expectations, there does appear to be military benefit in developing and using the technology, the ban and the drawing of public attention to their illegal weaponry development reduce the chance that someone else realizes the advantage. The internationally agreed legal prohibition strengthens the fear of the weaponry.

The only logic against this line of thought is the potential to miss out on something. By banning it before really understanding the benefits and threats posed by the technology, you might 'guess wrong'. You'll never know for sure whether you banned a technology with truly horrible effects, or an effective lifesaver in a combat situation. In the cases where the logic of the first layer prevails, the arguments mentioned above are strengthened by a belief in one's ability to 'guess right'. In other cases, it is the reason why the logic of the second layer comes into use.

At worst (from a humanitarian point of view) the first layer has no effect and the counter-argument of the second layer prevails. In cases where the first layer does succeed, it remains to be seen whether its effect is permanent or whether, after time has passed and insight into the regulated technology (its effects and military benefit) has progressed, the logic of the second argument kicks in to cast the prohibition aside or soften the regulation.

Even in the case in which the first layer's argument has achieved absolute victory and an unknown, undeveloped, and unused but much feared new weapons technology is banned permanently, questions remain regarding its effectiveness in improving humanitarian conditions. However highly probable it may have been, it can never be said for certain that the banned technology would have ameliorated the situation. There always remains a chance that an opportunity to improve battlefield conditions has been missed.

The final question arises in situations where the first layer argument has achieved a permanent ban on weaponry that would deteriorate the situation. The weapon is not developed, not deployed and never used. Even in these apparently successful cases, the extent to which the regulation is to credit remains open for debate. Since States are more likely to accept the first layer argument in cases regarding technology they weren't planning on developing anyway, the chances are that the laws of war are being celebrated for protecting us against something that probably would not have been a danger.

Altogether, the first layer argument makes a strong appeal to consider regulation of the laws of war for the good of humanity. In practice though, cases in which the argument turned out to be truly compelling and decisive in the regulatory debate are scarce. When one takes into account other factors affecting the achieved outcome and the possibility of the debate being re-opened or even ignored in practice, the number of cases could even be zero.

Layer two: do not condemn what you do not know
At its core, the second layer offers sound reasoning. The argument goes as follows: the law should be based on facts and knowledge of the matter it seeks to regulate. The law should only prohibit what is harmful and should be logically consistent. Banning technology 'A' on grounds that are equally or even more pressed by permitted technology 'B' makes little sense, undermining the validity and credibility of the law. Technological developments are hard to predict. Hampering human talent for innovation, exploring boundaries and pioneering new scientific territory should be based on hard facts, not fearful predictions. When new technology is the subject of regulatory debate, one should not pass judgment on the back of intuition and guess work. One should wait until the R&D is done, the military has deployed the technology and its effects and consequences can be measured, weighed, and properly judged.

However, there are problems employing this logic in practice. First, whether warnings against horrible effects are merely predictions or based on solid, reasoned, logical expectations of the technology under discussion is a matter for interpretation and debate. Those wishing to expand a military arsenal despite the probable negative humanitarian effect easily abuse the argument. Even more so when we know that, should military promise be realized, it becomes very difficult to regulate afterwards. Rather than, according to layer one's rationale, preventing the child from taking the candy, it suddenly becomes an attempt to get the hungry, eager child to agree to give it up.

Furthermore, the fear of negative consequences is quite often justified. There are a number of good reasons to expect little humanitarian benefit from a new technology. A more humanitarian outcome of the weapon's application is rarely the sole purpose of R&D. In fact, in using the second layer as an argument, it is seldom claimed that improved humanitarian conditions on the battlefield could be the

result. Most offerings are restricted to 'it is not clear that the effects will be worse than those already allowed'.
However dodgy the circumstances, the second layer argument forces those pressing for an early ban to prove that any of the new technology's possible effects would be worse than any of those from any currently allowed weapons technology, at all times, under all circumstances. If there is any room left for the possibility that use of the new technology, be it in the smallest niche, might turn out to improve the humanitarian equation on the battlefield, a ban is off the table and the 'wait and see' policy starts. As we will see in analyzing the third layer, after the waiting and seeing is done, a ban or regulation of the new technology that has failed to improve or even deteriorated the humanitarian position is harder to achieve. This in turn sees the logic responsible for postponing the ban suddenly offering somewhat lesser value.

Layer Three: delivering promises
The second layer argument has no outcome of its own. If unsuccessful, it means that the layer one argument has prevailed and a ban was achieved in the early stages of the new technology's development. If successful, it merely highlights that the first layer argument was overcome and that promises have been made. As shown, the second layer argument of 'wait and see' enjoys most success when the technology under discussion seems to offer potential for military benefit. However, application of the second layer argument makes a promise of its own. If banning unknown technology is cast aside with the view that one should only regulate on the basis of hard facts, than one should see regulation immediately when those hard facts become reality. Then the military benefit is weighed against humanitarian concern and compared to older banned and permitted technologies. This last promise, however, proves a good deal more difficult to deliver. The promise of military benefit has already been delivered, its temptations busily steering the interests and opinions of those negotiating at the regulation table.

Imagine that the second layer argument has blocked a ban of the technology before its effects were known. Even in the case that the effects turn out to be worse than expected and foretold, a ban does not automatically follow. Rather than turning to the advocates of the first layer argument and saying 'sorry, we were wrong, your guesses and fears were right, let us accept the ban and sign up to it', other arguments come to the fore. Let us be clear that I do not wish to put the blame on stubbornness or irrational attitudes. It is in fact quite rational for States that have invested significant time, money, and elite personnel resources to try and achieve the maximum return on their investment (or at least prevent a total loss). Since in these cases one cannot argue that the weapons technology's direct effect is preferable (or at least not worse) than what is already allowed, arguments of 'indirect improvement' often result. The classic 'the shorter the war the better' has gained the company of the deterrence argument: 'this is so bad that our capability to use it will prevent others from engaging in the first place', and the expense argument: 'this technology is so expensive that only 'good States' can afford it, those only using it for deterrence or as a last resort.'

This is not the place to evaluate the validity of these arguments, despite any claimed improvement of the humanitarian situation being indirect and resting on presuppositions concerning the conduct of those controlling the technology. It is certainly less effective than a ban securing the non-existence of the weapons in the first place.

Special attention should be paid to a rather peculiar form of regulation free from discussion of military necessity versus humanitarian concern. It is the regulation method as we see applied to nuclear weapons. Their use is not allowed, but not banned either. Possession of the weapons technology is only allowed for a selected set of States.
It would go too far to call this approach a purely hypocritical power based solution. This argument could be called upon in cases that such regulation is passed before R&D into the technology has been done. When the regulation comes after the fact, it is quite logical to let some States have it to deter others and to be able to respond when the developed technology is illegally deployed by other States. Add to this a logic often applied in the patents field: those who have paid the R&D should be allowed to have a monopoly on its fruits, at least for a certain time directly after the development of the technology.
However logic these rationales may be, it does create regulation that treats subjects unequally in considering access to the same weapons technology. This unequal treatment can serve to undermine the validity of the entire body of the laws of war, particularly in the eyes of those being discriminated against. The law should avoid any appearance of being partial, which is hard to do with regulation that grants possession of certain weapons technology to some parties and not to others
In sum, the fact that it is hard to agree to a ban after the R&D, after the deployment by the military, after the waiting and seeing, when the promises of the technology have been fulfilled and the military have tasted the fruits of their labor, is a fact based on solid logic. However, from a humanitarian point of view, this logic serves little benefit.

In the case that the new technology turns out not to be worse than what is already allowed, but just about as bad, other problems arise. The chances are slim that the total comparison of the technologies is also equal. If the new technology offered no benefit whatsoever, it would not be deployed -the R&D probably having been halted as soon as the problems were realized. New technology, even if it goes no further in its effects than those already allowed, can indirectly worsen the humanitarian situation. As an example, tactics deployable at lower cost also have a lower threshold for use. The same goes for an equally destructive force offering lower risk to the party delivering the blow. Even technology theoretically replacing 'worse' weaponry might lower the deployment threshold enough for the humanitarian net impact to be negative.
More efficient technology with direct effects comparable to existing, permitted technology enables an army to either do the same at lower cost (monetary and casualty count) or wield more force at the same cost. Although one might expect that an effective army already overpowering all others tempts politicians to save

money with the first option, this approach is actually the historical anomaly. Only directly after the end of the Cold War did some (mostly European) States decide to cash in on the 'peace dividend' and spend less money on armies already operational at a stable, effective level. A look at global military expenditure shows us that the second option is more popular and that often spending has even risen despite the lower costs of an equally effective military apparatus. As shown elsewhere in this book in more detail, the military does not just steer technological developments. Innovations are also steering the military and, in accordance with Say's law, supply constitutes demand.[133]

Conclusion

I conclude that all three rationales are strong in their own right. However, the second and third layers heavily challenge the first layer's strength. While it is true that banning new weapons technology is easiest when not much is known about either its possible military benefits or humanitarian consequences, the second and third layers offer strong tools to those afraid of missing out on something. Once the first layer argument is cast aside, things start to look pretty grim from a purely humanitarian point of view. Only in that first layer can humanitarian concerns have absolute, overriding power. In later stages, they face arguments of military benefit and comparison with already accepted means and methods of warfare. Arguments backed by vested interests and significant temptation to explore effective new military options make it an uphill battle for those offering humanitarian concerns.

Of course, it is impossible to draw a solid comparison between a situation in which the new technology is used and a situation in which it is not. The entire complex interplay between law, technology, and doctrine creates a situation in which a change in one factor changes the entire context, creating a new reality as a result. However the figures for (civilian) casualties and damage do suggest that when the second layer argument of 'wait and see' has carried, the instances of the new technology making war considerably more humanitarian are few and far between. It follows from this that we see the third layer rationale become dominant in regulatory debates on new weapons technology where military benefit and humanitarian impact are already known.

This should not come as a surprise. If the second layer argument's proponents were driven by an expectation of a humanitarian improvement rather than of military benefit or edge over adversaries, the argument would surely have been voiced in other terms. One could argue that, rather than denouncing regulation of the unknown and calling the law to halt until the effects are properly understood, a ban on the new technology should be in place until someone proves its humanitarian impact to be beneficial (or at least comparable). This would not only place the burden of proof on those wishing to expand military possibilities, but also shift

[133] To be true, this modern, short, and perhaps best-known version of Say's law is the result of Say's work and its interpretations through the years. A specific quote stating this can not be attributed to Say. The original wording can be found here: J.B. Say, 'A Treatise on Political Economy', Grambo & Co: Lippincott, 1855, pp.138-139.

research focus toward probable (in)humanitarian consequences (and not mere military benefit). Done before the technology is developed, R&D investments in new ideas unlikely to pass this fortified humanitarian test could be discouraged.

To restate the dilemma as phrased in the previous Chapter: the less useful a new form of weapons technology, the easier to prohibit its use. The more destructive it proves to be, the more difficult to prevent the destruction by legal means.

§4 Law, Technology, and Doctrine: A complex interplay

So far, I have analyzed the body of the modern laws of war itself. Its strengths and weaknesses, opportunities and risks have been clearly set out. Perhaps most importantly, a number of inevitable paradoxes and dilemmas have been singled out, hopefully highlighting how the laws of war can never offer a definitive solution for tackling inhumanity in warfare. However, the goal of this book is certainly not to relieve those with hopes for humanity of their dreams. Striving for a more humane world in general, with less suffering and casualties in warfare in particular, is a noble purpose. However, ends and means should not be confused. Making the laws appear more humane does not necessarily create a more humane reality. Sometimes it might be that less elaborate regulation increases compliance with a decisive underlying moral norm, bringing us closer to the humanitarian end through seemingly less humanitarian means. This is, in itself, a nice paradox to complement those already present throughout this work.

Now I turn to discuss how recent changes in warfare instigated by technological innovation have influenced the laws of war. However, before I continue to do so in the next Chapter, it is useful to consider where the laws of war currently stand.
The complications in regulating means and methods of war only seem to increase as we broaden our scope away from a pure legal analysis. Analysis and investigation of the characteristics of the laws of war is one thing. A realistic view of the position and potential of the laws of war involves something more though -a look at the influence they carry in the wider picture of warfare itself. Perhaps unfortunately, it is not the laws of war that decide what actually happens on the battlefield. It is human conduct and decision-making that really determine what happens there. The laws of war are but one factor among quite a few others. Perhaps most important are human nature, its instincts, inclinations and processes of response to stressful situations and positions of power. However, assuming that human nature is not (yet) a variable that we can change at will, I will leave the study of it and our psychology out of the current picture, accepting it as a fixed factor around which other elements should be built -or perhaps even tailored.

Next to the laws of war, we have to take into account two main factors of decisive influence: military doctrine and technology. By military doctrine I mean the full cycle -from grand strategy to field instructions. It is the political command structure that instructs individual military personnel in their practical conduct, in addition to deciding which means and methods will be available and in turn utilized.

Technology reflects the practical technical limits of the means and methods available. It goes beyond covering the technical limits imposed by science, including the influence of research as well.
By way of an introduction, one could start by considering the following questions: is a weapon deployed because scientists happened to develop it and military doctrine saw benefit in its use? Are new weapons developed because replacements are needed for legally prohibited means and methods of warfare? If so, are the replacements developed to remedy the moral objections to a predecessor or to achieve the same effects while avoiding technical legal restrictions? With these ideas in mind, it is not difficult to start thinking of many more important questions reflecting the interplay of law, doctrine, and technology.

Understanding the interplay between these three elements is crucial to a firm grasp of the laws of war. To offer an example: when it turns out that developments in technology and doctrine are dependent on what the laws of war dictate, this should highlight significant opportunity for the laws of war. If, on the other hand, we see the laws of war having no influence at all, their value would be reduced to theoretical legal debates against a background of zero practical significance. In the case of the latter, further study regarding changes within the laws of war would be futile until the status and position of the laws of war could be fortified. At the cost of suspense, neither of these two extremes will turn out to reflect our reality. Reality just is not that simple.

§4.1 Possible schemes of interplay

With three factors to take into account, we have to face six possible outcomes with regard to the following order of dominance in their mutual interplay. Merely seeking out whether law comes first, second, or last is not enough. Since doctrine and technology both pay an independent role in influencing the practical reality of wartime conduct, their relative position is vitally important. Regardless of its strength, if there *is* room for law it is important which factors it should focus on most in order to achieve maximum impact. There is no room in this book for an empirical analysis of the different possibilities and research into which model occurs most in practice. The analysis has to remain tentative. The goal here is to review which models can be deemed more plausible than others. The aim is to ensure that our expectations for solving the issues raised in the next Chapter remain realistic. For some, it might be an eye opener on the potential the laws of war have for shaping reality. Unfortunately for others though, it could well be a disheartening reality-check on the limits of international law.

§4.1.1 The six possible schemes of interplay

- Law >> Doctrine >> Technology
- Law >> Technology >> Doctrine
- Doctrine >> Law >> Technology
- Technology >> Law >> Doctrine

– Doctrine >> Technology >> Law
– Technology >> Doctrine >> Law

It would be an oversimplification to review all six models and expect to find the one true scheme of interplay that genuinely reflects reality. All models can exist alongside one another, each being applicable to different times, situations, or cases. What matters is whether their occurrence is incidental or structural enough to matter. For a full understanding, all possibilities have to be explored.
The most important factor to be determined remains the role of the laws of war. Do they play a leading or following role? If they are following, are they 'dominant' or 'passive' followers? In other words, are the laws of war a significant player in determining the use of means and methods of warfare?

§4.2 Model A: law dominates doctrine in turn dominating technology

This model has the highest potential for the 'controllability' of conduct in warfare. Most dominant would be the legal norms –reflecting long standing moral tradition-, which are established after careful deliberation, consolidated over time and influenced little by the pressures of wartime. Next are the norms and decisions made in times building up to and under that pressure. Lastly are the more 'accidental' spurs following developments and discoveries in technology that offer leaps forward in destructive military power.
Finding practical examples of the occurrence of model A is not an easy task. As seen earlier in this book, most laws of war were framed after and as a response to public outrage over specific instances deemed to be inhumane. This model is unrealistic because it requires life to be predictable. Lawyers, State officials, and the military all have to be able to predict fundamental scientific breakthroughs, planning the military technological consequences ahead of time.
The closest thing might be regulation in the field of chemical and biological weapons where the law prohibits governments from conducting research into the offensive application of biological and chemical agents. However, this regulation came to be after the initial discovery of chemical and biological weapons, making this a case more representative of model D.

§4.3 Model B: law dominates technology in turn dominating doctrine

The instance that comes closest to following this order is the 1980 CCW Protocol I regarding Non-Detectable Fragments. There had been no reports on the use of 'any weapon the primary effect of which was to injure by fragments which in the human body escape detection by X-rays' as stated in the Protocol's wording.[134] No State was developing doctrine, guidelines, or tactics regarding the use thereof and no R&D was funded with the goal of deploying such weaponry.
However, to state that this regulation originated on its own and was not spurred by external factors would be inaccurate. No conference of lawyers and science fiction-writers was instigated to come up with frightening future weaponry and then

[134] Protocol on Non-Detectable Fragments (Protocol I), Geneva, 1980.

regulate it. General developments in science and technology led to a fear of the *possibility* of such weaponry being available and deployable in practice. This somewhat abstract fear stimulated the call for the regulation at hand.
After the Protocol entered into force, little is known about any breaches of the regulation. The weaponry seems not to have been developed. No plans for its potential development are known today.[135] Without development and production, the question regarding its use is of course moot. The regulation initially targets technology and its development. With the specific type of weaponry prohibited, the expected profit for R&D in this area is greatly diminished. After overcoming practical hurdles, one would have to either overcome doctrinal objections against deploying illegal weaponry or convince States to alter the regulation and legalize the use of currently prohibited weaponry. In turn, the fact that the weapon is not available and probably never will be restricts doctrinal choices. With the option not feasible and not deployable on short term, chances are that it will be off the table permanently. A doctrinal choice for its use would require starting up the entire R&D, testing and production process, awaiting its results, hoping for success and then either accepting the laws of war being breached or going through a lengthy process of changing them. Seeking alternatives that are not prohibited by the laws of war and where technological development is at a further stage is the more probable doctrinal approach.

Model B thus seems to be as effective as its practical occurrence is rare. However, one could argue that the reason for its occurrence is also the reason for the nullification of its success. The Protocol regulated something that was not a practice, nor likely to become one soon. It was fairly easy to reach agreement on it since no State party saw a self interest harmed by it. No military benefit was lost for the humanitarian 'gain'. What was forbidden was something that probably would not have happened, even without the regulation.

All in all, although a powerful model in theory, model B seems to represent an unrealistic view. It is, again, difficult to predict what technology tomorrow will bring. Should one manage it, the chances are that the dilemma of regulating new technology, as discussed earlier this Chapter, will come to the fore.

§4.4 Model C: doctrine dominates law in turn dominating technology

The model in which doctrine is most dominant and law second, is slightly more complicated. Since the laws of war are not established by an ultimate 'Lawgiver', but after deliberation between (mostly) States, the political will of societies is a crucial factor in determining them. This political will is often cut from the same cloth as the society in question's military doctrine. Of course, it is quite possible for societies to have multiple (conflicting) interests, international law possibly even used as a tool in competition. A society has an interest in keeping the world as humane as possible (if

[135] One might argue that the extensive research in the field of nanotechnology is relevant here. However potentially gamechanging nanotechnology is, the aim of that field of research lies not with killing by piercing a body with non-detectable fragments.

for no other reason than possibly falling victim to an overpowering aggressor), as well as in keeping its military strength effective enough to protect its interests. Furthermore, since the laws of war are established by broad international agreement and remain valid until the same broad international agreement changes them, they are subject to less modification than doctrine. It would thus go too far to state that all laws of war are servile to doctrine, although doctrine can have a significant influence in shaping them.

Of course, military doctrine is not some evil counterpoint to humanitarianism. Military doctrine is not unequivocally helped by less war legislation and more military options. It has to adapt to reality, including limitations placed by budget, threat, allies, public opinion, and laws. The military doctrine reflects the (in democracies) will of the people, or at least the government regarding military affairs. Military doctrine can have a clear stake in the legal prohibition of certain means and methods of warfare. Doctrine faces one specific threat less if a certain weapon is prohibited and adversary compliance with that prohibition can be expected.

This model is somewhat feasible, although dangerous for the laws of war at the same time. It turns the laws of war into an instrument of war. The laws of war are used to set the stage for warfare according to doctrinal preferences of the parties behind the proposed regulation.

§4.5 Model D: technology dominates law in turn dominating doctrine

This category would contain those instances in which technological developments are immediately followed by regulation. A weapon is developed; it becomes known and immediately regulated without it being deployed in practice. In such a case, there is no room for military doctrine to decide whether or not deployment is attractive. The rise of non-State actors has made this model more feasible than before. With pressure for new regulation no longer coming solely from the same States that determine military doctrine, there is room for the law to skip ahead and manifest itself in direct relation to the technological innovation.
However, this model is restricted to innovation stemming from fundamental scientific research or from byproducts of research not directly aimed at finding new means of warfare. In other words: cases where doctrine has not steered or stimulated the research and discovery. These types of cases would fall under model E. Model D is feasible, but not dominant. When innovations in weapons technology come 'out of the blue', it is to be expected that a cry for regulation will follow immediately from non-State actors closely scrutinizing any relevant developments. However, in most instances, research programs producing innovation in weapons technology are guided by desires from military doctrine.

§4.6 Model E: doctrine dominates technology in turn dominating law

This model is first of the two most disheartening cases from a legal standpoint. It represents a world of doctrine dominating law, but dominating technology above it.

It is thus one of two models in which law is the least relevant factor, this particular scheme stating doctrine as the most dominant factor.
The clearest example of application of this model is the 'Manhattan project'. Nuclear weaponry was no byproduct of civilian technological research. A group of scientists was appointed and funding offered with one goal in mind: developing a useable nuclear bomb before the enemy. Of course, scientists first hinted at the destructive potential of weaponized nuclear power, but the technology was, at that point, not readily available. The doctrinal will and choice to seek a weapon capable of delivering the ultimate blow, to end a war with one strike, spurred the process and led to the nuclear bomb's development.
Law seems rather distant from this process. The destructive kinetic power promised by weaponizing nuclear technology was so great that one could hardly imagine deploying it in a discriminate fashion. Furthermore, the principle of subsidiarity would raise large issues regarding the possibility of achieving the same goals with a lower casualty rate –particularly with respect to civilians. It would be hard to imagine a legal use of nuclear weaponry given the fundamental principles of the laws of war.
The laws of war currently demand a State to assess the legality of new weapons technology before deploying it.[136] If a State takes this obligation seriously, it would carry out this assessment before even starting with a research program. It would be foolish to spend money developing a weapon that would not pass the test of legality. In theory thus, the laws of war assume prominence at the front of the cycle. However, practice continues to show weapons being developed first, used second, and their effects assessed and, if necessary, regulated third.

§4.7 Model F: technology dominates doctrine in turn dominating law

A good example of this following order relates to the establishment of the Chemical Weapons Convention. The technology was already there, chemical weapons having already been used in practice. It was not the weapon delivering the most destructive (kinetic) power; it did not supersede the nuclear weapons for whom a total ban was never achieved. It was a weapon however, with specific, particularly horrifying characteristics, that was hard to defend against. It was thus beneficial from the viewpoint of military doctrine (at least of the States party to the Convention) to self-impose a limitation of available military means and methods. Not only was the use of chemical weapons prohibited, but their production, trade, and possession as well. Of course, the laws of war did not allow the use of chemical weapons prior to this. The general principles prohibiting unnecessary suffering covered their use.[137] However, the laws of war in that form failed to steer doctrine effectively, the weapons were used and the technology was further developed.
The wish to ban the use of chemical weapons was a doctrinal choice that spurred change in the laws of war. Of course, that same doctrine could also effectively influence the technological sphere by not funding chemical weaponry R&D,

[136] Article 36 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977.
[137] Since the chemical weapons were often used against civilians, the principle of discrimination was often breached as well.

production and stockpiling. In effect it did. In the time leading up to the ban, States unilaterally denounced use of chemical weapons, halted their development programs and started destruction of their stocks. However, it is important to note that such actions were taken in the process of agreeing to the CWC. It was as much part of the process of lawmaking as anything else.

The call for a wide prohibition regarding chemical weapons was a doctrinal choice. Immediately recognized, however, was the fact that doctrine would not be enough to effectively diminish the threat of chemical weapons. Law was drafted to enforce that doctrinal choice, solidifying the prohibition and decreasing the risk of a sudden doctrinal change by a major power re-establishing chemical weapons armaments.

Aided by a doctrinal disinterest in developing chemical weapons, the laws of war then effectively constrained the development and large-scale production of new chemical weaponry.

This model is perhaps the most challenging for the laws of war. Model E presents a clear divide: doctrine and technology versus the law. Since military doctrine actively sought the regulation of technological innovation, the laws of war stand alone in representing humanitarian concern. Military doctrine is sensitive to the issue and willing to accommodate it, but within the bandwidth of what is reasonable it is more a tug of war between humanitarian restriction and military necessity calling for lenience. In model F, however, the technological innovation arrives on its own. Depending on the position of a State, its military doctrine will either favor use of the new technology, or ban it. The laws of war are then not just humanitarian agents, but instruments for doctrinal interest as well. Achieving a prohibition on what an adversary has but you cannot afford is a high prize. Keeping for yourself what you have discovered and prohibiting others from replicating it is as well. As is not prohibiting what only you can afford to buy.

§4.8 Conclusion

Without ranking the models from hypothetical to dominant, this assessment elucidates the place of the laws of war. Without getting into the chicken-egg debate regarding whether the wish for new weaponry (doctrine) or the possibility to develop it (technology) comes first, or indeed whether they are in a constant process of cross-fertilization, it is clear that the laws of war do not play the first fiddle. The two scenarios, models E and F, in which law arrives last are the most representative. Model F complicates the matter by turning the laws of war into an instrument of diplomatic warfare.

§5 General Conclusion

We should now be beginning to understand just how complicated the system of the laws of war is. Within the system, numerous dilemmas and paradoxes have to be assessed and dealt with. Outside the system, it faces fierce competition from other interests and powerful forces. This, however, should not rid us of hope for the laws of war, despite the obvious lack of easy solutions to current tensions within the field. It

should also make us realize that many current disappointments are inherent to the laws themselves and not the result of recent developments.

Our understanding of these issues is important. It might prevent us from focusing our attention in the wrong areas, better equipping us to tackle the issues that really do stem from recent changes in warfare. Becoming stronger starts with addressing our limitations and our weaknesses.

Chapter IV

Asymmetry in Warfare

§1 Introduction

The different types of laws of war as described in the previous chapter should be confronted with reality. With war as it is fought in practice and the changes warfare has undergone as the result of technological innovation. Writing about the way modern war is fought without considering the extensive research on 'Asymmetric Warfare' would be like trying to play baseball without the bat. The term is widely used, its omnipresence widely acclaimed. No author denies its current importance, modern military forces counting on little, if any symmetric engagement in the foreseeable future.

However, as often with popular buzzwords, it seems that every use leads its connotations to become stronger and its meaning vaguer. Asymmetry can be interpreted narrowly or broadly (every difference between two units leads to some asymmetry) and applied to many relevant areas of concern in (modern) warfare –its social, cultural, and technological aspects. It can reflect the means and ends involved, methods, technology, and degree of organization of the fighters. It can refer to a divide between people, between States, between States and non-State actors, between types of conflict; the list goes on and on.
The more one studies 'Asymmetric Warfare' and becomes acquainted with the finer nuances and consequences involved, the more one finds oneself asking whether truly symmetric warfare has ever really existed. The battle coming closest was perhaps the one never fought: the Cold War, in which the (perceived) true symmetry of destructive capabilities caused a 'warming' to be impossible, the ultimate symmetric fight never coming to fruition.

I will not attempt to redefine 'Asymmetric Warfare' or try to delimit its scope. With regard to our main focuses -technology and the laws of war- a solid grasp of the phenomenon is sufficient. Standing on the shoulders of many experts in this field, I will use this Chapter to analyze the most important consequences of 'Asymmetric Warfare' for the laws of war.

Firstly, in paragraph two, I will look at the idea of 'Asymmetric Warfare' and its variations. Paragraph three will focus on the unconventional party in asymmetric conflict. Their conduct will be held against the background of the laws of war in paragraph four. The fifth paragraph covers the conduct of conventional parties against the laws of war as a yardstick for comparison. In the sixth and seventh paragraphs, I will discuss the significant problem of mutual undermining of compliance, a backlash to the presumed bias within the laws of war and the breaching of rules by adversaries.

§2 What is 'Asymmetric Warfare'?

There is no clear, agreed-upon definition for 'Asymmetric Warfare'. This is perhaps not surprising given the broad nature of the term 'asymmetry' and the number of ways in which it can be applied to warfare. Furthermore, 'Asymmetric Warfare' has generated an entire lexicon of terms used to describe those fighting it, the axis of their asymmetry, the strategies and tactics used as a result of the asymmetry etc. etc. Be it unrestricted warfare,[138] Fourth Generation Warfare (4GW),[139] irregular warfare or new wars,[140] all these terms add to, replace, or entail forms of 'Asymmetric Warfare'. To simplify matters as much as possible, we will use 'Asymmetric Warfare' as the 'catchall' term from here onwards.

§2.1 Definitions

Proposed definitions of 'Asymmetric Warfare' are not hard to come by. However, a clear definition carrying wide consent is still unavailable. Since the phrase covers such a wide area of practical examples, there is enough room to set definitions specifically accentuating certain points.[141] A fair number of definitions also create an additional distinction with a specific subtype of 'Asymmetric Warfare', one to which I would like to pay particular attention.[142] This insightful definition offered by Meigs is a good example:

> Asymmetry means the absence of a common basis of comparison in respect to a quality, or in operational terms, a capability. Idiosyncrasy has a different connotation -possessing a peculiar or eccentric pattern. In a military sense, idiosyncrasy connotes an unorthodox approach or means of applying a capability, one that does not follow the rules and is peculiar in a sinister sense.[143]

Meigs rightly attempts to create a distinction between a 'neutral' definition of asymmetry and the normative (and negative) judgment that, in Western literature,

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[138] R.R. Luman, Welcome and Perspective on Unrestricted Warfare. In Unrestricted Warfare Symposium 2006: Proceedings on Strategy, Analysis, and Technology, R.R. Luman, Ed. Johns Hopkins University: Laurel, 2006; p. 2.

[139] T.X. Hammes, Modern Warfare evolves into a Fourth Generation. ibid., p.65 and A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007 p.76.

[140] H. Münkler, 'The Wars of the 21st Century', in: *International Review of the Red Cross* 2003, (849), pp. 7-22., p.15.

[141] E.g. A.A. Stahel, 'Dissymmetric Warfare versus Asymmetric Warfare', in: *International Transactions in Operational Research* 2004, 11 (4), pp. 435-446., p. 438.

[142] E.g. F.P.B. Osinga, Asymmetric Warfare: Rediscovering the Essence of Strategy. In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp. 267-317., p. 272.

[143] M.C. Meigs, 'Unorthodox Thoughts about Asymmetric Warfare', in: *Parameters* 2003, 33 (2), pp. 4-19., p. 4.

often accompanies it.[144] Meigs uses the term 'idiosyncrasy' to classify the latter. This definition has not caught much wind, but it is helpful to keep the tension in mind.
To circumvent the danger of excluding elements or incorporating a normative implication, some definitions take such a broad view that it becomes difficult to imagine any military strategy not falling under the definition.[145]
Metz and Johnson, in their "Asymmetry and U.S. Military Strategy", offer a solid overview of a number of definitions. After combining and reviewing them, they reach the following definition, which has since gained some authority:[146]

> In the realm of military affairs and national security, asymmetry is acting, organizing, and thinking differently than opponents in order to maximize one's own advantages, exploit an opponent's weaknesses, attain the initiative, or gain greater freedom of action. It can be political-strategic, military-strategic, operational, or a combination of these. It can entail different methods, technologies, values, organizations, time perspectives, or some combination of these. It can be short-term or long-term. It can be deliberate or by default. It can be discrete or pursued in conjunction with symmetric approaches. It can have both psychological and physical dimensions.[147]

Although still broad, this definition is significantly less vague. It encompasses the relevant parameters of various types of asymmetry and steers clear of normative judgments on the phenomenon. It also shows us that, with regard to its possible consequences for the laws of war, the story has many different sides and angles requiring analysis.

§2.2 Maintaining a neutral view

As already stated, discussion of 'Asymmetric Warfare' is often accompanied by a normative notion, be it glorification in non-Western literature or its condemnation in Western writing. For the purposes of this book, it is important to state that 'Asymmetric Warfare', in itself, is nothing to be either condemned or glorified. In

[144] E.g. C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 1.

[145] E.g. Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999 p.211; S. Metz and D.V. Johnson, 'Asymmetry and U.S. Military Strategy: Definition, Background, and Strategic Concepts', Strategic Studies Institute, U.S. Army War College: Carlisle, 2001 p.1; R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p.15.

[146] E.g. Osinga adopts the definition. F.P.B. Osinga, Asymmetric Warfare: Rediscovering the Essence of Strategy. In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 267-317., p. 274.

[147] S. Metz and D.V. Johnson, 'Asymmetry and U.S. Military Strategy: Definition, Background, and Strategic Concepts', Strategic Studies Institute, U.S. Army War College: Carlisle, 2001, pp. 5-6.

light of the laws of war, specific consequences (beneficial or malignant) can be called problematic, but the phenomenon itself should not be dismissed easily.
However, when discussing 'Asymmetric Warfare' and the ones waging it,[148] negative remarks pervade the arguments. This issue extends to the words used to refer to 'Asymmetric Warfare' and the weaker parties fighting it.
Guerilla's, have-nots, insurgents, revolutionaries, unlawful combatants, freedom fighters, heroes, or savages; these terms are all used in reference to the same people. In search of a more neutral term, I will take the guidance of Frederick Kagan:

> Most people are accustomed to thinking that insurgency, revolutionary war, guerilla war, and unconventional war are all pretty much the same. Even experts frequently use these terms interchangeably. All these concepts are commonly contrasted with conventional war, a disarmingly and deceptively simple phrase. … Guerilla war and unconventional war, however, describe not the purpose of the conflict but the methods used to prosecute it. Unconventional war is an even broader term that can include just about any form of military activity other than the deployment of regular combat units in traditional formations.[149]

In extending this reasoning to the terminology used to describe the conventionally weaker party, the current term 'insurgents' becomes problematic. The terms 'guerilla' and 'rebel' are equally imperfect. Despite the fact that guerilla tactics can be used to achieve many different (political) goals, and have also been used by stronger parties, the word is colored with negativity. Particularly in the case of guerilla movements in Latin America, the connection with organized crime is easily made and comparisons to terrorism are quickly and often drawn.
That leaves us, if we want to heed the warning of Kagan, with the term 'unconventional' fighters, one seen less frequently in current debates. A closely linked and more favored term is 'irregular' fighters, seemingly more colorful and appealing in its nature. However, since this book deals with the law as much as with warfare, the popular term of 'irregular' might have too close a connotation to being 'against the regulations', possibly even being construed as 'illegal'. This is certainly not a judgment that should be made as a categorized assumption concerning persons engaged in a specific form of warfare. As such, I will use the term 'unconventional' warfare/ fighters to describe the low-technology side of 'Asymmetric Warfare'.

§2.3 Scope of the problem

Before getting into the details of the problems 'Asymmetric Warfare' presents with regard to the modern laws of war, we need to consider whether 'Asymmetric Warfare' is a significant factor or merely an exception to the rule.

[148] Of course, both parties are waging it, but the responsibility for the asymmetry is often placed on the shoulders of the weaker party.
[149] F.W. Kagan, 'Finding the Target: the Transformation of American Military Policy', 1st ed., Encounter Books: New York, 2006, p. 366.

The answer is pretty straightforward and shared by the vast majority of authors.[150] 'Asymmetric Warfare' is here to stay and will dominate warfare in the foreseeable future.[151]

One of the main reasons is the insurmountable gap in military and technological capabilities between the most advanced Western States and the rest of the world (this group containing their most probable current and future adversaries).[152] In recent years, the US alone accounted for more than half of global military expenditure.[153] This lead position is an American policy goal.[154] Most relevant States and scholars acknowdledge the fact that it leaves potential adversaries with little choice other than engaging these modern forces in an unconventional.[155] The point was well highlighted in the outcome of the early 90's Gulf War, a clear display of what happens to the weaker party in a conventionally fought war.[156]

The American National Defense Panel (NDP) states that "...enemies and future adversaries have learned from the Gulf War. They are unlikely to confront us conventionally ... They will look for ways to match their strengths against our weaknesses".[157]

Ewans claims that "the main focus has been on 'Asymmetric Warfare'",[158] and it leads Cassidy to conclude "Asymmetric conflict will therefore be the norm, not the exception".[159] Perhaps the irony underlying this development is best captured by Peters: "...the United States is unbeatable on a traditional battlefield -but that battlefield is of declining relevance."[160]

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[150] C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 1.

[151] B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 7.

[152] M. Applegate, 'Preparing for Asymmetry: As Seen through the Lens of Joint Vision 2020', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2001, p. v.

[153] B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 214.

[154] S. Lambakis, J. Kiras and K. Kolet, 'Understanding "Asymmetric" Threats to the United States', in: *Comparative Strategy* 2002, 21 (4), pp. 241-277., p. 5.

[155] See A.G. Peck, 'Airpower's Crucial Role in Irregular Warfare', in: *Air & Space Power Journal* 2007, XXI (2), pp. 10-15.; R.M. Cassidy, 'Why Great Powers Fight Small Wars Badly', in: *Military Review* 2002, 82 (5), pp. 41-54., p .42.

[156] A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, p. 52.

[157] National Defense Panel, as quoted in: S. Metz, 'Strategic Asymmetry', in: *Military Review* 2001, (July-August), pp. 23-31, p .23.

[158] M. Ewans, 'Conflict in Afghanistan: Studies in Asymmetric Warfare', Routledge: London, 2005, p. 2.

[159] R.M. Cassidy, 'Why Great Powers Fight Small Wars Badly', in: *Military Review* 2002, 82 (5), pp. 41-54, p. 42.

[160] R. Peters, Our New Old Enemies. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 215.

Taking it one step further, Van Creveld argues that the dominance of modern (Western) armed forces is not translated into dominance in deciding the type of warfare waged. As their adversaries have little choice other than to fight them asymmetrically, the modern forces themselves are left with little room to maneuver:

> For all the countless billions that have been and still are being expended on them, the plain fact is that conventional military organizations of the principal powers are hardly even relevant to the predominant form of contemporary war.
> To support this claim, consider the record. Since 1945 there have been perhaps 160 armed conflicts around the world, more if we include struggles like that of the French against Corsican separatists and the Spanish against the Basques. Of those, perhaps three quarters have been of the so-called "low-intensity" variety (the term itself first appeared during the 1980s, but it aptly describes many previous wars as well). The principal characteristics of low-intensity conflict (LIC) are as follows: First, they tend to unfold in "less developed" parts of the world; … Second, very rarely do they involve regular armies on both sides, though often it is a question of regulars on one side fighting guerilla's, terrorists, and even civilians, including women and children, on the other. Third, most LICs do not rely primarily on the high-technology collective weapons that are the pride and joy of any modern armed force … Besides being numerically predominant, LICs have also been far more bloody than any other kind of war fought since 1945. …
> … the term LIC itself is grossly misconceived. The same applies to related terms such as "terrorism," "insurgency," "brushfire war," or "guerilla war." Truth to say, what we are dealing with here is neither low-intensity nor some bastard offspring of war. Rather, it is WARRE in the elemental, Hobbesian sense of the word, by far the most important form of armed conflict in our time.[161]

The numerical relevance of 'Asymmetric Warfare' is overwhelming. Van Creveld also outlines worrisome issues arising with regard to the laws of war, referring with cogent simplicity to the consequences resulting from these issues and tensions: "WARRE". It is exactly that type of battle that the laws of war were set out to prevent.

§2.4 Gravity of the problem

The fact that most parties interested in taking on a modern armed force have little choice other than asymmetric fighting is, in itself, not sufficient to declare its broad occurrence. Theoretically, they do have other options. However, those other options are, generally speaking, tantamount to suicide. In using the concept of 'Asymmetric Warfare', we imply that it offers a chance of success to parties militarily weaker in a conventional sense.

Arreguin-Toft, in his study *How the Weak Win Wars,* offers -in great detail- the empirical data underlying the encounters between strong and weak actors. The general image, going back to 1816, still favors the stronger actors, though perhaps not as much so as one might imagine:

[161] M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, pp. 20-22.

Since 1816 strong actors have won more than twice as many asymmetric conflicts as weak actors. On the other hand, since in this analysis strong actors outpower weak actors by a large margin, it remains puzzling that strong actors have lost such fights as often as they have.[162]

The recent rise of attention regarding the phenomenon of 'Asymmetric Warfare' is certainly justified. Arreguin-Toft's data presents more than the chances of success for weaker parties. The numbers also help explain why the age-old issue of asymmetry has received so much attention recently:

> If the total record of asymmetric conflicts since 1816 is divided into discrete time periods, a striking trend emerges: strong actors have been losing asymmetric conflicts more and more over time. From 1800 until 1849, strong actors won 88.2 percent of all asymmetric conflicts. That proportion dropped slightly to 79.5 percent in the next fifty-year period. But starting in 1900, the number of asymmetric conflicts won by strong actors began to fall off significantly, down to 65.1 percent through 1949. By the last fifty-year period -1950 to 1999- strong actors won only 48.8 percent of all asymmetric conflicts.[163]

§2.5 History

> THIS PROVIDED A FORTUNATE TURN OF EVENTS FOR ROME BECAUSE FABIUS HAD LONG ADVOCATED REFUSING BATTLE TO HANNIBAL. INSTEAD, HE IMPLEMENTED A STRATEGY, WHICH SOUGHT TO STARVE AND HARASS HANNIBAL UNTIL HE WAS FORCED TO WITHDRAW FROM THE ITALIAN PENINSULA. FABIUS' SCORCHED EARTH TACTICS QUICKLY PROVED EFFECTIVE. IN CONCERT WITH THIS POLICY, FABIUS HARASSED HANNIBAL'S LINES OF SUPPLY AND COMMUNICATION. WHEN HANNIBAL SOUGHT TO BRING THE ROMANS TO BATTLE, THEY QUICKLY DISPERSED AND RETREATED TO THE HILLS AND MOUNTAINS.[164]

Fabius is often used as evidence for 'Asymmetric Warfare' being far from a new phenomenon. However striking and clear the example might be, more should be said on the presence of 'Asymmetric Warfare' in history. There is more to the situation than merely showing asymmetry as always being strategically relevant, some weak parties always being able to outsmart the strong.[165] History shows that the choice to fight asymmetrically has often been the logical result of an already existing imbalance in power.

The distribution of power and its consequences can be seen to develop in different ways. One view is that the current rise of 'Asymmetric Warfare' is unprecedented. It has always been present as an approach, but the current imbalance of power steers

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[162] I. Arreguín-Toft, 'How the Weak Win Wars: a Theory of Asymmetric Conflict', Cambridge University Press: New York, 2005, p. 3.

[163] ibid., p. 3.

[164] A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, p. 18.

[165] ibid., p. 14.

us toward dominance for 'Asymmetric Warfare' never seen before.[166] It is clear that, even though this view suggests 'Asymmetric Warfare' in its dominant form being 'modern', this type of combat itself is still viewed as an age-old phenomenon. As Lowther puts it:

> The reality of asymmetric conflict is that it is a form of warfare as old as war itself. Weak actors have long sought to minimize the strengths of their adversaries just as the strong have sought to bring the weak to battle.[167]

Alternatively, the shifts in balance -and likewise the shifts in dominance of Asymmetric or conventional warfare- are viewed more as recurring patterns. Power is concentrated, then dispersed and accompanied by Asymmetric and conventional warfare respectively.

With regard to the second pattern, one could debate whether this shift will continue or whether we have reached the last peak. A case for the latter is made by Ewans, equating the rise of the nation-State with the establishing of a reasonable power balance:

> Since the beginnings of nation-State formation in the seventeenth century, 'Asymmetric Warfare' has been the exception rather than the rule, …
> Mechanization, which began during the First World War, became the principal characteristic of inter-State 'conventional' warfare from the Second World War onwards. This meant that warfare became both more expensive and more destructive, until, with the development of nuclear weapons, the scale of destruction and expense became self-defeating. In a nuclear war, there would be no winners.[168]

Leaving this last interesting matter aside, the second pattern paints the following picture -history has always seen periods when fighting was the preserve of an (economic) elite interchanged with periods of 'democratizing/ popularizing' warfare. In the latter case, the opportunity to utilize (great) force was often available, asymmetric fighting between a professional (elite) military and 'people's warriors' the more common *modus operandi*. Such a period would last until a new (technological) development reinstalled superiority of professional armies' and wealthy political organizations (be it States or other societal forms of organization).
Of course, in the latter case, the asymmetry regarding possibilities to employ weaponry would be even greater. However, greater asymmetry in attacking possibilities can become a deterrent to fight at all if one does not stand a chance against a vastly more powerful enemy. This scenario is feasible today more than ever

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[166] D.L. Grange, 'Asymmetric Warfare: Old Method, New Concern', in: *National Strategy Forum Review* 2000, (Winter 2000), p. 1.

[167] A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, p. 53.

[168] M. Ewans, 'Conflict in Afghanistan: Studies in Asymmetric Warfare', Routledge: London, 2005, p. 1.

before with the stronger parties now having nuclear weapons at their disposal. However, their self-restraint and unwillingness to use them (again) practically voids their deterrence potential. Only when the technological asymmetry equals a gap that can be bridged by other means (e.g. playing by different rules) is 'Asymmetric Warfare' feasible. Too great a gap results in symmetrical warfare among the high-technology parties and/or asymmetrical peace between the high- and low-technology parties. Technological advances and developments spur both situations.

Skimming the surface of the deep ocean of history, one could find example in the huge improvement in chariots around 1800 BC -the creation of a select class of 'chariot warriors' suddenly seeing regular soldiers overpowered. This confronted the common man with a virtually insurmountable disadvantage, one only truly overcome with the development of cheap iron armor and weaponry around 1200 BC.[169]

The swing back to the other side was fueled by the emergence of professional bureaucracy and the imposition of taxation, professional armies with highly skilled and trained professionals were introduced as a consequence. The cavalry revolution created by the stirrup again divided the world of warriors into two distinct classes. This lasted until the invention, mass production and commercialization of the crossbow, enabling foot soldiers to shoot their enemies from their literal technological high.[170]

A comparable development exists in the evolution of cannons, once again making it virtually impossible for those without them to battle those with.[171] In the words of Michael White: "For a while the cannon became the nuclear weapon of its day."[172] It took the steering of the gunpowder-revolution into portable small arms to turn the tide.[173] Again, Michael White, with regard to the handgun:

> Such a weapon adds significantly to the demise of the knight and chivalric tradition already severely damaged by the reintroduction of the crossbow during the Middle Ages. Most importantly, the gun was relatively cheap and easy to make and its invention and use led to a radical change in the very structure of armies.[174]

At the turn of the 20th century, industrialization created mechanized warfare. Once more heavy tanks, boats and, -later- airplanes created an insurmountable gap between haves and have-nots. This time, it was more than just the quality of the new weaponry. Although the armored mechanized tanks heavily shifted the balance to the high-technology powers possessing them, it was the industrialization allowing

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169 W.H. McNeill, 'The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000', University of Chicago Press: Chicago, 1982, pp. 9-12.

170 ibid.

171 A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, pp. 27-28.

172 M. White, 'The Fruits of War: how Military Conflict Accelerates Technology', Simon & Schuster: London, 2005, p. 78.

173 W.H. McNeill, 'The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000', University of Chicago Press: Chicago, 1982, p. 80.

174 M. White, 'The Fruits of War: how Military Conflict Accelerates Technology', Simon & Schuster: London, 2005, p. 94.

the manufacture of large quantities of weaponry that had the most impact. However, in accordance with the market rationale that larger numbers bring lower prices, the 'democratization' of weaponry would soon also be a fact. Following the Second World War in particular, the proliferation of (small) arms surged. Though the tide would turn again. The trend was countered by the development of nuclear weapons and the possibilities of creating conventional, biological, or chemical WMD. This once again shifted the balance in favor of the few States able to develop the latest and greatest.

Thenceforth, those States failed to develop biological and chemical weapons on a large scale. The nuclear arsenal alone sufficed to maintain their leading position. As we can now see, progress in the field of chemical and biological weaponry would serve to 'democratize' the situation once again. Those weapons could reach levels of kinetic force able to compete with those of high-technology States and could be manufactured with limited means in low-profile laboratories with ingredients and knowledge available to all.[175]

This wide availability is in great part due to technological developments in the non-military field –in particular civilian use of the internet for the distribution of relevant information.[176] The ingredients can be acquired in civilian stores- civilian life making use of highly developed technology in everyday situations.

The current 'democratization' of warfare also extends beyond civilian developments relevant to biological and chemical WMD. As the rebels in Sudan and Somalia show,[177] a Toyota pick-up truck with a mounted fifty-caliber machine gun and team of men carrying AK-47s and an RPG-7 functions as a cheap, fast and maneuverable war machine.[178] As the unconventional fighters in Iraq show, a cleverly disguised IED can be detonated at distance via an ordinary mobile phone and some garage-handiwork. In the words of Van Creveld: "a move away from today's large, expensive, powerful machines toward small, cheap gadgets capable of being manufactured in large numbers and used almost everywhere, much as, in the past, firearms replaced the knight and his cumbersome armor".[179]

This pattern of technological developments inextricably linked with changes in societal organization is important to keep us grounded. We should not get carried away too much in viewing 'Asymmetric Warfare' in its current scope and strength as a historical novelty. By focusing on the similarities, we can draw lessons from the past to tone down over-excited claims and unnecessarily extreme conclusions. It has

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175 W. Barnaby, 'The Plague Makers: the Secret World of Biological Warfare', New rev. ed., Continuum: New York, 2000.

176 Of course, internet was a military invention. However, it can be safely said that non-military life has taken over.

177 R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007.

178 B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 115.

179 M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991,R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 210.

happened before. We have seen times in which the weak were powerless and times, like these, in which the weak are so only in relative measure.

§2.6 Types of asymmetry

The current peak of asymmetry is often associated with technological development alone. It is certainly the case that the influence of developments in (weapons) technology should not be underestimated. However, there are more factors to take into account, often playing their part in a complex system of interrelationships.
The different sources and forms of asymmetry are relevant in analyzing the consequences for the laws of war. The process also offers greater insight in the tensions that we will return to later in this Chapter.

§2.6.1 Sources of asymmetry

Until now, we have seen asymmetry mostly as an inevitable consequence of the practical variations in (technological) military capabilities. The differences lead the weaker party to resort to asymmetric means and unconventional fighting. However, this 'asymmetry by default' is not the only source of an asymmetric outcome, it sometimes also being the result of a deliberate choice.[180] Decisions to fight unconventionally can relate to the specific 'warrior culture' of a fighting party, or come as a specific choice made for the war at hand. Of course, these different sources of asymmetry can reinforce one another: a different outlook on life, battle and the treatment your adversary deserves has consequences for your strategy and tactics. This in turn has an impact on the tools necessary for the job -and the composition of the weapons arsenal.[181]

§2.6.2 Goals of asymmetric fighting

In addition to being fueled by different sources, asymmetry also manifests itself in different ways. The goal of asymmetry is often a very different one from those targeted in conventional warfare. It entails more than just fighting the same war through different means and methods. The targets and even ultimate goals are quite different.
With regard to the targets of warfare, Dunlap leaves no room for doubt: "The kind of asymmetrical warfare future adversaries may wage is not that which seeks to actually defeat U.S. or Western military forces, but rather that which assaults the psyche and will of the populations whose political support is required by Western democracies to sustain military operations".[182]

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[180] S. Metz, 'Strategic Asymmetry', in: *Military Review* 2001, (July-August), pp. 23-31, p. 25.
[181] K. Homan, 'Van Pepperspray tot Lasergun', Rathenau Instituut: Den Haag, 2005, p. 19.
[182] C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 11.

§3 Have-not and can-not

'Asymmetric Warfare' from the weapons technology viewpoint is often translated into a juxtaposition of the 'strong' against the 'weak' -the 'haves' and the 'have-nots'.[183]
The terms used above do not cover the entire story. They stem from a deceptive focus on the (technological and conventional) military capabilities at the outset of war.[184] In order to claim the success-rates shown in the aforementioned study, other aspects must be brought to the fore.

§3.1 Technology

There is no doubt that there is a considerable technological gap between modern (Western) armed forces and less wealthy actors. However, framing the matter in this respect is somewhat misleading. Of course, it does seem to fit seamlessly with the view one has of the battlefield. On one side, a highly organized professional uniformed military with the latest and greatest in (weapons) technology at its disposal. On the other side, a ragtag band of unshaven fighters, wearing whatever they can find, hiding wherever they are hardest to discover, fighting the enemy with improvised weaponry and unconventional technique.
This asymmetry however does not necessarily equal a capabilities gap. Sure enough, there is disparity between the two sides of the conflict; they act very differently toward each other and use different equipment and methods. The professional military have weapons and other technology, the unconventional fighters do not. But let us not forget that the unconventional fighters have other means and methods at their disposal, their tools not necessarily lacking in sophistication. It might be helpful to borrow the distinction made by Guilmartin: "...distinguish between high tech and high end. While the two concepts overlap, high tech is a qualitative distinction defined by technological sophistication and capability, while high end is defined by size, cost, and complexity".[185] Consequently, the weaker parties can also have high technology weaponry at their disposal, provided it is low end. Developments in civil technology -decreases in production costs and the spread of technology through global trade and information through the internet-, make it clear that high-tech, low-end technology is now available to all, now significantly empowering the weaker parties as well. As such, equating asymmetry directly to a difference in strength cuts short too many corners.

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[183] T.W. Smith, 'The New Law of War: Legitimizing Hi-Tech and Infrastructural Violence', in: *International Studies Quarterly* 2002, 46 (3), pp. 335-374, p. 362.

[184] C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 5.

[185] J.F. Guilmartin, Technology and Asymmetrics in Modern Warfare. In Challenging the United States Symmetrically and Asymmetrically: Can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 26.

Broadly speaking, the so-called 'have-nots' have more than they have ever had before. Or, as Joseph Nye put it: "technology is putting into the hands of non-State actors destructive powers that once were reserved solely to governments".[186]
Borrowing a commonly found idea in the globalization debate, the improvements in weapons technology have diverged power to smaller parties: groups or even individuals. Technology has 'empowered' the individual in a variety of senses, including in the application of force. This empowerment has led to asymmetry being visually evident in conflict. The asymmetry has always existed, but generally in such powerful forms that it never came to be used. Though having developed through a range of asymmetric influences, the power-gap and the divide between have's and have-nots has become smaller. It would perhaps be more precise to speak of the 'always had that now have some more' versus the 'never had and now have a lot more'. Even though the gap in specific technology remains real, the perceived power gap as a consequence is now larger in theory than in practice.[187] In the ever provocative words of Van Creveld: "The military gap between developed and undeveloped countries is, however, nowhere as evident as on the pages of the many glossy international magazines devoted to praising modern weapons systems. An observer relying solely on this literature might be pardoned for thinking that the gap is greater today than ever before".[188]

§3.2 Stakes

In addition, outside the realm of technology, the 'weaker' parties have a few things offering them relative strength over the 'stronger' parties.[189]
First of all, there often is an asymmetry lying in the stakes framing the conflict.[190] As Barnett puts it: "An important operational asymmetry in which one side might be concerned about survival interests, while the other would be operating on the basis of interests much lower on the scale. The higher up the scale of interests one believes himself to be, the less likely his objectives will be constrained".[191] This, according to Cassidy, leads to the following paradox: "on the one hand, the qualitatively or quantitatively inferior opponent fights with limited means for unlimited strategic objectives -independence. On the other hand, the qualitatively or quantitatively superior opponent fights with potentially unlimited means for limited

[186] J.S. Nye, 'Understanding International Conflicts: an Introduction to Theory and History', 5th ed. ed., Pearson Longman: New York, 2005, p. 2.
[187] R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, p. 21.
[188] M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 26.
[189] S. Lambakis, J. Kiras and K. Kolet, 'Understanding "Asymmetric" Threats to the United States', in: *Comparative Strategy* 2002, 21 (4), pp. 241-277, p. 5.
[190] S. Metz, 'Strategic Asymmetry', in: *Military Review* 2001, (July-August), pp. 23-31, p. 27.
[191] R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p. 36.

ends".[192] The 'weak' might have less high-end weaponry; they might also have all the more to lose. Paradoxically, this works as an enabler. The higher the stakes are, the smaller the restraints. This goes for economic resources, sacrifice of lives, and, unfortunately, compliance with the laws of war. In the words of Metz: "An asymmetry of will leads the antagonist with the higher stake to bear greater costs, accept greater risk and undertake actions the less-committed antagonist might eschew on moral or legal grounds".[193]

§3.3 Will

> WE WERE NOT STRONG ENOUGH TO DRIVE OUT A HALF-MILLION AMERICAN TROOPS, BUT THAT WAS NOT OUR AIM. OUR INTENTION WAS TO BREAK THE WILL OF THE AMERICAN GOVERNMENT TO CONTINUE THE WAR. WESTMORELAND WAS WRONG TO EXPECT THAT HIS SUPERIOR FIREPOWER WOULD GRIND US DOWN. IF WE HAD [ATTEMPTED TO PIT OUR MATERIAL INFERIORITY DIRECTLY AGAINST YOUR SUPERIORITY], WE WOULD HAVE BEEN DEFEATED IN 2 HOURS.[194]
> - GENERAL GIAP

Linked to the higher stakes is the idea that the 'weaker' party makes up for a lot of its technological disadvantage by displaying superior will.[195] Reversed, the 'stronger' parties, especially Western States, are perceived as suffering a lack of will, making it an object of direct attack.[196] The phrase 'winning hearts and minds' is well known with regard to Western militaries –both in seeking support from the civilians amongst whom they operate, and from the public back home. However, it also works for 'weaker' parties. In winning the hearts and minds of citizens far away, they can influence the level of support behind their adversaries' military effort.[197] Where the stronger party has to 'play nice' to gain sympathy, the weaker party can 'play dirty', accepting decreases in popular support worldwide to win by paralyzing the enemy with fear.[198] When 'will' offers an area in which the weak is strong and vice versa, it is to be expected that this area becomes a primary battleground for the 'weak' parties strong in will.[199] Cassidy is right in his 'paradox of hubris and humility'-

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[192] R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, p. 5.

[193] S. Metz, 'Strategic Asymmetry', in: *Military Review* 2001, (July-August), pp. 23-31, p. 27.

[194] as quoted in: J. Record and W.A. Terrill, 'Iraq and Vietnam: Differences, Similarities and Insights', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2004, p. 48.

[195] R.M. Cassidy, 'Why Great Powers Fight Small Wars Badly', in: *Military Review* 2002, 82 (5), pp. 41-54, pp. 41-42, 48.

[196] T.L. Thomas, 'Deciphering Asymmetry's Word Game', in: ibid.2001, 81 (4), pp. 32-37, p. 37.

[197] M. Applegate, 'Preparing for Asymmetry: As Seen through the Lens of Joint Vision 2020', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2001, p. 5 and M. Ewans, 'Conflict in Afghanistan: Studies in Asymmetric Warfare', Routledge: London, 2005.

[198] S. Metz and D.V. Johnson, 'Asymmetry and U.S. Military Strategy: Definition, Background, and Strategic Concepts', Strategic Studies Institute, U.S. Army War College: Carlisle, 2001, p. 11.

[199] C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be

assertion that strong powers "*always underestimate the will, skill, and tenacity of their adversaries in small wars.*"[200]

§3.4 Time

> IN THE METROPOLIS, A WAR WITH NO VISIBLE PAYOFF AGAINST AN OPPONENT WHO POSES NO DIRECT THREAT WILL COME UNDER INCREASING CRITICISM AS BATTLE CASUALTIES RISE AND ECONOMIC COSTS ESCALATE. … TAX INCREASES MAY BE NECESSARY TO COVER THE COST OF THE WAR, A DRAFT SYSTEM MAY HAVE TO BE INTRODUCED, AND INFLATION WILL BE AN ALMOST CERTAIN BY-PRODUCT.[201]

A final factor supporting the 'weaker' side is time.[202] Asymmetry with regard to the entire overall goal of the war creates a situation in which time really is on the low-technology party's side. The high-technology party still wants to 'win' the war in a classical sense, however varied possible applicable definitions of victory might be. The parameters for victory are mostly set in limited strategic goals, fitting for the post-total war era: get in, achieve goals, get out, and be victorious.

The low-technology side's definition of victory now comes down to not being totally defeated. They have little or no clear set of goals to be met, let alone a timeframe in which it has to be done. They have all the time in the world, and then some. For many, the fight itself is their ultimate cause. As Michael Ignatieff wrote with regard to the wars in former Yugoslavia in his book *Virtual War*: "The Serbs would want to fight asymmetrically, avoiding full battle, breaking into small units, seeking not to win, but to down sufficient helicopters and kill enough troops to break NATO's resolve".[203]

By continuing the war long enough, the stronger party is exhausted and will look for a way out.[204] Covered by a more modest definition of victory, defeat is accepted.[205] It cannot be said that they really lost to the weaker party.[206] They are not forced out, although the exhaustion was probably an intentional strategy of the party aiming to

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Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 6.

200 R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, p. 51.

201 As quoted in: I. Arreguín-Toft, 'How the Weak Win Wars: a Theory of Asymmetric Conflict', Cambridge University Press: New York, 2005, p. 28.

202 S. Metz, 'Strategic Asymmetry', in: *Military Review* 2001, (July-August), pp. 23-31, p. 27.

203 M. Ignatieff, 'Virtual war : Kosovo and beyond', Henry Holt: New York, 2000, p. 65.

204 R.M. Cassidy, 'Why Great Powers Fight Small Wars Badly', in: *Military Review* 2002, 82 (5), pp. 41-54, p. 41.

205 A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, p. 38.

206 M.M. Philips, In Counterinsurgency Class, Soldiers Think Like Taliban. Wall Street Journal 2007.

'not be defeated'.[207] However, in the words of Kissinger: "The guerilla wins if he does not lose. The conventional army loses if it does not win".[208]

§4 Unconventional parties and the laws of war

We have seen the nature of 'Asymmetric Warfare', its scope, its dominance, and its pervasiveness throughout the culture, technology, means and methods, strategies, targets, and goals of war. It is now time to analyze the consequences of the above with regard to the focus of this book. Initially, I will analyze the relation between the unconventional party and the laws of war. Does 'Asymmetric Warfare' lead them to breach those laws more, and if so, Why? Does it follow that such conduct leads to a worse outcome from a humanitarian perspective?

§4.1 Breaches as a goal

> WE LIVE IN A WONDROUS TIME IN WHICH THE STRONG IS WEAK BECAUSE OF HIS MORAL SCRUPLES AND THE WEAK GROWS STRONG BECAUSE OF HIS AUDACITY.[209]
> – OTTO VON BISMARCK

The first clear threat to the laws of war is not posed by a byproduct of 'Asymmetric Warfare', but by a clear asymmetry of norms present at the outset.[210] This is represented by a situation where, regardless of how the war would have been fought, one of the parties does not see it as their duty to comply with the laws of war. This asymmetry norm can then actually be a cause for further asymmetry in the means and methods employed (as oppose to a consequence of them).[211] Of course, there will always be areas of conduct from the unconventional side that are considered inexcusable, explained only by the brute logic of engaging in the cruelest of atrocities to instill great fear or inspire hate in their adversaries. These areas of conduct have no basis in (military) necessity though. There is no excuse for them. In such cases, there is no room for debating morality, only for moral indignation.
Legally, the fact that a party does not share the norms of the laws of war does not mean it dodges being bound by them. Certainly, the fact that many unconventional

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[207] C. Coker, Asymmetrical Warfare: Ends or Means? In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 319-340, p. 336.

[208] As quoted in: M. Ewans, 'Conflict in Afghanistan: Studies in Asymmetric Warfare', Routledge: London, 2005 also: R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, p. 17.

[209] Otto von Bismarck, as quoted in: M. Applegate, 'Preparing for Asymmetry: As Seen through the Lens of Joint Vision 2020', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2001, p. 4.

[210] R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, p. 53.

[211] F.P.B. Osinga, Asymmetric Warfare: Rediscovering the Essence of Strategy. In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 267-317, p. 271.

fighting parties are not States complicates the matter. Some argue that this means they "are not bound by international Treaties, codes of conduct or operating principles".[212] However, since in general terms the laws of war are considered customary international law, valid to all under all circumstances through the doctrines of *ius cogens* and *erga omnes*, the laws of war should be upheld by those parties as well.[213]

This is not a new problem and not an issue regarding 'Asymmetric Warfare' alone. There have always been parties failing to comply with the laws of war, either out of carelessness or as a deliberate attempt to generate fear through atrocity.[214] For those not sharing the fundamental moral principles underlying the laws of war, it is virtually impossible to adapt them to improve compliance.

These are the most extreme cases. The laws of war are generally not breached as a byproduct of choices made on other grounds, but are neglected because the norms are not shared by the parties involved. That itself is a threat to the laws of war, though not a new one, nor one emanating from 'Asymmetric Warfare'. Asymmetry in norms can be and has been displayed in conventional warfare.[215] Its biggest threat lies in its undermining of the adversary's readiness to comply with the laws of war. As this is a matter relevant to other areas of the discussion, we will be returning to it again later in the Chapter.

§4.2 Compliant asymmetry

> HOW THE CHECHENS EMPLOYED MAOIST/ ASYMMETRIC METHODS TO EXPLOIT THE WEAKNESSES OF THEIR CONVENTIONAL RUSSIAN ENEMY. ONE SUCH METHOD WAS TO USE THE SEAMS BETWEEN THE RUSSIAN UNITS, COUPLED WITH THE POOR COORDINATION BETWEEN RUSSIAN UNITS, TO PROVOKE THE RUSSIAN ELEMENTS TO FIRE AT EACH OTHER. ... AS SOON AS THE RUSSIAN TROOPS RESPONDED WITH FIRE, THE CHECHENS WOULD WITHDRAW. AS A RESULT, THE RUSSIAN UNITS WOULD CONTINUE TO FIRE AT EACH OTHER FOR A LONG TIME BEFORE THEY REALIZED THEY WERE COMMITTING FRATRICIDE".[216]
> - CASSIDY

Next is a category of 'Asymmetric Warfare' offering no problems with regard to the laws of war. I think it deserves a special mention given that there is, as shown above,

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[212] T.L. Thomas, 'Deciphering Asymmetry's Word Game', in: *Military Review* 2001, 81 (4), pp. 32-37, p. 36.

[213] T. Pfanner, 'Asymmetrical Warfare from the Perspective of Humanitarian Law and Humanitarian Action', in: *International Review of the Red Cross* 2005, (857), pp. 149-174, p. 163.

[214] Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 132.

[215] One needs only to think of the horrors committed during World War II.

[216] R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, p. 39.

a tendency to automatically connect the unconventional side of 'Asymmetric Warfare' to images of barbarism.
An examples serves best to illustrate this point. Let us consider a high-technology adversary having a dramatically increased ability to gather information. Disrupting them by deliberately feeding an overload of (false) information[217]is an asymmetric strategy coming nowhere near a breach of the laws of war. For instance, as Thomas noted, "When NATO's air forces engaged Serbia's armed forces, Serbian deceptions fooled NATO's high-tech equipment. The Serbian military found a flaw in NATO's electronic-reconnaissance system -targets could be seen but not clearly identified. Decoys and fake positions protected the real ones".[218] Asymmetric strategies are not suspicious per se, let alone illegal. This other side of the extreme is thus unproblematic from a legal point of view.

§4.3 Noncompliant asymmetry

> IT IS IMPORTANT TO UNDERSTAND THE CONCEPT OF BELLIGERENCY BEFORE DISCUSSING INSURGENCY, BECAUSE THE INSURGENCY MOVEMENT AMOUNTS TO AN INCOMPLETE BELLIGERENCY. AMONG THE MOST IMPORTANT DEFECTS OF AN INSURGENCY ARE ITS FAILURE TO CONTROL TERRITORY AND THE LACK OF A DISTINGUISHING MARK FOR ITS ARMY. HOSTILITIES ARE USUALLY WAGED BY CLANDESTINE FORCES WHICH MELT AWAY AT THE APPROACH OF THE GOVERNMENT TROOPS, ONLY TO STRIKE BY SURPRISE AT SOME OTHER POINT. THEIR PURPOSE IS NOT TO HOLD TERRITORY OR TO ENGAGE THE GOVERNMENT TROOPS IN DIRECT COMBAT, BUT RATHER TO WAGE A GUERILLA TYPE WAR WHERE THEY CAN LOSE THEMSELVES IN THE CIVILIAN POPULATION BY POSING AS PEACEFUL CITIZENS.[219]

Witnessing unconventional fighters breaching the laws of war as a frequent element of their strategy is one thing. Establishing why they do so is another. The question is whether unconventional fighting parties truly have any incentive to abide by the laws of war at all. Could it be that playing by the rules equals defeat? If the latter is the case, the essence of unconventional warfare and guerilla tactics is logically, perhaps hopelessly entangled with breaches of the laws of war through low-technology means. The golden rule for underdog-tactics is to camouflage, to evade your own weaknesses and your opponent's strengths, to solely exploit the adversary's weak spots as a goal. As Walzer eloquently puts it in relation to conventional warfare: "Guerillas do not fight that way. Their struggle is subversive not merely with reference to the occupation or their own government, but with reference to the war Convention itself".[220] Following this logic, one could even suggest that the laws of war held upside down read like a tactical manual for successful unconventional warfare.

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[217] R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 68.

[218] T.L. Thomas, 'Deciphering Asymmetry's Word Game', in: *Military Review* 2001, 81 (4), pp. 32-37, p. 36.

[219] J.B. Kelly, 'Legal Aspects of Military Operations in Counterinsurgency', in: ibid.1963, (21), pp. 95, p. 99.

[220] M. Walzer, 'Just and Unjust Wars: a Moral Argument with Historical Illustrations', 2nd ed., Basic Books: New York, 1992, p. 179.

As said before, the unconventional party in 'Asymmetric Warfare' chooses to adopt the means and methods it employs. The asymmetry is not a byproduct as part of the strategy, it is its essence. "By employing their own specific relative advantages against the vulnerabilities of much stronger opponents. Often this will mean that the weak will use methods that lie outside the 'norms' of warfare, methods that are radically different".[221]

Taking this element to the core principle of the laws of war -the protection of non-combatants- we see the practical neglect of this principle as one of the situation's most striking features.
Civilians get killed -not by murderous acts of the unconventional or conventional fighters, but because the fighters involved abuse the cover of a populated area and then get attacked themselves. The firepower that kills the non-combatants is most likely from the conventional party. However, from their point of view, the outcome becomes collateral damage resulting from striking a legitimate target. The blame for the collateral damage is placed on the unconventional fighter's choice to hide among non-combatants, thereby breaching the laws of war.
Such occurrences display significant ambiguity. The high-technology party that bombed the enemy in a populated area might have breached the laws of war if the actions failed to meet the proportionality requirements regarding military necessity and the sparing of non-combatants. The unconventional party has certainly breached the laws of war by deliberately choosing to hide among civilians and abuse the protection afforded to innocents.

Next to condemning such conduct as going against the letter of the laws of war, it is necessary to ponder whether the unconventional party's decision to hide amongst civilians really is the result of choice. If they were to fight their high-technology adversary solely in accordance with the laws of war, would they still have a chance to compete? Or would a much stronger opponent just rapidly overpower them?[222]

§4.4 Compliance equals suicide?

The law is correct in demanding restraint in fighting and limitation in the means and methods used in warfare ('the right of combatants to choose their means and methods of warfare is not unlimited'). However, the law cannot ask a party to restrict itself to such an extent that fighting equals suicide. Should they do so, the chance of such a party respecting the law is effectively zero. Such a demand might well be morally valid, but is practically nonsensical.
Literally, the scope and sophistication of technology applied by modern armed forces does not force unconventional fighters to breach the laws of war. Nonetheless, they do create an environment for them in which many conventional ways of waging war are no longer viable options (only becoming 'unconventional' as result of that same process). Conventional warfare is thus not simply cast aside by

[221] R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 1-2.
[222] ibid., p. 6.

the low-technology party, but to an extent 'forced out' by those having become so overwhelmingly dominant at fighting it. As Van Creveld puts it: "So expensive, fast, indiscriminate, big, unmaneuverable, and powerful have modern weapons become that they are steadily pushing contemporary war under the carpet, as it were; that is, into environments where those weapons do not work, and where men can therefore fight to their hearts' contents".[223] Needless to say that, in this phrase, Van Creveld does not refer to those with humanitarian inclination at heart. The limitation of options for waging war also limits choices with regard to abiding by the laws of war. It is more difficult to spare civilian casualties and suffering when forced to fight in their midst than when able to do battle at a safe distance from civilian life.

Over time, the 'necessity' to breach the laws of war regarding permissible 'means and methods' usually increases for those wishing to stand a chance against technologically superior adversaries. When the course of the struggle brings little success to the unconventional fighters and sees the conventional military do well, tensions begin to rise. The unconventional fighters do not have the option to scale up the technological means available to them. They cannot just throw bigger bombs on the enemy's military targets. Having no 'better means', they have little option but to resort to 'lesser methods'.
The more successful the 'relatively humanitarian' or law-abiding high-technology effort, the less useful it is for unconventional fighters to stick to means and methods in accordance with the laws of war. The chances rise that they will seek refuge in inhumanitarian and illegal tactics with a greater potential for success. At this point, it is clear that insurgency can devolve into acts of terror. This is certainly not a novel occurrence, as Eisenhans observed during the French War in Algeria: "The liberation movement began increasingly to carry out mass actions in urban areas. But as the French government was capable of repressing such actions ... the activities of the movement became more and more terrorist in nature".[224]

§4.5 Double standards?

The fact that adhering to the laws of war might equal defeat certainly does not have to be accepted as a reason to adapt the laws of war. One could take the stance that if one cannot fight in accordance with the laws of war, one should not fight at all. Underlying this rationale is the assumption that the rules in themselves are purely designed to improve humanitarian conditions, having no bias toward a specific type of fighting party. However, the laws of war can only be upheld as a standard for legitimate fighting if they are perceived not to contain double standards. The issue of possible bias will be dealt with further on in this Chapter.
Moreover, although such a stance could perhaps be considered morally satisfying, it is feared that it would be practically impotent. First, it is highly questionable whether such a demand stands a chance of being met. Second, it implies that conventional

[223] M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 32.
[224] H. Eisenhans, Counter-Insurgency: The French War in Algeria. In The World Military Order: the Impact of Military Technology on the Third World, M. Kaldor and A. Eide, Eds. Macmillan: New York, 1979, p. 110.

actor compliance is always based on equally selfless grounds. Both matters are problematic.
Selflessly adhering to the laws of war to the point of their own defeat is something which cannot be demanded from unconventional fighters. The laws of war have certainly never demanded this from conventional parties.
While many norms with a higher moral value should be upheld even to one's own potential disadvantage, in this case it is simply not a practically feasible idea to operate. This does not suggest that low-technology unconventional fighters inherently lack a moral compass or display an underdeveloped 'savage' nature.[225] We have to view human group behavior and the power of our survival instinct with realism. Very few praise the moral high ground to such a degree that they would walk straigth into death rather than descend to safety on a lower road.
With regard to the second issue, considering the behavior of States (or other political organizations) behind the modern high-technology conventional military machines, the logic is exactly the same. Antonio Cassese wrote:

> In actual Practice, States tend to comply with international law out of sheer self-interest: this holds true for bilateral Treaties as well as for multilateral Treaties or customary rules based on reciprocity. … Instead, many States are markedly reluctant to implement 1) multilateral Treaties not based on reciprocity, such as those on human rights and 2) customary rules imposing duties which in actual fact operate 'unilaterally', or 'asymmetrically', for example, those on the nationalization of foreign property, on non-interference into domestic affairs, and so on, that is duties which in practice are ultimately operative for certain categories of States only.[226]

Looking back on the practices of States in WWII, Geoffrey Best wrote:

> The record was mixed over the whole spectrum. It may be summed up thus. There was a good deal of observance of the law when governments and commanders judged it to serve their own interest; interest which might be reckoned in quite an enlightened, generous, and long-term way but which equally might amount to no more than convenience. When such a judgment was not reached, the law and the humanitarian impulse of the principles behind it had no power over or (except as elements of propagandistic explanation) place in the larger matters of policy and strategy, though they might still affect small-scale tactical and personal decision-making.[227]

Surely, all this does not lead to the conclusion that something is wrong with the laws of war. When the laws are practically harder (or indeed near impossible) to meet for one party, it highlights a challenge to the laws of war rather than a problem

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[225] Although there has always been a line of reasoning arguing just this. E.g. Colby, 'How to Fight Savage Tribes', in: *American Journal of International Law* 1927, 21 (2), p. 285.
[226] A. Cassese, 'International Law in a Divided World', Oxford University Press: Oxford, 1986, p. 17.
[227] G.F.A. Best, 'War and Law since 1945', Oxford University Press: Oxford, 1994, p. 62.

necessarily lying within. Only when the framing of the laws of war is the cause of the disparity, changes might be prudent.
We need to see what the consequences of the breaches are. If the breaches create a decrease in humanity equal to the increase stemming from adherence by the conventional party, the laws of war are solid. On the other hand, we cannot demand that one side adheres to rules that, on paper, are equally valid to all parties but are biased toward one in practice. This is especially the case if the conduct does not actually lead to more inhumanitarian practice. This would be like asking them to disregard their own interest in favor of their adversary's. A body of laws thus constructed would be difficult to maintain. This is further strengthened by *post facto* adjudication being rare, seldom totally impartial and doing little good to the civilians that have already suffered from the breaches.

§4.6 Law of war as a weapon

> IN FACT, THE AMERICANS WERE GOING RIGHT INTO THE MIDDLE OF A SOMALI NETWORK, WHERE THE ENEMY HAD A CLEAR INFORMATION ADVANTAGE. THE SOMALI COMMANDER, MOHAMED AIDID, HAD SET A TRAP. HIS OBJECTIVE WAS TO SHOOT DOWN A U.S. HELICOPTER. AIDID KNEW THAT THE AMERICANS WOULD NOT LEAVE THE CREW BEHIND, SO THE RESCUE WOULD HAVE THE EFFECT OF FREEZING THE AMERICANS IN PLACE, MAKING THEM A FIXED TARGET. AIDID COULD NOT KNOW AHEAD OF TIME WHERE HIS FIGHTERS MIGHT DOWN THE HELICOPTER, BUT THIS WAS UNIMPORTANT, BECAUSE HIS FORCES WERE ARRANGED AS A NETWORK. JUST ABOUT EVERY MAN, WOMAN, AND CHILD IN MOGADISHU SEEMED TO BE CARRYING AN AUTOMATIC WEAPON. AND THE SOMALIS HAD A SIMPLE BUT EFFECTIVE COMMUNICATIONS SYSTEM: EYEBALLS, RADIOS, AND BURNING TIRES.
>
> ...
>
> AMERICAN CASUALTIES TOTALED SEVENTEEN. THE SOMALIS LOST THOUSANDS. BUT AIDID ACHIEVED HIS OBJECTIVE. THE SIGHT OF A DEAD AMERICAN SOLDIER BEING DRAGGED THROUGH THE STREETS OF MOGADISHU HAD EXACTLY THE EFFECT THE WARLORD WANTED. BILL CLINTON AND HIS ADVISERS DECIDED THAT RELIEVING SOMALIA WAS NOT WORTH THE COST, AND WITHDREW U.S. FORCES WITHIN A MONTH.[228]

A common response from unconventional parties, which see an alleged bias in the laws of war is to utilize them as a part of their strategy. Perhaps the most (in)famous example was the incident in Mogadishu described above.[229] Taking refuge in an urban area, hiding among civilians, dressing as civilians and dragging bodies through the streets can hardly be seen as laws of war compliance. However, it can be seen as a prime example of using the media, public opinion, and the law to your advantage. Counting on your adversary not responding with further breaches (e.g. by area bombing the entire city of Mogadishu) allows a tactical victory through disregard for the laws of war.

[228] B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 116.

[229] A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, pp. 118-119.

This phenomenon is defined by Dunlap:

> Lawfare describes a method of warfare where law is used as a means of realizing a military objective. Though at first blush one might assume lawfare would result in less suffering in war (and sometimes it does), in practice it too often produces behaviors that jeopardize the protection of the truly innocent. There are many dimensions to lawfare, but the one ever more frequently embraced by U.S. opponents is a cynical manipulation of the rule of law and the humanitarian values it represents. Rather seeking battlefield victories, per se, challengers try to destroy the will to fight by undermining the public support, that is indispensable when democracies like the U.S. conduct military interventions. A principle way of bringing about that end is to make it appear that the U.S. is waging war in violation of the letter or spirit of LOAC.[230]

Since, in their view, the laws of war are used by the conventional to unjustly distribute blame and paint the unconventional fighters black by creating rules of play suited to improve their chances and disable important unconventional modes of play, they feel that they should do the same. A popular term is that they *weaponize the law,*[231] or wage *lawfare*[232] by provoking breaches, influencing public opinion through propaganda and staging scenes resembling atrocities committed by high-technology parties. When evaluating their current condition, we cannot ignore the ironical fact that the law -intended to restrain the means and methods used in war- has become a method of warfare in itself. David Kennedy:

> As many in our own military have already well understood, there are new opportunities for creative strategy. They have a term for the waging of war by law- "lawfare". In today's asymmetric wars, moreover, law can be weaponized quite differently by our own technologically sophisticated forces and by the dispersed groups of terrorists and insurgents against whom they have found themselves in combat.[233]

The unconventional fighters extend the asymmetry they suffer to the field of adherence to the laws of war where they can use it to their advantage. In practice this results in the 'underdog' –in terms of pure fighting power and technological advancement- breaching the laws of war as a means of leveling the playing field. It is done either as a result of a broader interpretation of 'military necessity' regarding one's own conduct or as part of a deliberate strategy to hit the enemy in his political weak spot.[234]

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[230] C. Dunlap Jr., 'Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts', in: *Humanitarian Challenges in Military Intervention Conference* 2001, p. 4.

[231] D. Kennedy, 'Of War and Law', Princeton University Press: Princeton, 2006, p. 37.

[232] Coined and conceptualized in: C. Dunlap Jr., 'Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts', in: *Humanitarian Challenges in Military Intervention Conference* 2001.

[233] D. Kennedy, 'Of War and Law', Princeton University Press: Princeton, 2006, p. 12.

[234] C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be

The unconventional fighters make use of their enemy's pledge to adhere to the laws of war, their serious effort to live up to that standard, and the public scrutiny the military and political leadership will potentially face in failing to do so.[235] As Matthews puts it:

> Enemies may perceive vulnerable asymmetries in what the West views as its virtues. While the mindset in the United States and the West sees, as JV 2010 says, the "moral strengths" and the "ethical standards" of its troops as keys to military power, adversaries willing to abandon Westernized legal and ethical regimes may well consider them as things to exploit and manipulate.[236]

Another key element of the unconventional strategy is utilizing the media to reach the citizens of the conventional party's State.[237] The key objective is to change the public opinion, to influence the thoughts of the people supporting your conventional adversary. In other words: psychological operations.[238] Cheap technology and internet connections have made this more available than ever before.[239] One way to do this is through provocation: by breaching the laws of war, one hopes to tempt the enemy to do the same, thereby undermining the public support for its leadership. The latter is especially effective against substantially democratic States.
A second method can be called 'entrapment': civilians, being forced to act as human shields, deceitfully defending a legitimate military target. We have seen this practice being used, for example, by the Somali warlords and by Saddam Hussein surrounding his palaces with civilians.[240] This in itself is a breach of the laws of war. However, when the enemy attacks the target and kills a large number of civilians, they end up faced with a dramatic, significant PR issue.[241] Referring to the initial breach of the laws of war by the low-technology unconventional fighters will not do much good. It solely appears as a weak excuse from such a (technologically) powerful party.

Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 8.

235 A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, p. 47.

236 C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 7.

237 A.H. Cordesman and K.R. Al-Rodhan, 'Gulf Military Forces in an Era of Asymmetric Wars', Praeger Security International: Westport, 2007, p. 56.

238 S. Sloan, Terrorism and Asymmetry. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343, p. 177.

239 ibid., p. 181.

240 C. Coker, Asymmetrical Warfare: Ends or Means? In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 319-340, p. 328.

241 C. Dunlap Jr., 'Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts', in: *Humanitarian Challenges in Military Intervention Conference* 2001, p. 5.

Yet another method is to 'stage' breaches of the laws of war by the enemy. In such a case, there is no breach, it only appearing to be the case because the unconventional party has manipulated the scene.[242] Examples include the placement of civilian corpses near an attacked target. The casualties do not result from the conventional enemy attack, but are presented to be the result of it. Of course, it is not always clear whether a breach is real, staged or manipulated to appear a larger than it actually was.[243]

The battle for Fallujah, Iraq is an example involving a mixture of all of these types of lawfare and the consequences stemming from regular 'Asymmetric Warfare'. Next to what really happened, an important lesson was learned. In these kinds of battles, the image created might be even more important, from an overall strategic perspective, than the result itself:

> The insurgents portrayed the battle as a stunning victory. As Anthony Cordesman noted, it "created the image of large innocent casualties, a 'heroic' Iraqi opposition, collateral damage, and U.S. advanced weapons hitting mosques." Other observers talked of a "powerful, deeply symbolic myth" emerging from Fallujah. This was an important idea: myth creation is often the goal of major insurgent offensives. Insurgency, after all, is armed theater.[244]

One could respond to this 'weaponizing' of the law with a mere shrug of the shoulders: exploiting your enemy's weakness is merely good strategy. Sure, the fact that a provoked breach of the laws of war causes innocents to suffer and/or die is an issue, but it has to be dealt with as a breach in its own right. When making a serious effort to uphold the laws of war comes to be seen as an essential point of weakness though, we can safely state that the laws of war are in trouble. This is especially the case when we understand that the more shocking the breaches, the more effective lawfare will be.[245]

All in all, the case of lawfare can be said to be the ultimate consequence of asymmetry between fighting parties. As Liang and Xiangsui put it:

> Apart from the effectiveness it displays when used, asymmetry in itself is a rule of action suggested by the golden rule. Of all rules, this is the only one which encourages people to break rules so as to use rules.[246]

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[242] A.H. Cordesman and K.R. Al-Rodhan, 'Gulf Military Forces in an Era of Asymmetric Wars', Praeger Security International: Westport, 2007, p. 56.

[243] C. Dunlap Jr., 'Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts', in: *Humanitarian Challenges in Military Intervention Conference* 2001, p. 5.

[244] S. Metz, 'Learning from Iraq : Counterinsurgency in American Strategy', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2007, pp. 43-44.

[245] A.H. Cordesman and K.R. Al-Rodhan, 'Gulf Military Forces in an Era of Asymmetric Wars', Praeger Security International: Westport, 2007, p. 56.

[246] Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 212.

§4.7 The (in)humanity of breaches

> NOWADAYS WAR'S BRUTALITY IS LESS AND LESS OFTEN RESTRICTED TO SOLDIERS (SOME WOULD SAY IT IS A MYTH THAT IT EVER WAS). IT IS PERHAPS AN UNINTENDED CONSEQUENCE OF THE ATTEMPT TO USE THE GENEVA CONVENTIONS (AND SUBSEQUENT INSTRUMENTS OF INTERNATIONAL HUMANITARIAN LAW) TO PROTECT INFANTS, THE INJURED, THE SICK, THE MENTALLY ILL, THE CRIPPLED, SMALL CHILDREN, WOMEN WHO DO NOT BEAR ARMS, AND THE ELDERLY, THAT IT IS PRECISELY THESE HUMAN BEINGS, AND NOT SOLDIERS, WHO HAVE INCREASINGLY BECOME TARGETS OF KNIVES, RIFLE BUTTS, FLAME, AND FLYING METAL. THEY ARE TARGETS BECAUSE DESPERATE MEN FIND IT USEFUL TO SHELTER BEHIND AND AMONG THEM.[247]

Is the conduct of the unconventional party in breaching the laws of war also an affront to the humanitarian goals behind those rules? First, we will take a look at typical unconventional fighter conduct. We will look at the justifications they themselves offer when confronted with their own breaches of the laws of war, analyzing and assessing whether these justifications are acceptable. A conclusion can then be drawn on whether the laws of war rightfully condemn the conduct under discussion, or whether they unfairly blame the unconventional party for technical legal incompliance that is not inhumanitarian in its practical effects.

The means and methods employed to achieve the mentioned 'success' are, in many cases, not compatible with the laws of war. The number of troops killed in close combat is small. Of the common tactics used by unconventional fighters, the following can be said at first glance: drive-by shootings are not carried out in accordance with the demand to carry arms openly. Posing as a civilian accounts to an illegal act of perfidy.[248] Booby-traps, roadside or not, are expressly forbidden under the laws of war.[249] Suicide bombings are often prone to the same critique as drive-by shootings: up to the moment of detonation, the suicide bomber poses as an innocent civilian, couching himself (or, in rising numbers: herself) in the protection the laws of war award civilians. In addition, such bombings are often executed indiscriminately, causing large numbers of civilian casualties.[250] A Human Rights Watch (hereafter: HRW) study on the conduct of unconventional fighters in Iraq affirms this general view:

> Since the U.S.-led invasion of the country in March 2003, armed opposition groups have purposely killed thousands of civilians -men, women, and children. Across the country, insurgents have used car bombs and suicide bombers ... to maximize the number of civilian injuries and deaths. They have assassinated

[247] I. Arreguín-Toft, 'How the Weak Win Wars: a Theory of Asymmetric Conflict', Cambridge University Press: New York, 2005, p. xi.

[248] Article 37 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977.

[249] Article 3 and 6 Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), Geneva, 1980.

[250] In such cases, the term 'collateral damage' is misleading, since the civilian deaths are not 'collateral' to an itself legal act of war.

> government officials, politicians, judges, journalists, humanitarian aid workers and those deemed to be collaborating with the foreign forces in Iraq. They have tortured and summarily executed, sometimes by beheading, persons in their custody. And attacks against legitimate targets, such as army convoys, have been carried out in such a manner that the foreseeable loss of civilian life was far disproportionate to the military gain. All of these attacks are serious violations of international humanitarian law -war crimes- and in some cases they are crimes against humanity.[251]

The three most recurring breaches of the laws of war are the indiscriminate targeting of civilians, the disproportionate numbers of civilians casualties in striking legitimate targets and the use of perfidy in attacking targets. These breaches strike at the core of the most crucial fundamental principle of the laws of war -the obligation to discriminate between combatants and non-combatants and to leave the latter out of the matter. The first two breaches are clearly inhumanitarian. Keeping civilians out of the war as much as possible is the essence of humanitarian concern. A claimed humanitarian benefit cannot defend deliberately targeting them or seeking to maximize collateral damage.

At first glance, perfidy might be a different story. Tricking your enemy into trusting you enables you to strike at him more effectively. It might even improve the humanitarian situation by enabling closer proximity to the military target: a precision strike, not through smarter weapons, but through smarter manipulation of the enemy's psyche. Posing as civilians, hiding among civilians, even using protected sacred locations as a base -they are all regular tactics in unconventional warfare.[252] As we will discuss later, these tactics have a strategic benefit: they make it very difficult for the enemy to engage with the unconventional fighters without risking also making a (albeit inadvertent) breach.[253]
Furthermore, the tactical benefits for unconventional fighters to resort to perfidy have grown immensely. The added bonus lies in its defensive merits, forcing the conventional adversary to either avoid attacking you or breach the laws of war. If one focuses on the possible effect of restraint, one could even argue a second humanitarian benefit from the perfidious acts carried out by unconventional fighters. Next to being able to strike more precisely by getting closer, one spares civilian collateral damage by deterring an enemy strike, despite you being a valid military target.
Unfortunately, both potential humanitarian benefits are overshadowed. Firstly, the unconventional fighters have tended to employ perfidy not to strike more precisely, but to strike more often, with more collateral damage -even deliberately targeting

[251] H.R.W. (Organization), 'A Face and a Name: Civilian Victims of Insurgent Groups in Iraq', in: *Human Rights Watch* 2005, 17 (9), pp. xvi, 402, p. 1.
[252] A.H. Cordesman and K.R. Al-Rodhan, 'Gulf Military Forces in an Era of Asymmetric Wars', Praeger Security International: Westport, 2007, p. 56.
[253] R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 10.

civilians on occasion. Secondly, the conventional military have tended not to be deterred, continuing to strike and accept the multiplied collateral damage.
Perfidy is also especially problematic through its rather nasty side-effect. Again, the HRW report:

> Perfidious attacks increase the risk to all civilians at checkpoints and at other defended zones. Attackers who unlawfully feign civilian status to carry out attacks increase the likelihood that armed forces will use force against civilians who are perceived to be disguised combatants. Many of the shootings of civilians at U.S. and Iraqi checkpoints, however unlawful, occurred in part as a result of the fear the soldiers had of being attacked by insurgents pretending to be civilians.[254]

Not being able to trust your sight and other senses -not knowing whether someone who looks like a civilian truly is a civilian- increases the risk of error. Posted at a roadblock, a car approaching you and ignoring the stop signs might be an unconventional weapon (suicide car bombing). Equally it might just be a confused civilian frightened by the fog and stress of war, for some reason panicked into ignoring your stop signs but meaning you no harm. It could also be an old man and a little girl in a car without explosives but deliberately driving straight at you, forced by the unconventional fighters (or doing it willingly) to confuse the military and act as a diversion. Regardless of which is the case, chances are that the soldier posted at the roadblock will shoot at the approaching car and blow it to pieces. In the latter two cases it will be hard to justify why the civilians were killed, although easy to understand.

§4.8 Justifications

All in all, the most common breaches of the laws of war by unconventional fighters cannot be reasoned away as humanitarily irrelevant. They reflect material, relevant humanitarian issues. The unconventional fighters committing these acts offer a number of justifications for their conduct, debating its presumed illegality. Again, the HRW report:

> The insurgent groups in Iraq that target civilians use two broad arguments to justify their acts. First, they contend that persons in any way supporting the Multi-National Force in Iraq -which they believe remains a foreign occupation- are not civilians entitled to protection because of their collaboration with the United States and its coalition.
> ...
> Second, insurgent groups contend that the nature of the armed conflict in Iraq, rather than the identity of the victims, permits attacks on civilians. The arguments of insurgent groups include:
> – in a war to drive foreign occupiers out of Iraq, the ends justify the means;

[254] H.R.W. (Organization), 'A Face and a Name: Civilian Victims of Insurgent Groups in Iraq', in: *Human Rights Watch* 2005, 17 (9), pp. xvi, 402, p. 107.

- in a war against the military superpower of the world, an insurgency with small arms and explosives is obliged to go after non-military, or so-called "soft" targets;
- insurgent groups are bound only by Islamic law, and not international humanitarian law;
- Islamic law allows the killing of civilians in a war of self-defense;
- the illegality of the U.S.-led attack on Iraq, as well as violations of the laws of war by the Multi-National Force, remove any obligation on insurgent groups to abide by the laws of war.[255]

The first main justification given reflects a very broad notion of 'combatant', one not supported under the laws of war. It also reflects a sense of an absolute enemy which has to be defeated at all costs. A few elements falling under the second line of justification also point towards the notion of a 'holy war'. The reasoning of 'the ends justify the means' and the appeal to the higher power of Islamic law to justify the breaches display a clear asymmetry of norms and values. Clearly, such lines of reasoning were what the modern laws of war were designed to overcome. The humanity of specific conduct -not the reason for the struggle- should be the determining factor in judging what is right and wrong. The laws themselves cannot address an opposition to the laws of war of this nature.

The other justifications are more compatible with the language common to the laws of war. The argument "that armed opposition groups should not be expected to respect legal standards when the other side brazenly disregards the law"[256] is an interesting one. Although clearly unacceptable as a legal defense within the system of the laws of war, it is politically and morally understandable. It is the classic 'tu quoque'-argument as expressly rejected by the Nuremberg Tribunal.[257] It refers to the classic view of the laws of war being based on reciprocity, a stance also prevalent in the post-World War II era. As we will see further on in this Chapter, this argument is also used the other way around. If the unconventional fighters breach the laws of war, why should the conventional party be expected to uphold them? Furthermore, the implicit promise in this rationale is not likely to ever be fulfilled. That promise contends that party A will stop breaching when party B does, who will stop when party A does, who will stop when party B does; thus leaving us with a classic Catch 22.

One step further lies the argument that the alleged 'breaches' can be justified under the laws of war by applying the proportionality equation balancing civilian suffering with military advantage. In other words, it is all collateral damage: 'The United States and its coalition partners are better financed and equipped than insurgent groups, with overpowering technology and firepower. Against such an adversary, all

[255] ibid., p. 9.
[256] ibid., p. 25.
[257] 'Tu quoque' is Latin for 'you too'. The exoneration for breaching the laws of war is found in a breach by the adversary. Principles of International Law Recognized in the Charter of the Nüremberg Tribunal and in the Judgment of the Tribunal, 1950.

means of attack are necessary, including attacks on civilians and other "soft targets."[258]
This is a display of the rationale described earlier in this Chapter: for the unconventional party fighting an overwhelming conventional force, every blow dealt, however tiny or remote, is a huge success. By expanding the military advantage in line with this, virtually all collateral damage becomes proportionally acceptable. Of course, this interpretation of the proportionality equation is not universally accepted. The chances are that this interpretation would not stand in accordance with the laws of war. However, since adherence to the laws of war is primarily dependent on the interpretation given by the fighting parties, it remains a relevant factor.

Next to an appeal to the proportionality equation, the aforementioned justification contains elements referring to 'unfairness' within the laws of war.[259] It refers to the alleged bias and double standards we encountered earlier. The rationale concludes that the conventional party is favored. It can comply with the laws of war and still successfully target and strike the unconventional adversary. For the unconventional party, the laws of war block almost all options offering a chance of military success. The claim of this alleged bias is supported by the argument that the unconventional party's interests were never part of the lawmaking process: "Some who defend the conduct of insurgent groups in Iraq claim the groups are not bound by the laws of war because they did not sign the Geneva Conventions or otherwise make legal commitments to abide by international law. They say that insurgent groups cannot be bound by international norms they did not help shape or pledge to respect."[260]
Next to the formal argument of not ever having promised to uphold the laws of war, it is further pressed that the duty to comply is imposed without consent. The supposed crux is that the unconventional party becomes subjected to a law it never agreed to and in whose formation process it was not involved. The alleged bias leads to an unequal and unfair situation, sitting atop the already problematic inequality and disadvantage in terms of conventional military power.

The claim to such a bias is to be taken all the more seriously when the humanitarian equation suffers from it. When it can be expected that changes within the laws of war to overcome the bias would lead to both greater compliance *and* humanitarian improvements, such changes should be seriously considered. When, however, the argument is merely a cover for the breaches, seeking only to accommodate them by allowing that same conduct and not improving the humanitarian situation, it reflects a something of a Pyrrhic victory for the laws of war. Looking at the pattern of laws of

[258] H.R.W. (Organization), 'A Face and a Name: Civilian Victims of Insurgent Groups in Iraq', in: *Human Rights Watch* 2005, 17 (9), pp. xvi, 402.,H. Eisenhans, Counter-Insurgency: The French War in Algeria. In The World Military Order: the Impact of Military Technology on the Third World, M. Kaldor and A. Eide, Eds. Macmillan: New York, 1979, p. 25.
[259] H.R.W. (Organization), 'A Face and a Name: Civilian Victims of Insurgent Groups in Iraq', in: *Human Rights Watch* 2005, 17 (9), pp. xvi, 402, p. 28.
[260] ibid., p. 26.

war breaches by unconventional fighters and the justifications posed, it is hard to see how their illegal conduct can be justified humanitarily.

All in all, the claim that the laws of war are biased against the unconventional party cannot be based on a review of unconventional fighter breaches alone. Neither conduct nor justification for it highlights examples where actions have been favorably humanitarian in practice but still prohibited under the laws of war. The possibility though of a bias in the laws of war remains. This rests not on the analysis of the conduct of the unconventional, but of the conventional party. If the latter is allowed, under the laws of war, to cause inhumanitarian effects comparable to what the unconventional fighters are accused of, a claim of bias could still be justified. Whether this is the case is under discussion in the next paragraph.
In this paragraph, we have seen that the laws of war do not unfairly condemn the unconventional party when it breaches the laws of war. The sympathy a David might deserve when fighting a Goliath does not stem from the fact that David, in playing nice is forced to break unfair rules. Let us now turn to evaluating the conduct of Goliath and see whether he is praised for compliance with the rules while acting inhumanitarily.

§5 Conventional parties and the laws of war

The conventional party in the conflict tends to fight in a more traditional way, that would still recognizable for those who codified the modern laws of war at the turn of the 18th to the 19th century. It is thus a way of fighting more compatible with the means and methods envisioned by those early lawmakers. When we compare this to the conduct of unconventional fighters as analyzed in the previous paragraph, one might be tempted to conclude that the conventional fighter will have a better record in complying with the laws of war. Such a statement though cannot be made without further investigation. Since there is an alleged bias in favor of the conventional parties, analysis can also show whether the suggested compliance has resulted in a more humanitarian approach to fighting.

§5.1 More compliance?

In all armed conflicts, all parties breach the laws of war. There may be some clever example disproving this, but it would only be the proverbial exception to the rule. Total compliance by conventional parties is a nonstarter. Breaches do meet regularly with prosecution before military courts though, reaffirming the sense of respect for the laws of war by punishing those responsible.
Breaching the laws of war as a common and key element of strategy occurs much less in conventional warfare.[261] It is a bold statement and suggestions of this kind are often subject to debate. Some leave such a debate with the conviction that laws

[261] H.R.W. (organization), 'Off Target: The Conduct of the War and Civilian Casualties in Iraq', Human Rights Watch: New York, 2003, p. 5.

were breached, others convinced that the conduct fitted with the proportionality equation demanded by the legislation.[262]

Whereas unconventional parties are frequently accused of intentionally targeting civilians, perfidy and disregard for the principle of distinction,[263] conventional parties are mainly only accused of the latter. Equally critical reports offer a different tone in discussing the conduct of unconventional and conventional fighters. Whereas the first are often found guilty of clear and intentional breaches showing no respect for either the laws or its correction mechanisms, the latter are treated differently. Although often regarded critically, there is praise for serious efforts to respect the laws of war, investment in R&D for more precise weaponry, prosecution of individuals breaching the laws of war, and built-in feedback and evaluation mechanisms to turn 'lessons learned' into a more humanitarian future war-fighting approach. Where things do not go particularly well, talk is often in terms of 'no proper regard', 'problematic under international humanitarian law', 'raises concerns of legality' or 'used an unsound targeting methodology.'[264]

All in all, the conventional parties show a cleaner (though not spotless) record when it comes to conducting battle in accordance with the laws of war. Still, this could be the result of a biased body of laws favoring the conventional parties -turning a blind eye to their inhumanitarian conduct whilst zooming in on that of the unconventional fighters.

§5.2 (In)humanitarian compliance?

The least we can say of the conventional parties is that they seem more inclined to fight in compliance with the laws of war. This intention is indicated by the increasing use of precision weapons, despite the considerable extra costs their use entails. Figures range from 8 percent in the 1991 Gulf war, through to one third in Yugoslavia in 1999 and 65 percent in Afghanistan and the 2003 Gulf war.[265]
However, the humanitarian picture should not only be painted with effort and intention, but with results as well. As striking as the rise in precision weaponry use is the increasing number of civilian casualties resulting from conventional party conduct.[266] Focus on the large numbers of civilian casualties resulting from conventional war-fighting might reduce the optimism relating to the larger degree of compliance. Looking at the conflict in Iraq beginning in 2003, the 'Iraq Body Count'

[262] ibid., p. 40.
[263] H.R.W. (Organization), 'A Face and a Name: Civilian Victims of Insurgent Groups in Iraq', in: *Human Rights Watch* 2005, 17 (9), pp. xvi, 402, p. 1 and United Nations (Organization), 'Major Violations on Both Sides in Israel-Lebanon Conflict (Press release)', United Nations: 2006.
[264] H.R.W. (organization), 'Off Target: The Conduct of the War and Civilian Casualties in Iraq', Human Rights Watch: New York, 2003, p. 6.
[265] ibid., p. 16.
[266] ibid., p. 16.

initiative offers a lot of information.[267] Currently, more than 90,000 civilians have died as a result of violence during the armed conflict in Iraq. Detailed information is available for the casualties of the conflict's first two years, a total number of 67,365. Only 9,5% of these can be attributed to the actions of unconventional fighters -those often and rightly condemned for their disrespect for the laws of war.[268] The widely and rightly praised conventional fighting parties are accountable for 37,3% of deaths within that same group.[269]

The two aspects, the one of compliance with the laws of war and the other of accountability for civilian casualties, are seemingly not complimentary. Compliance apparently does not equal a lack of casualties. Non-compliant Western warfare may well cause more death and suffering, but regardless. Whatever the case, it is clear that qualitative compliance does not seem to equal the quantitative humanitarian result. In the rather harsh words of Martin Shaw:

> Western warfare shares the general tendency to produce massacres. However, it has a developed understanding of its own non-degeneracy: weapons are 'precise', civilian targets are systematically 'avoided', and deaths (let alone massacres) are 'accidental'. The question that arises is this: how plausible are the claims that the Western way has progressed from earlier degenerate warfare, and differs from the other contemporary ways of war?[270]

Shaw's question is harsh but not entirely unfair. The image of modern, high-technology conventional warfare is that of integrated, networked units using a satellite to pinpoint a target while lawyers evaluate the validity of the strike. Should it be found acceptable the force is applied in a 'surgical' fashion by highly sophisticated weaponry, whether it are bombs thrown from the air or laser guided ammunition. The exemplary vision of the modern soldier is not with bayonet or rifle, but with his or her night-vision goggles and a communications system built into the helmet. This image is, to a certain degree, correct and causes the praise conventional parties receive (and deserve) in evaluations of their conduct under the laws of war.

One could almost forget that the conventional parties are still in the business of winning wars, destroying targets and taking combatants *hors de combat* (in itself usually a euphemism for killing or wounding another person). The improvements in the accuracy of weapons should not be discarded as mere rhetoric. However, the

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[267] The exact number of casualties can not be determined and, unfortunately, is still rising at the time of writing. Several attempts have been made to come to a 'body count'. The choice to base this Chapter on the work of the Iraq Body Count initiative stems from an appreciation for their conservative estimates, thorough examination and high threshold for accepting statements. More on their work can be found on http://www.iraqbodycount.org .

[268] Iraq Body Count, 'The Killers: Fact Sheet 1', http://www.iraqbodycount.org .

[269] Two other striking facts are the number of deaths by 'unknown agents', 11%, and the number of deaths as result of criminal acts, 35,9%. Iraq Body Count, 'The Killers: Fact Sheet 1', http://www.iraqbodycount.org .

[270] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 67.

increased accuracy should equally not be presumed to automatically improve the situation for non-combatants.
When looking at the causes of death for civilian casualties in Iraq, the Iraq Body Count report offers the following insights:

- More than half (53%) of civilian deaths involved explosive devices.
- Air strikes caused most (64%) of the explosive deaths.
- Children were disproportionately affected by all explosive devices but most severely by air strikes and unexploded ordnance.
- 4,3% of civilians were killed by suicide and 3,4% by non-suicide vehicle bombs (car bombs).
- Small arms fire caused a relatively small proportion (8%) of deaths from conflict but almost all criminal murders.[271]

A more detailed evaluation of the modern, high technology ways of war can be found elsewhere in this book. This Chapter focuses on the low-technology unconventional side of 'Asymmetric Warfare'. In that respect, it suffices to show that a picture of a clear divide has been painted. We are led to see low technology unconventional fighting as both disregarding the laws of war and being extremely brutal towards non-combatants. We are also led to imagine high-technology modern forces as both adhering to the laws of war and offering 'clean', low non-combatant risk warfare targeted with surgical precision to combatants and military objects alone. This overview is undoubtedly a distortion of reality. It is true that low-technology, unconventional fighting is often combined with breaches against the laws of war. It is also true that high-technology modern militaries make serious efforts to uphold that same body of laws. However, both still produce significant suffering, damage, and death to civilian life.

§6 Bias in the laws of war

The question now is whether this discrepancy between the level of compliance and the level of responsibility for civilian casualties stems from a bias in the laws of war. After all, protecting civilians from becoming casualties is the ultimate goal of the legislation. Apparently, more compliance does not equal a smaller share in the number of civilian casualties. This strengthens the perception by unconventional parties that the laws of war are biased against them -their civilian casualties seemingly stemming from compliance with the law.[272] In the most extreme situation, the laws of war are no longer viewed as a humanitarian effort, but as 'weapon' in the arsenal of conventional parties.[273]

[271] Iraq Body Count, 'The Killers, fact sheet 3', http://www.iraqbodycount.org .
[272] N. Naastad, Prologue. In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 15-22, p. 15.
[273] Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 2.

§6.1 Procedural bias

The establishment of the current modern body of the laws of war at the turn of the 20th century occurred at a high point of power concentration. The laws of war have never before been confronted with the other extreme: that of highly dispersed power and a 'democratization' of violence. It comes as no surprise then that they are not particularly well accommodated to it. Our current laws of war were established mostly by a limited number of powerful States, so-called 'developed States'. They were valid among those States on a basis of reciprocity. With regard to parties outside the system, the rules were not deemed binding. In other words: the rules did not apply when fighting less developed 'savages' since they themselves relied on 'barbarous' methods of fighting.[274]
These rules were later claimed to be universally valid and binding upon all (States). This was a solid solution provided most of the warring done was restricted to that same set of States, either directly or by proxy. Over time, however, less developed States (and even non-State actors) evolved and entered the world legal and war arenas. From that moment on, they started co-authoring international law. The laws of war, however, resting on firm principles from the past, were not easily adapted. Militarily weaker parties have come to view the modern laws of war as biased in favor of those that established it -the more developed, powerful, militarily advanced (Western) States. As Van Creveld's describes in his *The Transformation of War*:

> Unfortunately, there were those who regarded conventional ideas about war as part of a vast plot designed to perpetuate the rule of developed countries over the undeveloped. All over the so-called Third World numerous movements of national liberation sprang into being. The majority did not have any army, let alone a government, though without exception they did claim to represent the people. ... If their arms did not resemble those of criminals, their methods often did. So, as a result, did the treatment that they received. Semantics apart, very often they were both able and willing to employ warlike violence to achieve their ends. ... Militarily they were very weak, especially at the outset. ... They had neither a regular organization, nor experience, nor heavy weapons. They were too weak to carry arms openly, nor could they afford to wear uniforms and thus turn themselves into easy targets. If only for these reasons, they could not and did not abide by the established rules of war. They did not agree to fight as if it were a tournament, one army against another. Far from observing the distinction between combatants and non-combatants, from Kenya to Algeria and from Rhodesia to Vietnam that was just the distinction they tried to abolish.[275]

Not having had a say in the process is one thing, being bound by legislation without being asked is another. As we have seen, one of the main justifications brought to the fore by unconventional parties is that they do not consider themselves bound by the laws of war. They never agreed to it, nor signed a Treaty or ratified a Protocol.

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[274] G.F.W. Holls, 'The Peace Conference at the Hague and its Bearings on International Law and Policy', The Macmillan Co.: New York, 1900, p. 93.
[275] M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 59.

Nevertheless, customary law is also relevant and important.[276] Moreover, when it comes to the laws of war vested in Treaties, these rules are not just considered binding to the parties that have signed them. These rules are presumed to exist regardless of acceptance -to be upheld by all parties by way of the *erga omnes* legal doctrine.

The discussion on whether this is a valid lawmaking process aside, such a method tends to work best when the parties bound by norms also (to some degree) share those norms. When war was fought by sovereign States, this led to fewer problems. Those States not willing to uphold the laws of war were often not the most powerful ones. The more powerful States who were seen to have the legal 'right' on their side thus defeated them. These non-cooperating States were punished for the breaches after their defeat by these same powerful States, this time acting as vindicators of the norms they imposed on others. However, in most cases, both parties involved in conflict did commonly agree to the norms underlying the laws of war.

This has now changed. An asymmetry of norms can be witnessed in current fights between low-technology unconventional fighters and high-technology modern conventional military. This asymmetry stems partially from a different look on the world and on what is just and appropriate within it. However, it is also related to the laws of war's drafting that restricts the parties involved while still leaving them enough room to achieve their strategic goals through favored tactical means. Since those parties were States comparable in nature and preference, codified law and customary law shared those same preferences. With more and more diverse parties taking a role on the world stage, this sharing of views has decreased dramatically. Again, Cassese:

> Since the Second World War custom has increasingly lost ground in two respects: existing customary rules have been eroded more and more by fresh practices, and resort to custom to regulate new matters has been relatively rare. ... A second general reason why custom has been demoted is that the world community's membership is far larger than in the heyday of international customary law (in the space of one hundred years it has risen from 40 to 170) and, even more important, it is deeply divided economically, politically, and ideologically. It has, therefore, become extremely difficult for general rules to receive the support of the bulk of such a large number of very diverse States.[277]

With this rationale taken into account, the record of noncompliance by unconventional parties versus compliance by conventional parties should come as no surprise. "Western States, because the edifice of international law is of their making, have a better record of compliance than others."[278]

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[276] A. Cassese, 'International Law in a Divided World', Oxford University Press: Oxford, 1986, p. 264.

[277] ibid., p. 181.

[278] R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p. 115.

§6.2 Material bias

Cassese continues his line of thought by -in addition to stressing the asymmetry in norms and values upheld by different fighting parties- stating that the asymmetry is reflected materially in the laws of war themselves. Simply put, the laws of war reflect a specific set of norms and values more than they do others. They have an inherent bias in favor of high-technology conventional forces in the service of a State government. Of course, not all laws of war share this bias. A good deal represents an honest intent to serve humanity, regardless of what party one belongs to and of how one chooses to fight. Nevertheless, some rules cannot be said to be of equal interest to all parties. Cassese makes a clear distinction between the two.
On another note, it has to be said that Cassese was writing about the time those rules emerged. He stated that the bias was in favor of strong States, seeking to hamper the weaker States. By analogy, this reasoning seems even more valid in discussing not just 'weaker States', but the low-technology (non-State) unconventional actors. It goes to show that the asymmetry in law was not something that had 'grown' into it. It did not arise from changes in the circumstances the law was supposed to regulate, but was rather present from the start.

> Like the provisions on means of warfare, most of those on methods of warfare tended to favor strong States. In this area one should distinguish between two sets of rules: those meeting the needs of all belligerents, regardless of the power they wielded; and those which instead, were calculated to favor, directly or indirectly, the stronger States. The former includes such rules as those prohibiting treachery; the killing or wounding of enemies who have 'laid down their arms or no longer having any means of defense, have surrendered at discretion'; the declaration that no quarter will be given, in other words that even the defeated enemies willing to surrender will be killed; the improper use of flags of truce, of national flags, or of the military Insignia and uniform of the enemy, the distinctive signs of the Geneva Conventions; and, lastly, pillage. Similarly, to this class belongs the rule allowing 'ruses of war' and 'the employment of measures necessary for obtaining information about the enemy'. All these norms are clearly intended to introduce a minimum standard of fair play into the conduct of hostilities and actually serve the interest of all parties.
>
> By contrast, when it comes to the rules prescribing how belligerents must behave in areas where civilians are located -areas which normally constitute the greatest part of the battlefield- it becomes apparent that the international regulation grants scant protection to either civilians or the weaker belligerent. In short, belligerents must not attack, either from land or from sea, undefended towns, villages, dwellings, or buildings … However, the concept of 'undefended town' was not defined … As a consequence, an invading Power could refuse to consider a locality as 'undefended' even if it had been declared such by the adversary … To conclude, traditional international law tended to favor strong and middle-sized powers in at least three major areas: those of means of combat, methods of combat, and devices for inducing compliance with law.[279]

[279] A. Cassese, 'International Law in a Divided World', Oxford University Press: Oxford, 1986, pp. 260-262.

§6.3 Bias to burden?

Both the procedural and material issues discussed underscore the alleged bias within the laws of war. I now have to determine whether demanding compliance with the laws of war places a larger military strategic burden on unconventional fighters than on conventional forces.

The strategic price for acting in compliance with the laws of war has different consequences for conventional and unconventional parties. At first sight, the price is the same: the same means and methods are prohibited in both cases. However, in the case of conventional fighters, prohibitions are often not crucial to their war-fighting effort and not relevant to their warrior culture -breaching possibly even rendering them counterproductive in the long run.[280] Moreover, they have the manpower and wealth to circumvent the cost of employing means and methods of higher sophistication, allowing the same strategic effects to be achieved while avoiding breaching the laws of war. Unconventional parties lack those options and, when paying the price of compliance, are often left with almost no viable means and methods effective against a conventionally overpowering enemy. They are, in effect, left with very little, if any chance.

Take for instance a technology-specific ban on certain weaponry that can be accused of arbitrariness: highly destructive weaponry that is very expensive to develop (nuclear weaponry) is allowed for a handful of high-technology conventional militaries, while equally destructive WMD that cost less (biological and/or chemical weapons) are banned. Of course, the very same financial distinction is one of the reasons why cheaper, more easily manufactured WMD are banned. The fact that this outcome favors one fighting party over another in certain cases should not, however, be confused with an elaborate lawmaking scheme aimed at partisan favoritism per se. Honest intentions were behind the ban of chemical and biological weapons. Equally honest disappointment has been shown over not achieving equal levels of regulation on nuclear weaponry. However, the States deciding on international Treaties might have had a broader appreciation of the value of the outcome. Roger Barnett brings this to the fore quite radically:

> The Western powers are hamstrung by the fact that they are powers. … They like being the powers, and so set up a system that kept the status quo. … the powers set out to establish, through the likes of the Hague and Geneva Conventions, the League of Nations, and ultimately the United Nations -the standards of today's international law.[281]

Even with regard to the laws of war created with clear, sole humanitarian intent (e.g. the protection of civilians by prohibiting perfidy) the consequences do differ for conventional and unconventional parties. Let us take the aforementioned example.

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[280] E.g. by eroding public support, problematizing relation with allies, and affronting other States.

[281] Barnett as quoted in: R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 16.

Since seeking cover and avoiding detection is a crucial element of unconventional strategy, unconventional fighters are forced to either use geographical shelter or hide among civilians. I should be clear that I am not advocating permission for unconventional fighters to endanger the lives of civilians for their own protection. We should not, however, close our eyes to the strategic trade-offs the laws of war demand. Compliance with the laws of war cannot be expected to be the first priority of all war-fighting parties. Traditionally, this realism is embedded in the laws of war. Strategic interests of parties were taken into account when codifying and drafting the laws of war. This rationale goes for both the unconventional and for the conventional parties. Either you take into account non-humanitarian strategic interests of all parties, or of none at all. Failing to do this risks the laws of war themselves becoming an instrument of warfare.[282]
For a war-fighting party to adopt a certain strategy, a number of issues are relevant. The most dominant is the expected level of success of the strategy. Parties will fight in accordance with the laws of war when it can be combined with effective war fighting. Only when the two -accordance with the law of war and military success- can be combined, will the laws of war be upheld. As valid as the maxim 'the right of combatants to choose their means and methods of warfare is not unlimited' is, equally valid is the rationale that 'the power of law to limit the means and methods of warfare is not unlimited.' Whether laudable or regrettable, the fact of the matter is that the law is not the leading player in the complexities affecting how warfare is conducted.

The least that can be said is that many unconventional parties genuinely view the laws of war as biased. When analyzing that complaint, one can hardly escape the conclusion of some merit existing in the claim. They did not have their say in the process of lawmaking, their strategic concerns are not taken into consideration.
This should not, however, lead to the conclusion that the laws of war are heavily partisan and fit to be cast aside. Nor is the bias large enough to justify the breaches committed by the unconventional parties. The intentional perfidious endangerment of civilians in particular cannot be appeased by changing the laws of war. However, the bias is a matter of great concern. It undermines possible intentions from the unconventional side to comply, offering them no pragmatic incentive. Indeed, it can even be considered to foster undermining of compliance on all sides of the conflict – which is the focus of the next paragraph.

[282] Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 130.

§7 Backlash: undermining compliance

> I WAS REMINDED OF AN INCIDENT IN VIETNAM WHEN I WAS A YOUNG LIEUTENANT. I REMEMBER READING IN THE STARS AND STRIPES THAT A BATTALION COMMANDER SOMEWHERE IN THREE CORPS, IN THE MIDDLE OF VIETNAM, WAS SO FRUSTRATED BY LOSING TROOPS TO BOOBY TRAPS AND AMBUSHES THAT HE MUSTERED HIS ENTIRE MECHANICAL FORCE, PUT IT IN A CLEARING ON THE EDGE OF THIS JUNGLE, SET UP LOUDSPEAKERS, AND CHALLENGED THE VIET CONG TO COME OUT AND FIGHT HIM LIKE A MAN. AND, OF COURSE, I IMAGINE THE VIET CONG IN THE JUNGLES WERE LAUGHING AT HIM BECAUSE HIS DEFINITION OF FAIR PLAY AND THE WAY TO FIGHT WAS NOWHERE NEAR THE WAY THEY WERE GOING TO FIGHT. THEY HAD DEFEATED A CONVENTIONAL MILITARY FORCE, THE FRENCH, IN THE INDOCHINA WAR, AND THEY UNDERSTOOD HOW TO MAKE A LEVEL PLAYING FIELD ON THEIR OWN BASIS.[283]

The diverse range of developments discussed up to this point all have one thing in common: they undermine the power of the laws of war. Next to this direct effect, there is a shared, indirect issue stemming from the different stances taken towards the laws of war by the conventional and unconventional parties. The widespread breaching of the laws of war by one side can have a detrimental effect on the other side's initial willingness to comply.

Originally, the laws of war took this into account by leaning heavily on the principle of reciprocity and even allowing the sanction of reprisal. With reciprocity less important and reprisals banned altogether, the laws of war in theory no longer change in response to breaches by one party. The pressure of continuous non-compliance, though, is still felt in practice. When breaches by the unconventional side offer them strategic benefits, frustration among conventionally superior armed forces who were initially willing to comply is increased.[284] The legally desirable response is not always psychologically satisfying.

§7.1 Legal response

Legally, the situation regarding a military response is crystal clear: noncompliance of a party does not alleviate the other party of its duties under the laws of war in any way. Reciprocity was once the basis of the laws of war, rooting self-restraint in mutual interest on all sides of the conflict.[285] Reciprocity lost its role as the foundation of the laws of war after the Second World War. As a legal stance it is facing increasing pressure, finding itself more and more difficult to defend in the process. Why restrict oneself against an enemy who does not do the same? Why tie one's hands when one does not expect the enemy to act alike? Of course, one could point at the legal obligation to comply, whether or not people feel like complying is irrelevant. However, lacking an independent enforcement mechanism, it is good to

[283] A. Zinni, Keynote Message. In Unrestricted Warfare Symposium 2006: Proceedings on Strategy, Analysis, and Technology, R.R. Luman, Ed. Johns Hopkins University: Laurel, 2006; pp 11-34, pp. 13-14.

[284] D.J. Mrozek, 'Asymmetric Response to American Air Supremacy in Vietnam', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998, p. 81.

[285] R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p. 11.

keep in mind that, especially for conventional military powers, practical compliance with the laws of war is essentially self-imposed.[286]

Reciprocity may have been cast aside as a legal fundament, but that does not render it invalid in the political decision to restrain oneself and comply with the laws of war. In practice, the laws of war still, in a large part, depend on the reasoning of reciprocity. As Pfanner puts it:

> Humanitarian and military interests do not necessarily clash. It is undoubtedly in the interests of an army to treat prisoners of war well and to expect the enemy to do the same. Similarly it may be advisable to refrain from bombing towns so as not to expose one's own population to a similar fate. Like most legal rules, both precepts have grown out of custom and the conviction that this practice ought to be legally valid. For this reason many rules of international humanitarian law are essentially designed to cover the belligerents' own best interests, so they should really be keen to comply with them. At the same time, the adversary is expected to have the same basic interests. Customary law and the whole body of Treaty law contained in the Geneva Conventions protecting war victims have developed from the concurrence of these interests. Reciprocity is of paramount importance in political terms and even the bulk of international humanitarian law thus rests on the expectation of reciprocity. ...
> In Lauterpacht's terms "it is impossible to visualize the conduct of hostilities in which one side would be bound by the rules of warfare without benefiting from them and the other side would benefit from them without being bound by them." ... In asymmetrical wars, the expectation of reciprocity is basically betrayed and the chivalrous ethos is frequently replaced by treachery.[287]

The fact that the laws of war offer no answer to non-compliance by a party catalyzes the frustration. When the conventional party is willing to play according to the rules but the adversary is clearly not and does not, and with no arbiter to address and remedy the situation, the challenge to keep a straight back and walk in compliance becomes a great one. Again, Pfanner:

> In particular, the law of war cannot take effect if one party is absolutely unable or unwilling to comply with its basic tenets. In the first instance, the operative prerequisites for applicability (it must be an organized armed group and thereby able to enforce compliance) are probably lacking. In the second instance, the party's actual aim is systematically to infringe the rules of international humanitarian law and to do away with the essential distinction between combatants and civilians.[288]

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[286] S. Lambakis, J. Kiras and K. Kolet, 'Understanding "Asymmetric" Threats to the United States', in: *Comparative Strategy* 2002, 21 (4), pp. 241-277, p. 6.

[287] T. Pfanner, 'Asymmetrical Warfare from the Perspective of Humanitarian Law and Humanitarian Action', in: *International Review of the Red Cross* 2005, (857), pp. 149-174, p. 161.

[288] ibid., pp. 164-165.

§7.2 Tactical response

This general frustration in facing an adversary breaching the laws of war while you are obliged to continue complying is further increased by the practical form of most of the breaches. As abovementioned, perfidy in all of its forms is a key element of unconventional strategy. It intentionally blurs the line between civilians and the unconventional fighters. This clashes painfully with the protection of non-combatants being the main reason for the conventional fighting party's compliance. The metaphor used by Kelly is a clear one:

> The international law of war was primarily designed to govern a contest between two armed forces which carry on the hostilities in a more or less open fashion. Analogously, the rules of football were designed to govern a contest between two uniformed teams, clearly distinguishable from the spectators. How well would those rules work, however, if one team were uniformed and on the field, the other hid itself among the spectators, and the spectators wandered freely over the playing field?[289]

This disorienting and disturbing effect is not just a byproduct of breaches initiated for tactical and strategic gain. It is often deliberately sought out in itself. Breaching the laws of war becomes the goal itself, or at least an important accompanying factor acting as a force multiplier. Thornton, in his elaborate work on 'Asymmetric Warfare', sums up this strand as follows:

> Not only are many asymmetric adversaries unrestrained in the use of violence, there is actually a great incentive for them to use or threaten to use violence in a different, illegal way that stands outside the norms of accepted behavior. For when violence stands outside norms, it is more shocking, and thus it has greater impact.[290]

The unconventional tactics deliberately breaching the laws of war have to be cast aside as morally and legally deplorable. When the breaches continue over time, it becomes a small step from continuous moral and legal condemnation to regarding the unconventional fighters as savage barbarians, seemingly with no respect for humanity or morality whatsoever. Since these 'immoral actors' make it impossible for members of the conventional party to recognize an innocent civilian from an immoral barbarian, relying on the enemy's ability to distinguish legitimate targets becomes dangerous.
Compliance with the laws of war by not shooting at anyone who looks like a civilian becomes potentially life threatening. A logical human tendency then arises to be 'better safe than sorry'. The cost for this safety is paid by innocent civilians

[289] J.B. Kelly, 'Legal Aspects of Military Operations in Counterinsurgency', in: *Military Review* 1963, (21), p. 104.
[290] R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 122.

considered potential unconventional fighters. Sadly, the fact that this process emerges on the battlefield is as understandable as it is regrettable.

§7.3 Policy response

A comparable process can be witnessed far away from the battlefield; in the public debate back in the conventional military's State, the political decision-making processes and the policy advice given. Conventional parties' willingness to comply with the laws of war is strong, but not unbreakable. The humanitarianism in their intent and efforts is clear, but so are the priorities: "When using the term 'humane' one is looking at three factors. First, the attempt to minimize casualties on one's own side, to reduce risk to one's own men. The second is to fight one's enemies humanely: with the minimum of collateral damage to citizens and non-belligerents alike. The third is to be seen to be acting in a humanitarian fashion. Indeed Western soldiers are increasingly encouraged to see themselves as humanitarians."[291] Just as one cannot expect unconventional fighters to surrender or die in order to comply, one cannot expect the conventional party to surrender or loose in order to maintain compliance following opposition breaches.[292]

So, how to demand your soldiers to show restraint while their buddies are being killed day after day by an enemy that shows no respect for those humanitarian norms -norms that are morally admirable, but practically hampering in their daily work? As Byers puts it in his 'War Law':

> In Washington, it has become accepted wisdom that future opponents are unlikely to abide by international humanitarian law. This assumption has been fueled by events. During the 1991 Gulf War, captured American pilots were brutalized in several ways, some having been raped. The September 2001 attacks on the Twin Towers breached international humanitarian law as 'crimes against humanity', a category of international criminal law that concerns violent acts committed as part of systematic attacks on civilian populations. And during the 2003 war, Iraqi soldiers committed the war crime of 'perfidy' by using civilian clothes and white flags to trick and then kill opposing forces. If your enemy is going to cheat, why bother playing by the rules?[293]

Taking a step further, one is tempted to reason that the unconventional fighters lose the right to any protection afforded by the same laws of war they continuously breach.[294] Those very fighters so often justifying their breaches by stating that the laws of war do not apply to them and that they do not feel bound by them encourage

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[291] C. Coker, Asymmetrical Warfare: Ends or Means? In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 319-340, p. 321.

[292] R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p. 21.

[293] M. Byers, 'War Law: Understanding International Law and Armed Conflicts', Grove Press: New York, 2006, p. 121.

[294] This rationale is already applied with regard to POW status, which depends in part upon the conduct and appearance of the fighters.

this. One could easily translate this refusal to a loss of protection -into an alleviation of the duty to treat them in accordance with those same laws of war. This results in the wane of any legal obligation to uphold the laws of war, leaving us with only the moral persuasion to do so.

This regrettable, albeit logical, tendency is multiplied when the enemy fails to share basic moral and cultural values. The normative judgments on the actions breaching the laws of war easily translate into categorical normative judgments on the adversary. Seeing the enemy going against everything you hold morally right easily lubricates claims that the adversary is not a rational actor (e.g. being spurred by a non-negotiable religious fanaticism).[295] Along the lines of 'desperate times call for desperate measures', a state of exception is argued to deal with extreme, immoral adversaries. As Pfanner puts it:

> The militarily weaker party is tempted to have recourse to unlawful methods of warfare in order to overcome the adversaries' strength. The expectation of reciprocity as a fundamental motivation for respecting the law is often illusory and replaced instead with perfidious behavior; covert operations substitute for open battles, "special rules" are made for "special situations.[296]

The danger is one of demonization of the unconventional adversary, those not complying with the laws of war distinctly categorized to represent pure evil. In less heated terms, one can see policy advisors constructing rationale that legitimizes leniency in compliance to the laws of war.[297] Following this rationale, unilateral compliance is a strategic blunder, a way of strengthening your adversary.

> It was suggested earlier that States do not knowingly commit suicide. Unwittingly, with very good intentions, the United States is moving along that path by amassing more and more constraints, depressing its willingness to fight, and stimulating asymmetrical acts by its adversaries. Cumulatively, the constraints extinguish U.S. choices. By so doing, they accomplish the same effect as coercion by an enemy. Coercion is for the purpose of confining options, of requiring the target to do one's bidding.[298]

Barnett goes even further, stating that the desire to comply and act humanitarily has already overridden strategic concerns. In his reasoning, what I described as something that cannot be expected is in fact occurring more and more:

> In fact, there is no evidence to support the contention raised earlier -at least with regard to Western military forces- that "the military … would not be inclined to

[295] C. Dunlap Jr., 'America's Asymmetric Advantage', in: *Armed Forces Journal* 2006, p. 1.

[296] T. Pfanner, 'Asymmetrical Warfare from the Perspective of Humanitarian Law and Humanitarian Action', in: *International Review of the Red Cross* 2005, (857), pp. 149-174, p. 149.

[297] Such a case was already made by Colby in 1927: Colby, 'How to Fight Savage Tribes', in: *American Journal of International Law* 1927, 21 (2), pp. 284-285.

[298] R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p. 19.

> obey the rules that would cause them to lose a war." The evidence lies entirely on the other balance of the scale.[299]

The next small step is logical, but nevertheless dangerous to the laws of war. If the fighting parties more concerned with humanitarianism are losing to less morally scrupulous parties purely because of that concern, something is clearly wrong.[300] To protect the party with humanitarian intentions, the conduct in question might need to become less humanitarian. Although it sounds strange, saving humanitarianism and ensuring humanitarian intentions remain durable might require less stringent humanitarian conduct in practice. In the words of Thomas Jefferson as quoted by Barnett:

> To lose our country by a scrupulous adherence to written law, would be to lose the law itself, with life, liberty, property and all those who are enjoying them with us; thus absurdly sacrificing the end to the means.[301]

This tendency increases when the inequality between fighting parties grows:

> The less equal the belligerents are, the less they will be prepared to treat the adversary as legitimate. Groups classified as "terrorists" will probably be denied any legitimacy and will be considered criminals. The opposite side is not regarded as an equal; the epithets "uncivilized", "criminal" or "terrorist" indicate that it should be denied equality at all costs. Its members will be treated as outlaws and will be ruthlessly pursued, if necessary by unconventional or illegal means.[302]

To be fair to Barnett, he does not conclude that the laws of war should be cast aside or compliance suspended. He makes a more nuanced case for adapting the laws of war to accommodate these issues:

> The thesis is not that warfare, or the use of military force on the international scene, cannot or should not be controlled. It is in substantial agreement with the advice of Michael Howard: "To control and limit the conduct of war is thus not inherently impossible; indeed without controls and limitations war cannot be conducted at all. The difficulty lies in introducing and maintaining controls and limits derived from criteria other than those inherent in sound strategy and the requirement for 'good order and military discipline'.[303]

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[299] ibid., p. 116.
[300] ibid., p. 133.
[301] ibid., p. 139.
[302] T. Pfanner, 'Asymmetrical Warfare from the Perspective of Humanitarian Law and Humanitarian Action', in: *International Review of the Red Cross* 2005, (857), pp. 149-174, p. 160.
[303] R.W. Barnett, 'Asymmetrical Warfare: Today's Challenge to U.S. Military Power', 1st ed. ed., Brassey's: Washington, D.C., 2002, p. 153.

§7.4 Moral response

Some argue towards the other extreme. Regardless of the conduct of the adversary, one should continue to comply with the laws of war under all circumstances. As former general Zinni noted:

> De Tocqueville said that America is great because she is good. If she ever stops being good, she will stop being great. Those are words we ought to live by. When we create ridiculous, hypothetical situations about a captured terrorist with knowledge of an imminent danger and ask "Can I put the thumb screws on him?," we are stepping off the moral high ground that is so important to us, that defines us as people, and that is essential to our beliefs and our self identity. It is the arrow in the back of the troops trying to win hearts and minds.[304]

The argument contains a moral appeal in addition to strategic considerations. First, the support of the civilian population has to be gained in order to erode support for the unconventional adversary. Second, upholding the laws of war means you do not contribute to a race to the darkest depths of breaching behavior, hopefully increasing the chances of your soldiers being treated humanely by the adversary (or at least less inhumanely than if you had made things worse).

§7.5 Challenge to the laws of war

Though this last point of view offers hope and still plays its part in the debates, the voices heard earlier are at least as loud. The first level of the backlash, by the conventional soldiers in the field, presents an everlasting challenge that the laws of war can deal with. The second level of conventional States discarding the laws of war as a response to widespread breaches by unconventional adversaries offers a much larger problem. The laws of war can remedy nothing if they are cast aside. The complicating factor is that, having cast aside reciprocity as the foundation, the laws of war are dependent on the moral convictions and altruistic behavior of those involved. The high road is easy to travel on a sunny day, but with storm clouds gathering it is often safer to stick to lower ground.

[304] A. Zinni, Keynote Message. In Unrestricted Warfare Symposium 2006: Proceedings on Strategy, Analysis, and Technology, R.R. Luman, Ed. Johns Hopkins University: Laurel, 2006; pp 11-34, p. 25.

§8 Conclusion

> TODAY THE MAIN DIFFERENCES BETWEEN TERRORISTS AND ARMIES ARE THE RULES THEY FOLLOW. SOLDIERS WEAR UNIFORMS BECAUSE GOVERNMENTS ARE SUPPOSED TO TAKE RESPONSIBILITY FOR THEIR ACTIONS WHEN THEY EXERCISE THEIR LEGITIMATE RIGHT OF SELF-DEFENSE. ARMIES TRAIN TO AVOID KILLING NON-COMBATANTS, AND DISTINGUISH THEMSELVES FROM CIVILIANS TO AVOID SUCKING INNOCENTS INTO COMBAT.
> TERRORISTS DO JUST THE OPPOSITE. THEY TARGET CIVILIANS INTENTIONALLY TO CREATE FEAR AND CONFUSION; THAT IS, AFTER ALL, THE DEFINITION OF TERROR. TERRORISTS HIDE THEIR IDENTITIES TO BE HARDER TO FIND, TO BLEND INTO THE REST OF THE POPULATION … AND MAKE IT HARDER TO FIGHT THEM WITHOUT HARMING NON-COMBATANTS.[305]

The rise of 'Asymmetric Warfare' poses a range of challenges for the laws of war. The scope and depth of the differences between the conventional and unconventional parties is a major problem. Variation in their possibilities, goals, worldviews and interests -and between the advantages and disadvantages they derive from fighting in compliance with the laws of war- is dangerously large.

The simple analysis would suggest laying blame with the unconventional party. They do most of the breaching, they provoke the conventional parties into breaching, and without their actions around the world the issues discussed in this Chapter would be nonexistent or significantly less important. Such a simple analysis is humanitarily without value. It will not convince the unconventional fighters to alter their ways.

First of all, let us make clear that convincing the unconventional fighters to alter their ways of warfare is a genuine challenge. This is not because they have sworn an oath to fight unconventionally, but because it works. It does not just work today, throughout history, it has always had a reasonable rate of success. The fact that it frustrates the conventional party is a part of that success. In the current armed conflict in Iraq, two sections of renowned war historian John Keegan's detailed study nicely illustrate the point. Firstly, regarding what the coalition calls 'war':

> The toll of coalition fatalities was nevertheless surprisingly light, 122 American, 33 British. Of the British dead, six had been killed in action, the others in accidents or by 'friendly fire.' A higher proportion of Americans were killed in combat but, again, most were victims of accident and some of attack by their own aircraft.[306]

It was a true success-story for the proponents of modern, high technology, risk-averse precision warfare. However, as a comparison of conventional with unconventional warfare, the following passage is also instructive. It deals with 'insurgency':

> The insurgency has resulted in a steep rise in deaths among the coalition forces; by the end of September 2004 they totaled 1008 American and 60 British. … Most

[305] B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 132.
[306] J. Keegan, 'The Iraq War', Pimlico: London, 2005, p.204.

> Western soldiers have been killed by terrorist methods such as drive-by shootings, roadside booby-traps and suicide bombings.[307]

Of course, as time has passed, the number of coalition casualties has risen. Approaching the end of 2009, the death toll had risen to 4,351 in the service of the U.S. military.[308]

Comparison of these sad numbers reflects a harsh truth: the unconventional methods of the unconventional fighters are successful. They were much more successful than the former Iraqi military and Saddam Hussein's Republican Guard's efforts to hold off U.S. and coalition forces in early 2003. Even the conventional recent success in Afghanistan can be linked to asymmetrical warfare. It was precisely the inability or unwillingness of the Taliban to revert to asymmetrical tactics in the initial stage of the war that led to its swift and early defeat.[309] Asymmetric tactics would allow them to take out far greater numbers of their adversaries' force, the unconventional approach also able to be deployed successfully for a much longer period of time before facing defeat. Within this success rate the general trend is what is most important. The unconventional war-fighting effort is fairly successful - depending for a large part on means and methods breaching the laws of war in their employment.

In short, it is my view that the key ingredient for unconventional fighters to have a chance of successfully facing a modern, high-technology military is 'cover'. Facing the adversary in a chivalric mode with open visor certainly meets the standards of romantic nobility and would uphold the laws of war for a short while. After that short while though, certain death and defeat would surely follow.

In geographical areas that provide natural cover or contain non-combatants, the unconventional fighters are able to engage their conventional enemy in accordance with the laws of war. Many battles in Afghanistan prove this. Although such 'battles' are nowadays called TICs (Troops In Contact), these engagements in rough terrain offer the unconventional fighters enough protection to (reasonably) openly engage the enemy without hiding amongst or posing as civilians. Jungle warfare in the Vietnam War is another example. However, in these conflicts, as soon as the natural cover is or was gone, the unconventional fighters initiated breaches in the law. When engaging the enemy in more urban or otherwise populated areas, they revert to illegal tactics, making use of non-combatants to create cover and confusion for tactical benefit. This is an understandable tendency since the modern military-industrial complex has achieved its own goals with flying colors. Innovation in weapons technology, whether labeled RMA, NCW, or some other beautiful acronym, has created a situation where detection -in an overwhelming number of cases-

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[307] ibid., p.224.

[308] Finding the right source for the accurate numbers is always problematic. Sometimes, to be sure, the lowest common denominator is chosen, or the official government statements. I have chosen to trust an independent civilian initiative that offers detailed and well-documented information: http://icasualties.org .

[309] A. Lowther, 'Americans and Asymmetric Conflict: Lebanon, Somalia, and Afghanistan', Praeger Security International: Westport, 2007, p. 143.

equals defeat. This leaves little room for unconventional fighters to fight the asymmetric war without creating another asymmetry regarding respect for the law. To be sure, this is not meant as a defense for ingraceful unconventional fighting. They might be the technological David to the conventional Goliath, but this is no cause for sympathy towards them breaching the laws of war.

Looking at the conventional parties, we witness an equal lack of willingness towards change. Not towards the conduct itself, but towards the laws of war. The laws of war serve them quite well, leaving enough room to successfully counter any unconventional adversary.

So, apart from hoping that environmental cover will be available in all future asymmetric conflicts, the laws of war will continuously face the following issues stemming from 'Asymmetric Warfare':

- in some cases, breaching the laws of war serves as a deliberate act of terror by the unconventional party;
- relying heavily on not being detected, unconventional parties will continue to be tempted to heavily depend on perfidy as a standard mode of operation;
- the 'bias' in the laws of war affirms the feeling of unfairness and offers a rationale for unconventional fighters to completely discard the laws of war;
- the willingness to comply expressed by conventional parties is exploited by unconventional parties. In order to accuse the conventional party of breaching the laws of war, those groups of non-combatants the laws of war specifically set out to protect are often endangered and harmed;
- the fact that conventional parties, while complying with the laws of war, still cause the death and injury of large numbers of innocents the laws of war are designed to protect undermines the humanitarian claims the laws of war can make towards unconventional parties;
- leaving behind reciprocity as a foundation for the laws of war has reduced the incentive to comply to moral righteousness, offering no better expectation of survival or humane treatment in return for compliance;
- the combination of issues leads to a backlash in compliance. Worst case, this can lead to a race to the dark depths of breaching behavior by both sides, both sides inspiring each other to continue the cycle.

Next to the challenges already described earlier and next to those that will be analyzed in following Chapters, 'Asymmetric Warfare' places great strain on the laws of war and their practical functioning. The fact that 'Asymmetric Warfare' is currently dominant and is likely to remain so in the foreseeable future adds quantitative weight to the qualitatively large challenges it poses to the laws of war.

Chapter V
Modern Warfare

§1 Introduction

> THE RESULT HAS BEEN A CONSTANT INCREASE IN THE TECHNICAL ABILITY OF WESTERN ARMIES TO KILL THEIR ADVERSARIES. … CREATIVITY HAS NEVER BEEN A EUROPEAN MONOPOLY, MUCH LESS INTELLECTUAL BRILLIANCE. RATHER, THE WEST'S WILLINGNESS TO CRAFT SUPERIOR WEAPONS IS JUST AS OFTEN PREDICATED ON ITS UNMATCHED ABILITY TO BORROW, ADOPT, AND STEAL IDEAS WITHOUT REGARD TO THE SOCIAL, RELIGIOUS, OR POLITICAL CHANGES THAT NEW TECHNOLOGY OFTEN BRINGS…[310]

Tensions have always arisen when the laws of war and military practice met. They have never fitted perfectly and possibly never will. Fortunately, there has always been serious concern for humanitarian conditions in the battlespace and much effort has been invested in trying to improve them. However, focusing on improving the imperfect fits of the past is not enough. Adapting the laws of war to better match previous tensions could only be satisfactory when the relevant practices remained the same in present time. This is clearly not the case. Changes in technology, whether developed deliberately for military purposes or as byproducts of civilian innovation, are continually changing the way we fight.

Current changes are sufficiently dramatic that many now expect them to be viewed in time as part of a military revolution (to use the more popular phrase, a Revolution in Military Affairs (RMA)). This Chapter will not offer an elaborate analysis of all those technological changes. Nor will it tap discussion on whether they truly represent a revolution, or indeed how these changes compare to revolutions of the past. It will seek out the most important general features of the way warfare is being changed by current innovations in military technology -insofar as they are relevant to humanitarian conditions in the battlespace. Hopefully, we can thus gain insight beyond the 'old challenges' to the laws of war analyzed earlier in this book, analyzing the 'new challenges' in turn as well.

A word of caution must be adhered to in assessing the impact of technological innovation. We have to avoid the mistake of blaming new technology for challenging the laws of war if the technological predecessor did so as well.

The fact that this Chapter focuses on changes in warfare instigated by technological innovation does not imply that only those changes matter, or that they matter the most. Doctrinal, societal, political, and economical factors, although not the focus of this work, are crucial too.[311] That said, we must understand that technology's importance is large, warfare itself is becoming more and more technology driven and dependent.[312]

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[310] V.D. Hanson, 'Carnage and Culture: Landmark Battles in the Rise of Western Power', 1st ed., Doubleday: New York, 2001, p. 230.

[311] T.X. Hammes, 'The Evolution of War: The Fourth Generation', in: *Marine Corps Gazette* 1994, p. 1.

[312] M.N. Schmitt, 'Bellum Americanum: The U.S. View of Twenty-first Century War and its Possible Implications for the Law of Armed Conflict', in: *Michigan Journal of International*

§2 Technology changes warfare

> THE LIST OF WEAPONS THAT, FOR ONE REASON OR ANOTHER, HAVE BEEN DECLARED "UNFAIR" IS LONG, STARTING ALREADY IN THE ANCIENT WORLD.[313]

Man has always worked on new and improved means and methods of killing each other.[314] War's incredible power to awaken energy and creativity are a major factor in the process. Aside from improving what is already there, mankind has always searched for a new 'silver bullet': a means to gain genuine superiority over the enemy with a stunning new innovation. Changing the means of warfare has, in the end, changed warfare itself. Often these changes are small, demanding only a small military adaptation to successfully embrace the new technology. Once in a while though, changes and innovations arise that are more than incremental; these are the revolutionary developments. These developments change more than the way wars are fought, and having larger societal consequences for the world order.[315] The stirrup, the longbow, the musket, gunpowder, cannons, the radio, aircraft, and nuclear weapons: they are all said to have caused a Revolution in Military Affairs.[316]

Innovations in weapons technology not only changed the conduct of warfare, but aslo the way one looked at warfare. This was often direct, the weapons themselves seeming unfair or too horrible. Sometimes it was indirect, by enabling changes in warfare deemed to cross the lines of what is humanitarily acceptable.

While the focus of this book lies on the 'modern' laws of war, regulation of weapons technology is much older. When a new invention made great impact on the battlefield, efforts to restrict or even prohibit certain means and methods often followed suit.[317]

The attention usually turned to specific weapons, less so to the more general changes they represented. To illustrate, we will take a quick look at an issue that will be discussed extensively later in this Chapter: the increase in distance between the target and the one applying the force. From the beginning, especially in Western warrior culture, this was surrounded by an odor of unfairness and cowardice. The bow, the catapult, and at the start even firearms, were all prohibited -they enabled one to kill from a distance and be unseen by the target.[318] However, despite crossbows, dumdum bullets and dropping explosives from balloons all being banned,

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Law 1998, 19 (Summer 1998), pp. 1051-1090, p. 1055.

313 M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 80.

314 M.L. Van Creveld, 'Technology and War: from 2000 B.C. to the Present', A rev. and expanded ed., Free Press: New York, 1991, p. 217.

315 Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 15.

316 W.A. Owens and E. Offley, 'Lifting the Fog of War', 1st ed., Farrar, Straus and Giroux: New York, 2000, p. 16.

317 B. Rappert, 'Prohibitions, Weapons and Controversy', in: *Social Studies of Science* 2005, 35 (2), pp. 211-240, p. 211.

318 M.L. Van Creveld, 'Technology and War: from 2000 B.C. to the Present', A rev. and expanded ed., Free Press: New York, 1991, p. 71.

the general trend of increasing distance between attacker and target was not effectively challenged. More powerful explosive charges, longer-range delivery mechanisms and aerial warfare were barely hampered in their impact on the way war would be waged.[319]

The impact that technology can have on societal revolutions should not be overestimated. Technological revolutions often coincided with broader societal changes, the combination potentially having the revolutionary effect.[320] That said, technology's impact on war and, vicariously, on the laws of war, is direct and immense. In a sense, our body of codified modern laws of war is a response to revolutionary changes in military affairs instigated by technological breakthroughs. The turn of the 19th into the 20th century witnessed industrialization of society and, in turn, the military. The Russian Tsar Nicolas II, partially out of fear for the mostly Western technological innovations, took the initiative for the Hague Peace Conferences.[321] As we have seen earlier in this book, the Conference was less aimed at codification of the laws of war, but more at general limitation and the reduction of armaments.[322] Ironically, the conference successfully regulated the laws of war on land with regard to existing means and methods, but achieved little in preventing (or even slowing down) development, production and use of new weapons technology.[323]

§3 Revolution or Evolution?

§3.1 RMA

The fact that technology has the power to change warfare and stimulate necessary adaptation of the laws of war is one thing. It is another to establish whether we are currently at a point of technological innovation with fundamental warfare-changing consequences. It is difficult to decide whether adaptation of the laws of war is now necessary to preserve appropriate humanitarian protection in the battlespace. The frequency with which the term 'Revolution in Military Affairs' (RMA) has become used in recent years suggests that we may be at just such a turning point.
However, the popularity of the term is accompanied by a diversity of interpretations and definitions which have also changed over time.
RMA has become a prominent term in the debates reflecting on the great (technological) changes in the post-Cold War era. First used by the Soviets in the 1960s, it then became popular in the US which became increasingly focused on the

[319] ibid., p. 71-72.
[320] J. Marshall Beier, 'Discriminating Tastes: 'Smart' Bombs, Non-Combatants, and Notions of Legitimacy in Warfare', in: *Security Dialogue* 2003, 34 (4), pp. 411-425, p. 414.
[321] Roberts, Land Warfare. In The Laws of War: Constraints on Warfare in the Western World, M.E. Howard, G.J. Andreopoulos and M.R. Shulman, Eds. Yale University Press: New Haven, 1994; pp vii, 303, p. 119.
[322] See §3.1 of Chapter II.
[323] Roberts, Land Warfare. In The Laws of War: Constraints on Warfare in the Western World, M.E. Howard, G.J. Andreopoulos and M.R. Shulman, Eds. Yale University Press: New Haven, 1994; pp vii, 303, p. 119.

technological aspect of its military.[324] For the purpose of this book, I do not want to stick to a notion of 'the' RMA. Many significant military affairs have changed and quite a few of them can sensibly be deemed revolutionary. Some of them influence each other directly, others only remotely by being part of the same spectrum of military relevance. Some can be argued to cause 'a' RMA in themselves, some in combination with others. Others will argue that in many instances, these innovations had predecessors and are thus more evolutionary than revolutionary.

The question whether the RMA(s) are the result of deliberate plans to revolutionize military affairs is also important. Focusing on RMA in such a way can put too large a focus on the technological aspects where deliberate innovation is best visible, obscuring the larger context as a result.[325] As Breemer states, the RMA transition is "not the product of a deliberate design for a RMA, but … the outcome of a confluence of seemingly disparate societal, technological, and intellectual transitions, of which the RMA is merely one symptom".[326]

This is also recognized within military circles.[327] The RMA in popular terms is too often pictured solely as a technological revolution offering new kinds of weaponry, vehicles and robotization of the soldier. However, "A Revolution in Military Affairs (RMA) occurs when a nation's military seizes an opportunity to transform its strategy, military doctrine, training, education, organization, equipment, operations and tactics to achieve decisive military results in fundamentally new ways".[328]

This understandable widening of the debate on the/a RMAs makes the concept more interesting, but less usable. As time goes by, more and more is brought under the RMA-umbrella. New conceptual views of war, like Network Centric Warfare (NCW), are taken into the ever expanding RMA-spectrum. As such, questioning whether we should call current transgressions an RMA is steadily becoming less useful, the concept would approach a breadth rendering it meaningless.

For the purposes of this book, the effects of technological change matter. These changes have created a battlespace very different from those we have seen before.[329] Technology is not the sole driving factor behind these changes, but it is a

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[324] F.W. Kagan, 'Finding the Target: the Transformation of American Military Policy', 1st ed., Encounter Books: New York, 2006, p. xiv.

[325] Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 115.

[326] J.S. Breemer, 'War as We Knew it: the Real Revolution in Military Affairs, Understanding Paralysis in Military Operations', Center for Strategy and Technology, Air War College, Air University: Maxwell Air Force Base, 2000, p. 1.

[327] C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999, p. 2.

[328] Annual Report of Secretary Cohen, as quoted in: J.S. Breemer, 'War as We Knew it: the Real Revolution in Military Affairs, Understanding Paralysis in Military Operations', Center for Strategy and Technology, Air War College, Air University: Maxwell Air Force Base, 2000, p. 3.

[329] The notion of a 'battlespace' replacing the 'battlefield' is further expanded in §4.1.1 of this Chapter.

dominant one.[330] Increasingly the weaponry is not put in the hands of the soldiers, but the military personnel themselves become part of the weapons system. As Kaldor argues, the developments of industrialization started a movement that is now complete, the soldier as an instrument of the weapons system rather than the other way around.[331] Whether this contributes to one RMA, multiple RMAs or brings fundamental, but not revolutionary changes is less important to this book than the changes and their consequences themselves.

§3.2 Changes in warfare

> THE TRADITIONAL AMERICANNOTION THAT TECHNOLOGY MIGHT OFFER A WAY TO DECREASE THE HORROR AND SUFFERING OF WARFARE. ... HISTORICALLY, THIS ASSUMPTION IS FLAWED IN THAT PAST TECHNOLOGICAL ADVANCES, FROM GUNPOWDER WEAPONS TO BOMBERS, HAVE ONLY MADE WARFARE MORE -NOT LESS- BLOODY".[332]

This Chapter will deal with these changes' most pressing consequences. The focus will not lie on the technology itself, but on the effects of the changes to warfare they have contributed to. These in turn have important consequences for the humanitarian equation in the battlespace. Overseeing the spectrum, it is hard to do away with the notion that military affairs have undergone revolutionary change, although many aspects -and not necessarily the humanitarily positive ones- still reflect the 'same old' war man has always known, loved, feared, and sought to regulate. Discussing the most relevant changes in modern warfare can bring us closer to answering a key question. Do they demand a revolution in legal affairs?

When dealing with changes in and by technology, one should refrain from focusing on technology as an evil forcing mankind to act in specific ways. Although technology is perhaps not entirely neutral, it does not have a mind of its own -at least not yet. The persons developing the technology are generally not intending to increase death and destruction either. However, intentions are less important than effects. As Dunlap states in reference to Tenner's fascinating *Why Things Bite Back*: *Technology and the Revenge of Unintended Consequences*:[333]

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330 R.F. Baumann, 'Historical Perspectives on Future War', in: *Military Review* 1997, 7 (2), pp. 40-48.

331 M. Kaldor and A. Eide, 'The World Military Order: the Impact of Military Technology on the Third World', Macmillan: New York, 1979, p. 10.

332 C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999, p. iii.

333 E. Tenner, 'Why Things Bite Back: Technology and the Revenge Effect', Fourth Estate: London, 1996.

> Tenner reminds us that technological "advances" have the nasty habit of surprising us with unexpected adverse qualities once their full import is experienced. Well-intentioned efforts can paradoxically create problems worse than the ones a specific invention was meant to solve.[334]

Humans deploy technology through choice. On its own, technology poses few problems. Weapons technology alone does not necessarily worsen the humanitarian situation. Unfortunately, it does not necessarily improve it either. In practice, the technology has made things both better and worse. As an example, air bombardment from high altitudes led to area-targeting in the Second World War, increasing the numbers of combatant and civilian casualties.[335] Landmines, nuclear weapons and other innovations have offered similar contributions. On the other hand, precision weaponry, better situational awareness and non-lethal weapons have contributed to the saving of civilians and combatant lives alike.[336]

Leaving aside the usual suspects

Since the relationship between technology and warfare is clearly important but not simply one-directional, merely assessing the newest technologies is an improper course of action. Some technological innovations offer vast improvements without significantly changing the way war is fought. The laws of war are in such cases equally as (un-)applicable as before. This Chapter will therefore analyze the main, current changes in warfare instigated by technology that challenge the laws of war, rather than focusing on the specifics of those technologies themselves. As a result, some of the 'usual suspects' like Weapons of Mass Destruction (WMD) receive little attention while more general developments (e.g. 'precision weaponry') are analyzed in greater detail.

This is certainly not because I believe WMD to be no great challenge to mankind or an unimportant issue in current international relations. The opposite is true, especially with the growing threat of relatively weak actors. When these (in terms of classical military strength) are pitted against an overwhelmingly strong opponent, the temptation for them to breach all rules and strike with a WMD is greatly increased.[337] Biological WMD are known as 'the poor man's atom bomb' for a reason.[338]

The reason WMD receive less attention lies in WMD having little to do with changing the way war is fought or, in turn, the way the laws of war should asses it. Even when

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334 C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999, p. 3.

335 F.F. Martin, 'International Human Rights and Humanitarian Law: Treaties, Cases and Analysis', Cambridge University Press: Cambridge, 2006, p. 531.

336 ibid., p. 532.

337 M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.

338 K. Homan, 'Van Pepperspray tot Lasergun', Rathenau Instituut: Den Haag, 2005, p. 62 and W. Barnaby, 'The Plague Makers: the Secret World of Biological Warfare', New rev. ed., Continuum: New York, 2000, p. 27.

the range of indiscriminate (and thus prohibited) weapons is expanded by those with more powerful force or alternative methods of inflicting damage (biological, chemical), (although possibly provoking a new degree of human horror) the basic tenets remain the same. Once used in escalation, the war will soon be over. As Van Creveld aptly states with regard to nuclear WMD:

> The reason why the political impact of nuclear weapons has been so small is, of course, that nobody has yet come up with a convincing idea as to how a nuclear war could be fought without blowing up the world.[339]

Once the weapon is used indiscriminately (and it is hard to imagine WMD being used otherwise), it constitutes a clear breach of the laws of war. The intriguing advisory opinion of the ICJ on nuclear weapons is telling: while possessing nuclear weapons is not prohibited and their use not absolutely forbidden, the ICJ cannot imagine a practical example in which their use is legal.[340] According to the court, the use or threat of use of nuclear weapons "would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law." However, the court continues saying that "in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake".[341]

With regard to biological and chemical weapons, their illegality is stated very clearly in both the 1972 Biological Weapons Convention (BWC) and the 1993 Chemical Weapons Convention (CWC), the legislation designed to offer specific regulation on these types of weaponry.[342]

The following paragraphs each describe a strand of more general change in the way wars are fought. With regard to these main changes, their impact on warfare and their underlying technologies will be analyzed, as will the degree to which they raise humanitarian concern and challenge the laws of war. If possible, lines for solution will be explored. Some of these changes overlap, as most are based on multiple technological changes, and some of the technological changes are relevant to multiple changes in warfare. The conceptual framework and division are for analytical purposes. Reality, as always, is much less conveniently arranged.

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339 M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 5.

340 N.C.L.A. (Organization), 'On the Unlawfulness of the Use and Threat of Use of Nuclear Weapons', New York, 2000, p. 5.

341 ICJ, 'Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons', International Court of Justice: The Hague, 1996.

342 See §9.5 of Chapter II.

§4 Increased distance

> THE FIRST HIGH-TECH VIDEO OF GROUND FIGHTING IN THE PERSIAN GULF WAR SHOWS TERRIFIED IRAQI INFANTRYMEN SHOT TO PIECES IN THE DARK BY U.S. ATTACK HELICOPTERS. ONE BY ONE THEY WERE CUT DOWN, BEWILDERED BY AN ENEMY THEY COULD NOT SEE.[343]

Increased distance is a consequence of many technological innovations in current warfare and certainly not just as a byproduct.[344] It is an effect deliberately sought after in new weaponry, the aim to reduce the risk run by the military personnel using it.
This distance can be in space (e.g. high-altitude bombers) as well as time (e.g. mines). It is also highly relevant as a moral distance, since the innovations have a psychological impact as the gap between the target and the individual responsible for applying the force increases. Pressing a button from the relative safety of a bunker is a very different job from slitting someone's throat.

§4.1 What is it?

When speaking of 'distance', we need to take a broad view. It is not just about physical distance measured in spatial terms between the target and the one applying force. The distance can be temporal as well, partially due to automatization and remote control. Both can lead to a mental distance, or 'distantiation', between the one applying the force and the target. Mediation by technological artifacts is influential, as air-conditioned offices and high-resolution monitors replace proximity and contact with the human being on the receiving end of the applied force. The next paragraph will take a closer look at these different forms of distance and the crucial, ever increasing role they play in the present battlespace.

§4.1.1 Space

Battlespace
The notion of increased spatial distance is a highly simplistic. It means more feet, meters, kilometers between the target and the one applying force. It means planes flying higher, artillery shooting farther, and rockets traveling longer distances.
This simple notion brings complexities to warfare. The increase is not a simple linear one, effectively only enlarging the battlefield.[345] Fundamental change has occurred. The idea of a battlefield has now been eliminated, replaced by the concept of a battlespace.[346] The battlefield concept required the physical presence of both

[343] Reuters report, as quoted in: R. Clark, 'The Fire this Time: U.S. War Crimes in the Gulf', 1st ed., Thunder's Mouth Press: New York, 1992, p. 48.
[344] M. White, 'The Fruits of War: how Military Conflict Accelerates Technology', Simon & Schuster: London, 2005, p. 344.
[345] M.N. Schmitt, 'Bellum Americanum: The U.S. View of Twenty-first Century War and its Possible Implications for the Law of Armed Conflict', in: *Michigan Journal of International Law* 1998, 19 (Summer 1998), pp. 1051-1090, p. 1057.
[346] D. Kennedy, 'Of War and Law', Princeton University Press: Princeton, 2006, pp. 112-113.

fighting parties,[347] the goal to close in on and then destroy the enemy. Now, in the battlespace, the goal is to defeat your enemy from a (large) distance.[348] The notion of a battlefield necessitates preparation and logistical movements that reveal the enemy approaching. It also means the number of enemies capable of attacking you is limited by the fixed spatial circle around you. In other words: preparation for defense is possible.

The increased traveling distance, increased speed and developments of stealth technology have diffused this idea.[349] The spatial distance to a potential enemy has become less and less important. A larger spatial distance is now even often preferred over close proximity. In the words of Ignatieff: "The battlefield has been emptying for centuries".[350] Kennedy sums it up as follows: "The old days of industrial warfare are over -you are not trying to blow stuff up on the battlefield until the political leadership surrenders. It is asymmetric, it is chaotic, it is not linear. Here at home, we hardly seem at war -the enemy, the conflict, the political goal, all have become slippery".[351]

Dual use targets

Connected to the development of battlefield to battlespace and the possibility of striking objects more precisely[352] is the tendency to take a broader view of which targets are sufficiently contributing to the adversary's military effort. Should they be considered to be doing so, they become open to legal strike. The range and number of dual use targets, having military as well as civilian importance, is increasing accordingly.[353]

Many civilian processes are crucial to sustaining the warfighting effort. These range from very direct examples like munitions factories to more indirect ones like an entire economy offering a strong basis for taxation to pay the costs of war. Henceforth, one might even be tempted to apply more creative reasoning such as to consider all civilians as sustaining the warfighting effort by providing the public and electoral support necessary to continue the war. Smith clearly discerns only one direction in which these factors lead:

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347 Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 132.

348 M.N. Schmitt, Targeting and Humanitarian Law: Current Issues. In Israel Yearbook on Human Rights, Y. Dinstein, Ed. T.M.C. Asser Press: The Hague, 2005; pp. 59-104, pp. 59-60.

349 M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 5.

350 M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 169.

351 D. Kennedy, 'Of War and Law', Princeton University Press: Princeton, 2006, p. 112-113.

352 For a more elaborate discussion of precision weaponry one is referred to §8 of this Chapter.

353 M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 170.

> In the modern age, as entire economies and societies have been conscripted to the war effort and military and nonmilitary work have converged, the so-called dual use dilemma has been resolved in a gradual loosening of what constitutes a legitimate military target, becoming, in other words, less and less of a dilemma. Dual use targets increasingly are treated as unambiguous military targets.[354]

A new habit

Currently, 'warfare from a distance' is a very common phenomenon -it has become warfare's new habit. The familiar military acronym is 'BVR' (Beyond Visual Range).[355] Naturally, this has led to a change in the way its fairness is perceived. Some conclude that Western culture in particular has turned 180 degrees in its original attitude towards spatial distance in warfare: "organized and deliberate destruction of life and property is profoundly repugnant to contemporary consciousness, especially in view of the quantum jump in human capacity to kill impersonally and at a distance that has occurred since 1945. The technology of modern war, indeed, excludes almost all the elements of muscular heroism and simple brute ferocity that once found expression in hand-to-hand combat".[356]

Increased spatial distance has become a key feature of modern warfare and without threat to humanitarian concerns *per se*. One could remedy the increased distance by deploying more accurate technology to attack with greater precision.[357] Henceforth, the larger control over the weaponry could compensate for the chances of deflection proportionate to the distance it has to travel. However, the technological possibility to fight from a larger distance does raise several other issues which might have negative consequences for the humanitarian equation.

§4.1.2 Time

A distance in time indicates that the one applying force can make his decision to apply force well before its actual application. Communications technology has advanced the possibilities in this area, although the familiar landmine is also a good example of the principle. The one applying force determines parameters based on the force to be applied. These might be very blunt, as with relatively primitive landmines (the parameter being contact or pressure), or more sophisticated. Today's technology, for example, allows an unmanned vehicle to be programmed to shoot guided by certain criteria it registers with its sensors.

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354 T.W. Smith, 'The New Law of War: Legitimizing Hi-Tech and Infrastructural Violence', in: *International Studies Quarterly* 2002, 46 (3), pp. 335-374, p.361.

355 R. Peters, 'A Revolution in Military Ethics?', in: *Parameters* 1996, XXVI (2), pp. 102-108, p.105.

356 W.H. McNeill, 'The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000', University of Chicago Press: Chicago, 1982, p. viii.

357 This will be elaborately discussed in §8 of this Chapter.

§4.2 Driving technology

An amalgam of technology and innovation, rather than any one single development, is accountable for significant distance increases in the current battlespace. The fact that the possibility became reality is, of course, not an automatic consequence of the technology. It is rather the result of (doctrinal) choices made by men to utilize the technology so as to increase distances in time, space, and perception.

§4.2.1 Space

The technology that catalyzed increases in spatial distance was the aircraft. The simple fact that war could be fought from the air enlarged the possible distance that could be covered dramatically. The real point of breakthrough was achieved in the early twentieth century when aerial warfare became a reality. Its seeds were sown around the time of the initial codifying of the laws of war; the first results harvested in World War I.[358] The threat of aerial warfighting's imminent arrival inspired early efforts to attempt its regulation. However, these early efforts to regulate aerial war were frequently overtaken by reality. Prohibition of aerial bombardment proved unachievable, although limiting such bombing strictly to military targets was possible in theory, it proved difficult in practice.[359] The huge destruction initiated by aerial warfare throughout the Second World War made this difficulty painfully clear.

While traditional aerial warfare was certainly a major contributor to our understanding of spatially distant warfare, it is not the only way in which the target is now distanced from the one applying force.[360] Developments in precision bombing, ballistic missiles, delivery mechanisms, stealth aircraft, unmanned vehicles, long-range artillery, and high speed satellite data transfer, to name but a few, have all had major consequences for the way war is fought.

The level and diversity of technology necessary to deploy an unmanned vehicle is enormous. One must be able to look at its camera images on a remote screen in real-time -possibly from the other end of the world- hear the audio from its microphone, control its movements, read data from its chemical and biological agent sniffers, order a missile launch at a given, precise target and guide armaments with satellite navigation to their point of impact. Each element, from the 'simple' monitor to the satellites orbiting in space, is crucial -a vital cog in the mechanism of effective spatially distant operations in the battlespace.

Aside from these technologies enabling 'high-tech' spatial distance, more mundane developments are also important. Rifles and bullets designed to cover more ground

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[358] J.J. Weltman, 'World Politics and the Evolution of War', Johns Hopkins University Press: Baltimore, 1995, p. 98.

[359] D.C. Watt, Restraints on War in the Air before 1945. In Restraints on War: Studies in the Limitation of Armed Conflict, M. Howard, Ed. Oxford University Press: New York, 1979, pp. 57-77.

[360] M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 348.

with the necessary accuracy also increase spatial distance between 'boots on the ground' soldiers and their targets.

§4.2.2 Time

In part, the same technologies that enable spatial distance also enable temporal distance. Since covering space takes time, these developments are simultaneously linked. The classic and tragic example of the fighter pilot dropping a bomb at a bridge the second before his radar shows a train full of civilians approaching clearly illustrates this. Undoubtedly, the moments between the push-button delivery of the bomb and its impact will be relived many times by the pilot.

Furthermore, some technologies are aimed at temporal distance alone. A mine is laid to explode when specific criteria are met. The one laying it is most likely far away, 'out of touch' when the force he applied is realized. There will most probably be no connection whatsoever between the applicant and the results of his work.

Cluster munitions

> THEY BLANKET A BROAD AREA WITH SUBMUNITIONS AND ARE OFTEN INACCURATE. THEY ALSO LEAVE LARGE NUMBERS OF HAZARDOUS UNEXPLODED SUBMUNITIONS, OR DUDS, THAT THREATEN CIVILIANS AFTER THE CONFLICT.[361]

A more pressing technology, creating temporal distance as a byproduct, is cluster munitions. Often taking the initial form of one large bomb, it launches to open up and release thousands of explosive packages or 'bomblets'. Not all the smaller explosive charges explode, leaving a scattering of dangerous remnants waiting to blow up. With dud rates of around 15 percent not being uncommon and with the large number of explosive sub units involved, there can be hundreds of unexploded bomblets resulting from every cluster bomb dropped.[362] Their bright colors make them more visible and less likely to be unknowingly stumbled upon; although they sadly also make them more attractive to children.[363] These bombs continue to take casualties long after the end of hostilities, representing an extremely bitter humanitarian concern.[364] Although not designed to cause a temporal delay, failure rate and sheer bomblet volume means these bombs do mount up to such an effect. When looking at the Iraq war and military activity from 2003 on, cluster munitions - those delivered from the ground even more so than those from the air- proved to be one of the major causes of civilian casualties.[365]

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[361] H.R.W. (organization), 'Off Target: The Conduct of the War and Civilian Casualties in Iraq', Human Rights Watch: New York, 2003, p. 54.

[362] ibid., p. 83-84.

[363] McClelland, 'Conventional Weapons: A Cluster of Developments', in: *International and Comparative Law Quarterly* 2005, 54 (3), pp. 755-766, p. 760.

[364] H.R.W. (organization), 'Off Target: The Conduct of the War and Civilian Casualties in Iraq', Human Rights Watch: New York, 2003, p. 56.

[365] ibid., p. 16.

§4.2.3 Training

Developments in this area are increased as training and reality becoming more alike. Next to significantly more realistic training facilities,[366] technological artifacts that turn reality into an experience similar to the training environment also contribute to this development. The pilot looks at a screen, not at the ground below.[367] He seems to aim at dots on that screen, not at humans. When reality looks like training, it might also feel like it. When the borders between training and real combat become vague, the sense of responsibility for one's actions might also be reduced.[368] Industry even hires game designers to create more intuitive ways of controlling real drones in operation. As reporter William Saletan accurately states: "It looks and feels like a video game. But it kills real people".[369] The 'virtualization' of reality can certainly be problematic for trained personnel with combat experience. However, new generations without real combat experience now have significant understanding of game consoles from their youth. Having such a degree of comfort with the technology certainly poses a risk of yet more dehumanization. With not only training facilities but the real operation soft- and hardware specifically tailored to the Xbox, Playstation, and Wii-generation, this risk is here to stay.[370]
Next to possible technological solutions to rule out civilian targeting or human errors, the matter of morality is also at stake. War (and its laws) has (have) long carried a sense of a mutual risk taken for a higher goal, a self-restraint and respect for the enemy shown out of chivalry and the mutual benefit of reciprocity. This increasingly electronic display of war leads us to question whether the human, moral element is receding as well.[371]

§4.3 Humanitarian challenge

As said, 'warfare from a distance' has become a highly important factor in modern war. Since it proved to be militarily effective, its role has grown, increasing its share of the killing as a result. The rise of civilian casualties as a proportion of the total number of war victims is also ascribed to aerial warfare. Doswald-Beck states in this

366 F.W. Kagan, 'Finding the Target: the Transformation of American Military Policy', 1st ed., Encounter Books: New York, 2006, p. 45.
367 M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 101.
368 J. Der Derian, 'Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network', Westview Press: Boulder, 2001, p. 14.
369 W. Saletan, 'War Is Halo: Killing Real People Becomes a Video Game', in: *Slate Magazine* 2008, online publication (http://www.slate.com/toolbar.aspx?action=print&id=2195751).
370 In some cases, not just the design is taken directly from the gaming industry, but the equipment is even running on console processors and Xbox/ Playstation/ Wii controllers. D. Hambling, 'Game Controllers Driving Drones, Nukes', in: *Wired Magazine* 2008, online publication (http://blog.wired.com/defense/2008/07/wargames.html).
371 J. Der Derian, 'Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network', Westview Press: Boulder, 2001, p. 147.

regard: "The more use that is made of bombs and missiles as opposed to bullets, the greater the number of civilian casualties compared with military ones".[372]
Since the main focus of humanitarian efforts lies in the protection of non-combatants, this development raises concern.

Several features of increased distance contribute to its military success and humanitarian lament. Two of them will be analyzed separately since they, despite relying heavily on the technologically enabled increase in distance, form part of more complex, and fundamental changes in modern warfare -precision weaponry and casualty-transfer warfare. This Chapter will focus on humanitarian challenges more directly related to the increased distance in current battlespace.

§4.3.1 Quality of decisions

When the distance between the moral actor deciding to apply force and the target is increased, the impressions that actor has of the conditions surrounding the target are mediated by technological devices. A camera sends signals viewed on a screen and a microphone sends sounds heard through speakers. As such, the problems accompanying this distance become practical as well as moral.
Starting with the practical consequences, a question presents itself: is the quality of the decision equally good when it is made by a moral actor physically present near the target? The answer to this question is commonly, but not unequivocally in the negative. As Schmitt points out, the distance of the human actor poses problems regarding the laws of war's demand to 'do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects.' However, Schmitt also argues that a larger distance does not always equal worse circumstances in making a decision. In the opposite case of being very close to the selected target, other disadvantages present themselves. Being near a target often means a greater vulnerability to enemy fire, which in itself influences accurate perception and can color the decision-making process.[373] Stressed by vulnerability, occupied by evading enemy fire, and hampered by the fog of war, following a 'better safe than sorry'-principle can be tempting. Certainly more so than when sitting safely far away with the largest threats posed by your superior scrutinizing your accuracy, discomfort at violating the laws of war on behalf of your country, or guilt at spending the taxpayer's money on annihilating a goatshed.
However, when a human actor is further away from the spot where the attack actually takes place -be it because of a long distance, technological mediation, a time-lag or a combination of the above- the chance of complementing the technology is gone. Just

[372] L. Doswald-Beck, 'Implementation of International Humanitarian Law in Future Wars', in: *Naval War College Review* 1999, p. 50.
[373] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 52.

as technology helps to remedy human shortcomings, human actors can act as a counterweight against technological errors.[374]

This distance brings about the risk of suboptimal care for preventing non-combatant casualties, and the risk of making decisions based on a partial and mediated view of reality in the battlespace. Distance and technological mediation can tempt the military to kill sooner. Available video footage and recorded conversations from actual military operations offer numerous examples. We see a recording of a truck in the night. People are walking around it, it is unclear what they are doing. They might be taking out an RPG and preparing it to launch an explosive. Certainty is unavailable. The commander gives permission to fire and the targets are taken out. Since any movement could mean the target is still trying to fight -even a lack of movement from someone seeking cover behind a vehicle might indicate preparation of a counterattack- the entire area is taken under fire until all is destroyed. The individuals, combatants or not, that might be injured after the first attack are killed, even though they might already effectively be 'hors de combat'.

§4.3.2 Dehumanization

> BOMBER COMMAND WAS AN EARLY EXAMPLE OF THE NEW EVIL THAT SCIENCE AND TECHNOLOGY HAVE ADDED TO THE OLD EVILS OF SOLDIERING. TECHNOLOGY HAS MADE EVIL ANONYMOUS. THROUGH SCIENCE AND TECHNOLOGY, EVIL IS ORGANIZED BUREAUCRATICALLY SO THAT NO INDIVIDUAL IS RESPONSIBLE FOR WHAT HAPPENS. NEITHER THE BOY IN LANCASTER AIMING HIS BOMBS AT AN ILL-DEFINED SPLODGE ON HIS RADAR SCREEN, NOR THE OPERATIONS OFFICER SHUFFLING PAPERS AT SQUADRON HEADQUARTERS, NOR I SITTING IN MY LITTLE OFFICE IN THE OPERATIONAL RESEARCH SECTION AND CALCULATING PROBABILITIES, HAD ANY FEELING OF RESPONSIBILITY. NONE OF US EVER SAW THE PEOPLE WE KILLED. NONE OF US PARTICULARLY CARED ... SINCE THE BEGINNING OF THE WAR I HAD RETREATED STEP BY STEP FROM ONE MORAL POSITION TO ANOTHER, UNTIL AT THE END I HAD NO MORAL POSITION AT ALL.[375]

Stories about 'mental distance' from the target are as old as the use of catapults and bows and arrows. The process of dehumanization has often preceded the gravest atrocities inflicted by mankind. Technological changes have created circumstances that might support a process of mental distancing, often as a byproduct of spatial and/or temporal distance and the mediation of reality through technological artifacts.
Not being able to see your target because it is far below, not seeing the consequences of the force you apply because you are nowhere near the scene when it detonates, or simply seeing dots on a screen becoming a blur under a message saying 'actions successful' -all these circumstances make it harder to identify with the human beings at the 'receiving end' and the consequences of one's own actions.

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[374] M.N. Schmitt, 'The Impact of High and Low-Tech Warfare on the Principle of Distinction', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2003, p. 9.

[375] F.J. Dyson, 'Disturbing the Universe', 1st ed., Harper & Row: New York, 1979, pp. 30-31.

The anonymity accompanying a large distance between the target and the one applying the force is also a problematic factor.[376] Having to kill your enemy face to face with a knife, hearing him breathe, smelling his scent and hearing his grunts and screams forces the realization that he or she is also a human being. Not being confronted with the result of the damage done can reduce the care taken in the force's application.[377] As Dunlap phrases it: "The inculcation of the revolutionary technologies into the armed services might create a generation of "console warriors" who wage war without ever confronting the deadly consequences of their actions".[378]
Those deeming such a future prospect to be exaggerated and thinking morality will provide the necessary check are advised to take a look into the past. During the war in Vietnam, the US army deployed project 'Igloo White', an automated system for waging aerial war. "At its peak operation in 1971-2, Igloo White was a tremendously ambitious, intricate system for seeking out and destroying truck convoys, supply depots, bivouacs, anti-aircraft sites, construction crews, repair teams, and just about any other signs of life … ground sensors, people sniffers … pinpointed local activity and transmitted this information automatically".[379] This information was then sent to the air force that based their decision to attack on the automated firing signals. "Much of this activity occurred at night, without pilots ever actually seeing the target. … from beep to bang, may take less than five minutes. The whole operation seemed like a wild scientist's dream come true".[380]

The distance can also lead to mental issues for the one applying force from afar. It requires a heavy mental gymnastic to wage war without being in its midst. Combining killing with ordinary family life adds to the surreality, the technologically mediated environment representing a 'sub-reality' in which one acts.[381] This said, another development should also be mentioned in relation to this. The 'regular' fighter pilot, although much closer to the target, often only views the target through technological mediation. If the pilot then has to maneuver away after applying the force and does not have time to view the consequences of his actions, remote controllers of unmanned drones have to view the live video feed of the impact and its

[376] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 4.
[377] L. Doswald-Beck, 'Implementation of International Humanitarian Law in Future Wars', in: *Naval War College Review* 1999, p. 50.
[378] C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999, p. 30.
[379] D.G. Marr, The Technological Imperative in U.S. War Strategy in Vietnam. In The World Military Order: the Impact of Military Technology on the Third World, M. Kaldor and A. Eide, Eds. Macmillan: New York, 1979; pp. 17-48, p. 37.
[380] ibid., p. 37.
[381] M.N. Schmitt, "Direct Participation in Hostilities" and the 21st Century Armed Conflict. In Crisis Management and Humanitarian Protection, H. Fischer, Ed. BWV: Berlin, 2004; pp 505-529, p. 512.

consequences to affirm the target being hit.[382] Although creating stress of its own, it might serve to some degree to rehumanize the application of force, despite being heavily mediated by virtualization. Conversely though, the stress itself could add to the difficulty of recognizing the blur on the screen as a fellow human being.

The tendency towards dehumanization is reinforced by the same trend taking root within the public. If the public dehumanizes itself from the victims, public pressure to minimize casualties is reduced. This reinforces the notion of surreality and the non-importance of those killed. As Peters states: "The citizenry of the United States, in fact, will tolerate enormous amounts of the killing of foreigners, so long as that killing does not take too long, victory is clear-cut, friendly casualties are comparatively low, and the enemy dead do not have names, faces, and families".[383] Dehumanization carries the risk of lowering the (moral) threshold for the application of force. By not recognizing the value of what is destroyed, by not truly witnessing the actual consequences of one's own acts and solely focusing on the merits of one's own cause and rationale, the risk of taking less care in preventing casualties and destruction among 'enemy' non-combatants increases. As Norman states: "in modern war especially, most of the killing is done at a distance, by bombing, shelling, guided missiles and the like … the distancing is psychologically necessary; those who are engaged in the activity of killing would find it much more difficult to do it face to face … To overcome these moral inhibitions it is necessary to resort to the kind of distancing which blinds killers to the humanity of the killed".[384]

§4.3.3 Accountability

Increased physical distance can increase moral distance and in turn diffuse accountability.[385] Do we measure the applied force to the damage done, or to the theoretical level of care that could have been taken? Do we look at the particular circumstances and hold the human actors accountable insofar as they, under the given circumstances in which they operated, made decisions and took action?[386] Should we hold the decision-makers at a political and doctrinal level accountable for creating the circumstances that led to the larger distances? Does it matter that they were never involved in a decision to apply force to a specific target, let alone 'pulled the trigger'?
Of course, discussions on accountability also rise in consideration of traditional forms of warfare. The Nuremberg tribunal famously waved away with the 'Befehl ist Befehl' defenses that lower ranked military personnel invoked to reason away their

[382] W. Saletan, 'Ghosts in the Machine: Do Remote-Control War Pilots get Combat Stress', in: *Slate Magazine* 2008, online publication (http://www.slate.com/toolbar.aspx?action=print&id=2197238), pp.
[383] R. Peters, 'A Revolution in Military Ethics?', in: *Parameters* 1996, XXVI (2), pp. 102-108, p. 103.
[384] R. Norman, 'Ethics, Killing, and War', Cambridge University Press: Cambridge, 1995, pp. 182-3.
[385] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, pp. 142-143
[386] R. Peters, 'A Revolution in Military Ethics?', in: *Parameters* 1996, XXVI (2), pp. 102-108, pp. 104-105

accountability. Things become different, however, when set circumstances are not the result of an order given by a higher-ranked officer, but of decisions (taken in peacetime) to design an armed force where technological artifacts determine the room for leverage that individual military have in applying force.

The risk occurs that some effects of warfare are blamed on the technology. This in turn suggests that the political/ doctrinal decision-makers are not accountable. They did not apply the force, having only acquired the weaponry and decided to wage war from a distance. The theory also proposes that the military men that do apply the force are also not accountable. They only do the best they can given the problematic effects of large distance and technological mediation. That all this, ultimately, is morally ambiguous is deemed an unfortunate consequence of the system. The laws of war can do a lot, but they cannot apply morality to technology.

§4.4 The laws of war

We have seen that the increased distance in space, time, and mentality can pose serious humanitarian challenges. This should, however, not automatically lead us to claim new specific regulation is in order. First, we have to observe to what extent the current laws of war cover the challenges and to what degree a possible lack of success can be attributed to the regulation itself.

§4.4.1 Current status

The current laws of war offer no specific regulation with regard to the issue of distance. No rules are set for the maximum height at which bombers may fly, the time between attack and the last human decision, or the degree to which the attacker has to feel sympathy for his target. Indeed, it would be hard to imagine an effective body of law based on these kinds of rules. Moreover, it would come down to trying to remedy the symptoms rather than the underlying problem.
Establish regulation on warfare in response to concern over increased distance is something else and a process quite familiar to the laws of war. A prime example of fighting over long spatial distance was encountered when aerial warfare became practicable. To this day, however, a Treaty specifically tailored to aerial warfare remains absent. The 1923 effort to introduce such a set of rules, analogous to those dealing with naval warfare and warfare on land, failed to be effective, due to a lack of ratification. To be fair, they were later deemed to be part of customary law.[387] The first Geneva Protocol did codify some, but not all, important elements of rules regarding aerial warfare, although they do not directly cover distance.

This lack of specific rules means that we are left with the well-known basic principles of the laws of war covering all application of force. Established in numerous Treaties and customary law,[388] these offer yardsticks against which fighting over distances

[387] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p. 181.

[388] ibid., p. 347 and A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, pp. 1-3.

can also be measured. First of all, the right of belligerents to adopt means is not unlimited. Second, military necessity is required for the application of force, but does not suffice to justify all means, methods and effects.[389] One has the duty to make a distinction between combatants and non-combatants, it prohibited to target the latter.[390] One is allowed to attack combatants, but only as long as they are capable of fighting.[391] An attack on combatants and/or military objects is subject to the demand of proportionality: the civilian damage caused by the attack may not be excessive in relation to the military gain.[392] In addition, the attack may not be carried out with means causing 'superfluous injury' or 'unnecessary suffering'.[393] In other words, the attack's legality is conditional to the principle of discrimination (containing the principle of proportionality in attack) and the duty to take feasible precautions before launching an attack.[394]

Increased distance does not violate these principles *per se*. It is in itself not a reason to alter the laws of war. However, the laws of war are heavily dependent on interpretation and the approach taken in weighing the elements inherent to the application of the laws of war.

Discrimination

An increase in distance can, as we have seen, lead to a decrease in the quality of information and decision-making. Whether regarding the pilot having to look further out of his window to the ground below; or the one judging the situation through technological mediation while sitting in a shelter on the other side of the globe. One could argue that this brings tension to the duty to discriminate between combatants

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[389] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p.123 and A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, pp. 3-7.

[390] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art. 51.

[391] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, pp. 124-125 and A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 7 and Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, p. 28.

[392] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p. 125 and A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, pp. 17-23 and Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, pp. 119-122.

[393] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p. 126 and A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 5 and Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, pp. 56-61.

[394] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, pp. 113-4 and Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, pp. 125-128.

and non-combatants. The laws of war demand that only military targets may be attacked.

Article 48 of the first Geneva Protocol:[395]

> In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.[396]

Article 51.4 of the first Geneva Protocol states:

> Indiscriminate attacks are prohibited. Indiscriminate attacks are:
> – those which are not directed at a specific military objective
> – those which employ a method or means of combat which cannot be directed at a specific military objective; or
> – those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol;
> and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.[397]

Article 51.5 of the first Geneva Protocol states:

> Among others, the following types of attacks are to be considered as indiscriminate:
> – ...
> – an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.[398]

ad Article 51.4(a)

The first provision restates a clear violation of the laws of war, an attack not aimed at a legitimate target. It might seem to offer a clear-cut regulation that can be easily applied. However, it is not the effects that prove an attack as indiscriminate -it is the objective of the attacker. The key element is not a large amount of non-combatant death and destruction, but whether one had the true intention of 'directing' the force in question at a 'specific military objective'.[399] Dinstein adds that the 'reconstruction of the state of mind' should take into account the fog of war and even that

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[395] Although not all dominant wagers of war are party to the first Geneva Protocol, the rules discussed in this Chapter are considered binding either because they are also part of other Treaties, to which those States are party, or since they are considered binding customary law. Since the first Geneva Protocol offers a fairly modern phrasing and has become the standard, it will be leading in this Chapter.

[396] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art. 48.

[397] ibid., Art. 51.4.

[398] ibid., Art. 51.5(b).

[399] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, p. 117.

intelligence on which decisions were based could be faulty. If the latter is the case, the attack could have many indiscriminate effects without constituting an indiscriminate attack in the sense of Article 51.4(a), provided that one faithfully trusted the source of (mis)information.[400]

ad Article 51.4(b)
The second provision is aimed at means and methods that as a result of their nature cannot be used in a discriminate fashion. The increased forms of distance have a gradual effect. They cannot be equated with a weapon or method that is by its very nature indiscriminate. Weapons released from a specific altitude can lead to both discriminate and indiscriminate effects depending on the circumstances. This said, the provision does put a limit on the degree to which one can fight from a distance, regardless of one's intentions: if the distance becomes so large that one cannot practically attack in a discriminate fashion, such an attack would be prohibited under the laws of war.[401]
However, an attack in accordance with this provision is not necessarily a discriminate one. One could conduct an attack that, despite being conducted over large distance and massive collateral damage being almost certain, could theoretically be directed at a military objective. It is here that the proportionality principle to which we turn now comes into play.

ad Article 51.4(c)
The provision sub (c) refers to limitations as required by the Protocol, dominated by the proportionality clause as worded in Article 51.5(b) and discussed hereafter.

ad Article 51.5(b)
Increased distances might, even when the attack is aimed at a legitimate target, lead to a higher level of collateral damage. This collateral damage is not legal or illegal *per se*, but has to pass the well-known 'proportionality-test'. If it fails to pass this test, the attack is deemed to be indiscriminate, and thus a breach of the laws of war. Although the term 'proportionality' is not part of the laws of war, the principle is a firmly established one within the arena. As shown above, it is codified in the first Geneva Protocol in Articles 51 and 57 in essentially the same wording.[402] Article 57 will be the subject of further discussion in the paragraph dedicated to precautions in attack.

The collateral damage must be measured against the military benefit to be expected ('anticipated') from a successful attack. The military benefit must outweigh the non-combatant death and destruction.[403] This is not a simple deduction of the damage

[400] ibid., p. 117.
[401] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p. 185.
[402] A.P.V. Rogers, 'Law on the Battlefield', ibid.2004, p. 20.
[403] ibid., p. 19.

from the gain, if such would even be objectively possible.[404] As long as the damage is not 'excessive' with regard to the military advantage, the collateral damage is legally acceptable. Some authors argue that 'extensive' damage is a factor to be taken into account, suggesting that there is an absolute limit of non-combatant death and destruction that cannot be 'compensated' for by military benefit. However, the term 'extensive' is not part of the laws of war vocabulary. A more plausible interpretation offers no theoretical limit to the amount of non-combatant death and destruction. It only applies a proportionality test to the military gain, implying that even 'extensive' suffering might not be 'excessive' as long as the military benefit is large enough.[405] Though interpretations on where the line between acceptable and excessive lies may vary, there is no direct relation to increased distance. The number of non-combatants allowed to die for a certain military gain to be achieved is a debate relevant to all applications of force creating collateral damage alike.

Next to the different interpretations of crucial elements of the laws of war is the important matter of how to apply them. While warfare is an inherently ongoing process, the laws of war have to place value on a decision made in a frozen moment in time. Decisions leading up to that moment have shaped the circumstances in which one has to make that decision.
The laws of war, needing to balance military necessity with humanitarian concerns, tend to judge an individual military's actions with the proviso 'all things considered'. The rules are applied with the circumstances under which the military operates taken as a given. The conduct of the human actor is valued according to the yardstick of whether he/she has taken due care in considering the circumstances he/she was in.
If a serious effort is made, given the chosen distances applied, to make a distinction between non-combatants and combatants and to target the latter, the attack is considered legal in this respect. With regard to collateral damage, the laws of war judge its proportionality to the military advantage anticipated. The care the military takes during the actual attack is held into account, the distance taken as a given. The overall effects of the increased distance chosen in legitimate attacks might deteriorate the humanitarian situation, but is not the primary focus of the laws of war.

That being said, there is a limit to what circumstances are acceptable as a legitimization for indiscriminate attacks. Dinstein states that it is prohibited to "conduct bombing raids at night, in inclement weather or from extremely high altitudes- when visibility is impaired- in the absence of adequate equipment for target identification".[406]
These circumstances, though technological innovation diministhes these circumstances, would create a situation in which an intention of discriminate bombing

[404] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, pp. 119-120.

[405] ibid., p. 121 and M.N. Schmitt, 'Precision Attack and International Humanitarian Law', in: *International Review of the Red Cross* 2005, (859), p. 10.

[406] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, p. 118.

would not be credible. It is important to understand that that factor of intention is crucial here. State-of-the-art equipment and clear sight offer conditions for conducting a bombardment with a true intention to target precisely and discriminately. Even then, however, the great altitude and sheer speed of modern aircraft can create 'confusion' as to what constitute real military targets; other objects have the potential to be easily be mistaken for them. As the NATO effort in Kosovo showed, civilian transport trucks and even cardboard cutouts were targeted more than once.[407]

Here, we witness a tension between a gradual practice and a binary law. The laws of war only prohibit fighting from distances so large that one is unable to perform appropriate identification of military targets. The entire area between the greatest precision at short distance, and the greatest risk of non-combatant suffering at a larger distance (just before being too large), is not an element that the laws of war regarding discrimination take into account. Although attacks conducted within that grey area must meet the demand of proportionality, such an assessment pays little attention to the distance from which one attacks.

Unnecessary Suffering
Article 35.2 of the first Protocol phrases the principle of prohibiting unnecessary suffering -also a firmly established principle of the laws of war:

> "It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering".

One might state that fighting from larger distance(s) with technological mediation causes suffering that different methods of warfare could prevent. However, legally, the prohibition doctrine of 'unnecessary suffering' is focused more on 'means'. It only considers 'methods' in the respect of their directness in applying the 'means' (e.g. killing someone with a knife quickly instead of slowly and painfully).[408] It offers no relative standard comparable to the principle of proportionality. It offers specific prohibition of extremes (weapons like hollow-tip bullets and poisoned bamboo stakes), contraptions the human mind has designed to inflict gruesome pain before death. Traditionally, the rule meant to prevent certain weapons from being used in favor of equally effective but less hurtful alternatives. The principle was not intended to reduce the overall number of casualties, but to reduce the pain and agony suffered in the moments before death.
A re-interpretation towards a more general application might be a way to mitigate the humanitarian deterioration certain (new) methods of war present, although such a move falls rather out of line with legal tradition.

[407] ibid., pp. 118-119.
[408] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p. 126.

Precautions

Article 57.2 of the first Geneva Protocol lays down the duty to take precautions in conducting an attack. It states:

> With respect to attacks, the following precautions shall be taken:
> those who plan or decide upon an attack shall:
> (i) do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection but are military objectives within the meaning of paragraph 2 of Article 52 and that it is not prohibited by the provisions of this Protocol to attack them;
> (ii) take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects;
> (iii) refrain from deciding to launch any attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated;
> ....
> effective advance warning shall be given of attacks which may affect the civilian population, unless circumstances do not permit.[409]

ad (a)

At first glance, these provisions impose a heavy duty on the military to avoid and minimize collateral damage. According to Fleck "precautions to be taken in attack involve a choice of the methods, means and strength of the attacking forces and a limitation of the measures of attack to the object to be attacked".[410] One might consider that fighting from a smaller distance -when a larger distance increases the threat towards non-combatants- is an obligation posed by this Article. However, the crucial elements are again 'abstract and generic' in their formulation.[411] Much room is left for interpretation, room that is generally taken when offered.[412] The most pressing one concerns interpretation of what is 'feasible'.[413] With regard to the choice of means and methods, Dinstein notes: "This is not to endorse claims, made by some commentators, that (i) there is a duty to use precision-guided munitions in

[409] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art. 57.2.

[410] As referred to in A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 95.

[411] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, pp. 83-84.

[412] S. Wei, The Application of Rules Protecting Combatants and Civilians Against the Effects of the Employment of Certain Means and Methods of Warfare. In Implementation of International Humanitarian Law: Research Papers by Participants in the 1986 Session of the Centre for Studies and Research in International Law and International Relations of the Hague Academy of International Law, F. Kalshoven, Ed. Nijhoff: Dordrecht, 1989; pp 375-393, p. 383.

[413] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, pp. 155-156.

urban settings; or that (ii) countries with arsenals of 'smart bombs' are compelled to use them everywhere. Such claims would introduce an inadmissible discriminatory bias".[414] Green translates it as being "practicable, or practically possible in the light of all the circumstances, including those of a military nature".[415] By the same rationale, an obligation to fight from the smallest distance possible cannot be derived from this provision either.
What is possible is not the same as what is feasible. In addition, the obligation described by these precautionary measures does not stretch back in time indefinitely. The choices available in carrying out the attack might be quite limited by the circumstances one is operating in. Those circumstances will result from choices made earlier. These cannot always be taken into account when judging whether all feasible precautions were taken with regard to the attack itself.

In practice, the rule of precautions is most effectively related to the target and the time of attack, less so in relation to the means and methods of attack. When multiple targets offer the same military benefit, the one offering the lowest estimate of anticipated collateral damage should be attacked.[416] When a target can be attacked at different times offering the same military benefit, the attack should be carried out at the moment offering the lowest anticipated collateral damage.[417] Much less enshrined in practice is the notion of choice in the means and methods available to conduct the attack. For the most part the commander responsible for the attack should tailor the violence used according to the framework of his immediate options.[418] In other words, again, the circumstances under which he operates are taken as a given – as Schmitt states, the laws of war operate in 'contextual' fashion.[419] The obligation is to choose the means and methods used with *consideration* for reducing collateral damage in achieving the military goal. This is not to be interpreted as an established, solid principle of subsidiarity. The military are not required to choose or acquire the means and methods best suited to minimizing collateral damage in effectively attacking a target. There is no obligation to use PGM's if you have them, no obligation to buy the latest and greatest in weapons technology, no solid demand of subsidiarity in choosing the fighting distance. As Rogers states "So long as weapons are not prohibited, States can use the weapons that are available to them".[420]

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[414] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, p. 126.

[415] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., Manchester University Press: Manchester, 2000, p. 156.

[416] M.N. Schmitt, Targeting and Humanitarian Law: Current Issues. In Israel Yearbook on Human Rights, Y. Dinstein, Ed. Nijhoff: Dordrecht, 2003; Vol. 33, pp 59-104, p. 102.

[417] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, pp. 97-98.

[418] ibid., p. 104.

[419] M.N. Schmitt, 'Precision Attack and International Humanitarian Law', in: *International Review of the Red Cross* 2005, (859), p. 13

[420] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 104.

All in all, it is hard to imagine this provision *requiring* a party to shorten the distance in time and/or space, or to reduce technological mediation if it offers minimized non-combatant death and destruction. Again, military interest is taken into account and again, the laws of war start judging *after* the stage is set and the circumstances given.

ad (c)

A last precaution to be taken is giving 'advance warning' to the civilian population insofar as military goals permit.[421] Traditional interpretation suggest that the military goal overriding the duty to warn lies in the crucial element of surprise -the old distinction between 'attack' and 'assault'.[422] As Dinstein rightly points out, the element of surprise is helpful, and to some extent crucial, to any military operation, turning the exception into the rule.[423]

The tendency to increase distance in warfare might put more emphasis on this Article. When the applied force's delivery mechanism is far away and significantly less noticeable, the element of 'automatic warning' via military vehicles entering the battlespace is gone. Of course, a general warning that an area is subject to attack for an unknown period of time is not particularly helpful -non-combatants living in the battlespace are painfully aware of that fact already. However, specific warnings with the time and place of bombardment are also difficult. When air strikes are aimed at fixed objects that cannot be moved quickly, this might be practicable. In a modern battlespace though, warning civilians is tantamount to warning the enemy, enabling him to take away the military benefit sought from striking the target. In practice, not much can be expected realistically from this provision.

The duty to give advance warning is of marginal importance already, a revival of the rule to offer counterweight to increased distance issues seeming to offer little help.[424] Rogers shows that Fleck, as well as the ICRC, felt that the only element regarding precautionary measures codified before the Geneva Conventions (that of fair warning) had already 'fallen into disuse' by the time it was enshrined in the Geneva Protocol.[425]

Ruses

The laws of war go beyond establishing a number of prohibitions to offer specific permissions as well. In relation to the topic of increasing distance, the notion of ruses is also relevant. Ruses are methods of misleading the enemy that do not account to perfidy. Where perfidious acts are clearly prohibited, ruses are clearly allowed. In practice this means that, although one may not disguise a vehicle as belonging to the

[421] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, pp. 127-128.

[422] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 88.

[423] Y. Dinstein, 'The Conduct of Hostilities under the Law of International Armed Conflict', Cambridge University Press: Cambridge, 2004, p. 127.

[424] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 95.

[425] ibid., p. 96.

Red Cross, one may camouflage-paint it or cover it with leaves. The main purpose of a ruse is to hit the enemy without him being able to prevent himself from being hit. This is also often the purpose of increasing the distance between an attacker and the target.
This rationale might lead to a lenient position regarding increased distance in warfare. However, two significant differences may occur. First, while the classic ruse does lower the risk to the attacker and increase the chance of a successful attack, in comparison to increased distances, it is much less likely to increase collateral damage. Second, the classic notion of a ruse allows camouflage of a vehicle *'so long as its national marks are identifiable during combat'.*[426] A ruse has a temporary nature: one disguises or hides oneself up to the moment of engaging in battle. Flying at great heights and dropping a bomb that is only noticeable a few seconds before impact stretches the temporary element of a ruse beyond absurdity.

§4.4.2 Necessity to remedy

We can see that the current issue of increased distance has a complex relationship with the laws of war. This is not particularly surprising, given that the relationship has always been a difficult one. From the moment technological innovation made it possible to fight beyond face-to-face, real-time individual human combat, significant issues have been raised. Perceptions that fighting from a distance is somewhat unfair have been reason to codify or adapt regulation throughout modern history.[427] However, distance of any kind between the target and the applier of force has not been viewed in a simple, universal manner. Where the Western world has always had difficulty accepting killing from a distance as fair, the Eastern world has always held it in high esteem.[428] Weapons like crossbows and catapults created spatial distance, technology like mines and booby-traps then added a further temporal element. Western military culture has continually had a hard time accepting such weaponry as fair, its effect in increasing distance anonymizing death.[429] This said, some may feel it has learned to adapt well enough. I will return to this theme in the paragraph on casualty-transfer warfare.

The fact that current regulation fails to specifically cover the element of distance in warfare should not be mistaken as a lack of concern. It is difficult to see how distance could successfully be included in a realistic body of law seeking a balance between military necessity and humanitarian concerns. Increase in distance does not represent a liner degradation of humanitarian circumstance *per se*. The laws of war are essentially based on taking combating factors into account. It would not be wise to simply place arbitrary limits on distance. Although a potentially important factor

[426] L.C. Green, 'The Contemporary Law of Armed Conflict', 2nd ed., ibid.2000, p. 186.

[427] E.g. the proposed bans on launching projectiles from balloons as discussed in §3.2.2. of Chapter II and on automated submarine contact mines as discussed in §4.2.2 of Chapter II.

[428] M.L. Van Creveld, 'Technology and War: from 2000 B.C. to the Present', A rev. and expanded ed., Free Press: New York, 1991, p. 71.

[429] W.H. McNeill, 'The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000', University of Chicago Press: Chicago, 1982, p. 172 and M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 81.

in the creation of humanitarily lamentable circumstances, it is certainly not a clear (mono)causal factor for increased death and destruction.
However, when a changed reality in combination with an unchanged regulation offers a different outcome -one pressurizing the realization of the regulation's initial goals-there is cause to seek remedy. We have seen that the increase in distance raises the chances of non-combatant damage. Moreover, we have seen that it is unlikely that the mere increase in distance will lead to an attack deemed illegal under the current laws of war. The technological drive behind the changes in distance warfare does not lead us to any reasonable interpretation of a violation of the laws of war. Nor does it provoke a strong re-interpretation of those laws that could erode their footing. However, as a result of the practical changes and distance warfare developments, the same rules with the same interpretations and modes of application do lead to a lower standard of protection. Applying the old rules to a new reality produces different end results. While the legal level of protection is the same on paper, the practical protection it offers to non-combatants is decreased.
To be sure, when an increase in distance of any kind does not lead to humanitarily worse results, the fact that the laws of war offer no particular remedy is not of prime importance. My intention is not to raise the level of protection the laws of war offer to unprecedentedly high levels. The tightrope between humanitarian concern and military necessity still has to be walked. Only when legally applied increases in distances produce significantly worse outcomes than the original level of legal protection sought to prevent, has something gone awry.

§4.5 Possible remedies

§4.5.1 Legal

Subsidiarity
As said, reality has changed. Technological innovation has immensely broadened the range of options available to today's modern military. The rules are based on a worldview in which one's options were much more limited than they are today. What was legal was also the most feasible option from a humanitarian perspective. Today, we witness a broad range of options -all legal, all passing the proportionality test, but varying greatly in their humanitarian outcome. Within this range, one could suggest a principle of subsidiarity with regard to means and methods of war, obliging a fighting party to go beyond carrying out the application of force without excessive non-combatant death and destruction and do it through the least damaging means and methods possible. This likens the situation to that already regarding targets and time of attack as stated in Article 57 of the first Geneva Protocol.
However, applying the principle of subsidiarity in an absolute form risks an erosion of compliance, the weight shifts too much toward a sole focus on humanitarian concerns and an insufficient appreciation of military interest. One is of course entitled to call for such an approach and suggest the laws of war mimic the system of human rights legislation, offering an absolute unnegotiable baseline. Though, in my view, the risks and stakes, are too high. The power of the laws of war lies in the delicate balancing act between military interests and humanitarian concern. A body

of law so strict that it makes warfare practically impossible cannot serve to realistically guide conduct during it.
The laws of war are, in most cases, not about setting clear and strict rules that can be easily applied with unequivocal results. The laws of war offer guidelines for appropriate balancing of the relevant factors. They state which to take into account in assessing the legality of specific conduct, setting the guidelines for when the morality in question can be reasonably translated into legal consequences. They also recognize the special circumstances that the entire notion of being at war involves, their structure tailored to the sense that different times call for different measures.
Introducing an absolute principle of subsidiarity could well be counterproductive, halting progress towards more precision. By demanding in absolute terms that one uses the means and methods that reduce collateral damage the most, one demands use of the most expensive equipment possible, fighting as close to the target as is possible and exposure to the greatest risks as a result. In terms of the demanded use of the most accurate (and expensive) means available, a less technologically advanced or prosperous adversary would be able to abide in using much less accurate (and much less expensive) but possibly even more effective weaponry. Alternatively, when one interprets a general clause of subsidiarity to entail all fighting parties use the most accurate weaponry technologically feasible, all but the most prosperous nations would be relieved of the practical possibility of waging war. Regardless of one's opinion of such a rule, it is easy to see that fighting parties abiding by it is a practical impossibility.

Nonetheless, all is not lost for a principle of subsidiarity. One could argue applying the principle not absolutely, but as an important part of the proportionality equation.[430] This way there is no absolute demand to use the most accurate weaponry possible, but the choices made are take into account to assess the proportionality of the damage done to the benefit sought. This way one would recognize military interests while simultaneously recognizing the changed reality - the broader range of options available to the military today. Next to the factors of military benefit and non-combatant damage, one would have to weigh up the choice of means and methods, looking at them in relation to other possibilities for carrying out the attack. In analyzing situations resulting from the choice of a less discriminate weapon or method, the non-combatant damage should be awarded added weight. Conversely, the choice of a highly sophisticated and expensive weapon offering the greatest accuracy possible should work as a mitigating circumstance.
It has to be said that some authors already suggest the factor of available means and methods to be part of the proportionality equation.[431] Those interpretations have it as little more than just another element to be taken into account on a lower level though, not awarding it the prominence I suggest giving it here.

[430] Rogers argues that such elements should already be taken into consideration in the proportionality clause. In my view however, this is not always clearly done and the point deserves more attention; see: A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 23.

[431] M.N. Schmitt, Targeting and Humanitarian Law: Current Issues. In Israel Yearbook on Human Rights, Y. Dinstein, Ed. Nijhoff: Dordrecht, 2003; Vol. 33, pp. 59-104, p. 101.

Accountability

Another relevant question regards the selection of a timeframe for use in applying the relevant rules of warfare. Does every application of force in itself need to be proportional, or is the overall effect of all the acts during the warfighting effort more important? Should we consider both?[432] Although Rogers states that it does not really matter as long as the same timeframe is applied to measuring both military benefit and humanitarian concern, it is hard to see the laws of war accepting a truly surgical strike as compensatory for a highly indiscriminate bombardment. The first should be praised, the second one condemned and the ones responsible still held individually accountable. The laws of war are tailored to be applied on a case-by-case basis. Of course, overall views, assessments and criticisms are given as well, though they mostly represent a sum of incidents and address a fighting party in general without attributing responsibility. This is not to say an assessment of the overall warfighting effort is nonsensical. It rather cannot serve to replace assessments of individual actions, those necessary for their perpetrators to be held personally responsible.

A related matter is the question of a suitable starting point for assessing individual cases? When one is required to do 'everything feasible' to prevent non-combatants from being hurt, do we start counting from the moment the soldier presses fire on his remote control, or do we take into account the choice made to send the unmanned verhicle rather than a footsoldier? As we have seen, the proportionality test leaves room for interpretation, taking many (military) choices as a given in evaluating conduct. The sum of separate actions that are in themselves proportional could provide an overall image that is seemingly much less so. The individual military personnel carrying out the attacks might have done the best they could given the circumstances they were put in. However, a more general proportionality test applied to the entire warfighting effort could then assess whether military and political choices creating those circumstances led to an acceptable relationship between military benefit and non-combatant damage. A series of actions, although carried out in accordance with the laws of war given the soldier's particular circumstances, could then still be found in violation since the war could, and should, have been fought in a different way resulting in less non-combatant suffering.

Such an additional test could remedy a change in practice that erodes the grip of the laws of war. The number of options regarding means and methods of warfare are much larger today than when the laws were drafted. This means that the choices made before deployment -determining the conditions under which the military operates in the battlespace- have become more important as well. The margin of discretion an individual soldier has in determining the humanitarian level of his actions is still vital and still worth the attention the laws of war pay to it. However, the predetermined set of factors limiting that discretion is perhaps worth even more so. Whether we send in a special-ops unit or order a bombing sortie to clear an urban

[432] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 22.

bunker has greater influence on the humanitarian outcome than the care taken by the military personnel in carrying out either operation. The gravity of those earlier decisions determining the circumstances demands more attention from the laws of war than mere regard as 'given circumstances'.[433]

In addition, such a test could help remedy the diffusion of accountability seen in fighting over large distances. A large number of people are now involved in the process. In such a situation of shared, spread and divided responsibilities, it is difficult to attribute accountability to individual actors. In addition, the distance (in space and/or via technological mediation) makes it more difficult to take the necessary precautions and increases the chance of errors.
When large numbers of people are involved, often only communicating through technology, it is hard to determine who is essentially accountable. Division of labor divides accountability too. Ultimately, there might not be a single person carrying enough weight to be held accountable for a violation, regardless the significance of that violation. In addition, when unmanned vehicles that operate -to some degree- in autonomous fashion perform more and more actions, it becomes harder to find an accountable human actor.
Since the laws of war take contingencies such as these as a given, they can be called upon as mitigating circumstances when something goes wrong. In turn, this reduces the accountability attributed to the human actor. The reduced accountability of those applying the force in such circumstances can be partly compensated by increasing the accountability of high officers and politicians, relating the end-results back to their initial choices regarding how the war is fought. When a pilot can claim mitigating circumstances due to the height at which he was flying, the decision to fly him there becomes an important factor. Accountability for that must be awarded to those making that decision. Should the issue slip between the cracks, those falling victim to collateral damage will pay the price.

The measures combined
Both proposed measures or shifts of emphasis help remedy the eroded practical protection of the laws of war by redistributing the diffused responsibility left hanging in the air. By strengthening the law's influence both before and within the proportionality equation, the tendency to increase distance, casualties, and damage without increasing legal scrutiny can be, to some extent, countered. Thus, the two proposed elements are most effective combined.

§4.5.2 Doctrinal

The danger of dehumanization does not equal a threatened violation of the laws of war. Since it has no concrete effect that the laws of war seek to prevent, it would make little sense, next to the practical impossibility, to create a rule to prohibit it. Furthermore, when dehumanization leads to atrocities or other unnecessary suffering, the laws of war cover these acts themselves.

[433] ibid., p. 111.

The problem lies in dehumanization leading to less care being taken within the legal framework. This in turn puts compliance with the laws of war under challenge. This humanitarian concern should be addressed through training and education. When identification with the adversary does not occur automatically during fighting, the issue should be addressed explicitly. Military personnel should be made aware of the problematic influence of too large a mental distance and non-identification.
The danger of dehumanization can be countered by a doctrinal emphasis on better training and instruction for military professionals. When militaries take into account lessons learned from experiencing dehumanization's influence, it can bring the reality of military operation closer to the requirements of the laws of war. The aspect of mental distancing can be countered by actively making military personnel aware of the practical consequences of their acts. They should be guided to combine their difficult tasks with a normal life, efforts made to revive the classic military ethos of nobility and chivalry throughout their entire program of training and education. This approach would help the military to prevent humanitarily disturbing applications of force and improve the mental health of their personnel.

§4.5.3 Technological

Fighting over increased distance is enabled by technological innovation. By the same token, technology could serve to counter the negative consequences of increased distance by offering appropriate countermeasures.
One of the threats posed by increasing the distance between a target and the one applying the force is a loss of precision. While a projectile has a small percentile of inaccuracy at the point of release, that inaccuracy is multiplied over the length of the trajectory. This particular humanitarian risk is being remedied increasingly by new developments in technology. The older systems of target spotting are accompanied by methods no longer relying on the parameters set at launch, but on independent, continuous modes of geolocation (e.g. GPS). In some cases, the accuracy even increases when the projectile has more time to process the location information and adapt to local circumstances (air pressure, wind speed). With means such as these, precision actually becomes *more* accurate with increases in physical distance. These developments might even eventually negate the humanitarian risk associated with inaccuracy altogether.

It seems that precision weaponry could remedy the humanitarian risk of inaccuracy in fighting from larger distances. It has been noted that, with regard to mental distance, the current improvements in the quality of video imaging serve to mitigate an absence of real-time presence. The reality remains virtual, but a much sharper resemblance of it.
With regard to distance in space and time, technology also offers a number of remedies. Unmanned vehicles have had a significant impact on the battlespace. An unmanned drone with real-time video feedback can replace a mine in waiting for an enemy, removing the distance in time from the equation. Having an unmanned drone fly much lower than a pilot safely could remedies an issue of spatial distance.

However, these technological solutions pose challenges of their own. Indeed, they are so important to the current changes in warfare that they require a more detailed analysis. As such, they will be discussed separately in the following sections.

§5 Away with the human actor?

> IN RESPONSE TO AIRCRAFT VULNERABILITY, THE DEFENSE DEPARTMENT IN RECENT YEARS HAS GIVEN PRIORITY TO DEVELOPING NEW GENERATIONS OF UNMANNED AERIAL VEHICLES (UAVS). THESE AIRBORNE VEHICLES HAVE BEEN AROUND SINCE THE 1960S, BUT WITHIN THE LAST FIVE YEARS SEVERAL TECHNOLOGICAL ADVANCES ... HAVE DRIVEN THEM TO THE FOREFRONT OF THE U.S. SURVEILLANCE EFFORT.[434]

The best way to protect the lives of your own combatants is to not put them in the line of fire. An aircraft without a pilot poses less of a casualty-risk than an aircraft with one. In addition, unmanned systems rely solely on technological logic that is, though not error-free, reliable and predictable most of the time. Unmanned weapons systems come in all shapes and sizes. Some are remotely controlled in real-time by a human being in a safe zone, others being pre-programmed to act and react on certain parameters.[435] The latter development is the most far-reaching, changing the face of battle to the greatest degree. These systems can act on their own, or in a network linked to other systems -either manned or unmanned.[436]
The potential for the use of unmanned vehicles is immense. Not only do they take the human element (partially) out of the loop (and risk), but can even overcome some of our human limitations. A drone can carry out surveillance on an object for days on end, possibly even recharging itself on local power sources.[437]

§5.1 What is it?

The most fundamental change in warfare is the change in the human actor's position. The use of unmanned weapons systems allows the human actor in control to take on another role. This is often combined with a larger distance from the battlespace, posing the challenges we have seen in the previous paragraphs.
In the most extreme cases the human actor's physical presence is displaced as well as several decision-making responsibilities.[438] Though some authors claim that morality requires us not to go further in the direction of unmanned weapons systems, all

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434 W.A. Owens and E. Offley, 'Lifting the Fog of War', 1st ed., Farrar, Straus and Giroux: New York, 2000, p. 129.

435 M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.

436 ibid., p. 16.

437 B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 123.

438 M.N. Schmitt, H.A. Harrsion Dinniss and T.C. Winfield, 'Computers and War: The Legal Battlespace', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2004, p. 1.

seem to agree that it is only a matter of time before we do so.[439] The concept of unmanned combat vehicles is too tempting for us to refrain from using them -it reduces risk to military personnel, increases capability, and reduces cost.[440]

§5.2 Driving technology

> IT TOOK A WHILE FOR UAVS TO PROVE THEMSELVES, BUT ONCE THEY DID, IT DID NOT TAKE LONG FOR SOMEONE TO FIGURE OUT THE NEXT LOGICAL STEP: PUTTING A SMALL MISSILE ON THE PREDATOR. THIS TRANSFORMED THE UAV INTO AN UNMANNED COMBAT AERIAL VEHICLE (UCAV) ... NOW, THE UNITED STATES HAD A UNIQUE NEW WEAPON: ONE COULD WATCH A TARGET FOR HOURS WITH A PREDATOR, AND PIPE THE IMAGERY TO A LOCAL COMMAND POST, THE PENTAGON -IN PRINCIPLE, EVEN TOP OFFICIALS IN THE WHITE HOUSE. THEY COULD DECIDE WHEN TO ORDER THE OPERATOR TO FIRE, ALL IN ONE SEAMLESS PROCESS THAT WAS NOT MUCH DIFFERENT FROM AN INTERNATIONAL TELECONFERENCE.[441]

Unmanned vehicles have become the center of attention over the last few years, although their development has a longer history. The US military used remotely piloted vehicles (RPVs) in the Vietnam War. These "small, fast, highly manoeuvrable drones capable of very low or very high flight and presenting minimum radar and infra-red signatures"[442] were used for reconnaissance and decoy tasks.

The class of unmanned vehicles can be divided into three main categories: remote-controlled, semi-autonomous and autonomous. The remote-controlled vehicles require real-time human guidance for the entire time of deployment. The semi-autonomous require guidance during specified aspects of deployment, e.g. launching, landing, and application of force. Autonomous vehicles only require guidance at launch and landing, the rest controlled by onboard electronics and the application of force carried out autonomously in conjunction with preset parameters.[443]

At present their use is both common and widespread. The recent operations in Iraq and Afghanistan have made their use mainstream and have familiarized the general public with their existence.[444]

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[439] R.C. Arkin, 'Governing Lethal Behavior: Embedding Ethics in a Hybrid Deliberative/ Reactive Robot Architecture', in: *Proceedings of the 3rd ACM/IEEE international conference on Human robot interaction* 2008, (121-128).

[440] A.J. Lazarski, 'Legal Implications of the Uninhabited Combat Aerial Vehicle', in: *Air & Space Power Journal* 2002, (2), pp. 74-83, p. 74.

[441] B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 121.

[442] D.G. Marr, The Technological Imperative in U.S. War Strategy in Vietnam. In The World Military Order: the Impact of Military Technology on the Third World, M. Kaldor and A. Eide, Eds. Macmillan: New York, 1979; pp 17-48, p. 40.

[443] A.J. Lazarski, 'Legal Implications of the Uninhabited Combat Aerial Vehicle', in: *Air & Space Power Journal* 2002, (2), pp. 74-83, p. 75-76.

[444] M.N. Schmitt, 'The Impact of High and Low-Tech Warfare on the Principle of Distinction', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2003, p. 5.

Unmanned vehicles come in a variety of shapes and sizes and can carry a variety of functional units -from real-time video reconnaissance to precision guided munitions. While they all share in taking the human being out of the dangerous battlespace, their other aspects can be tailored to specific use. A few examples will best serve to illustrate the large variety within this class of weaponry, also helping to convey the enormous capability of these units to exceed what can be expected from human beings (e.g. in endurance). It should soon be clear just how vast the military potential of unmanned systems appears to be.

A familiar unmanned vehicle image is the aerial drone, an example being the widely used Predator. It resembles a classic airplane but is much smaller. About 27 feet (8 meters) long, 7 feet (2 meters) high and with a wingspan of about 49 feet (15 meters), it carries optical sensors (full-color camera) and a communications unit to hook up to a network and transmit information in real-time. Lightweight, fuel efficient and carrying 100 gallons (380 liters) of fuel, it can stay airborne for 24 hours.
Of course, the Predator's camera can be replaced by a targeting system (infrared laser, laser designator and illuminator) and it is belly loaded with two Hellfire missiles, turning the drone into an unmanned, highly mobile precision weapons system.
These are not selling points from a glossy brochure, but are real possibilities that have proven their worth in recent conflicts like the ones in Afghanistan and Iraq.

Unmanned aerial vehicles can also take the form of a small helicopter, like the Firescout.[445] The Firescout can be used for reconnaissance, damage assessment or combat, though it will serve better in different circumstances to those suiting the Predator.

Other unmanned vehicles much less resemble any familiar manned aircraft. The Killer Bee looks like something taken straight out of a sci-fi movie. Considerably smaller than the Predator, it is launched by hand with a catapult-like mechanism. Also designed for both reconnaissance and combat purposes, it is designed to be part of a fleet, a single controller operating multiple Killer Bees.

Of course, there are also unmanned systems not operating in the air, although developments in the maritime and terrestrial fields are behind those in the air. RIPSAW offers a glimpse of the significant potential for unmanned land systems. It is a very fast, highly maneuverable all-terrain tracked vehicle. It can be used both to find IEDs and engage in combat. At the moment it is designed to be remote controlled, but it can operate in a more autonomous fashion as well.

Another application for unmanned land systems is a transporter for extracting wounded soldiers from the battlespace. It is even possible to have a robot-like tracked unit get out of the unmanned transporter and pick up an unconscious

[445] In military acronym, the firescout is a VTUAV: 'Vertical Take-off and Landing Tactical Unmanned Air Vehicle'.

soldier. This is not a direct combat application in which unmanned systems apply force, but highlights the extent to which unmanned systems are gradually replacing human actors in the battlespace.

Another approach, rather than 'unmanning' traditionally manned systems, is to design them from scratch. An attention-grabbing example is the designing of unmanned systems mimicking natural biological patterns. Often, such designs not only use mechanisms from nature, but also resemble their source of inspiration. Self-recharging fly-sized, fly-shaped and fly-like behaving drones are not that far around the corner. The military acronym is already there: MAV (Micro Air Vehicles).

The importance of unmanned systems can perhaps best be illustrated by the following quote from Major-General T. van Loon: "If there is no Predator, there is no operation. It is as simple as that".[446]

§5.3 Humanitarian challenge

Starting out as aides for surveillance purposes, unmanned systems gradually developed into independent weapons systems.[447] This line of development raises two issues. The first occurs when the unmanned system is still depending on real-time guidance by a human remotely controlling it -the classes of remote-controlled and semi-autonomous unmanned vehicles. This situation is already discussed in the previous paragraph. It does not displace the human actor in the process and leaves an ultimate decision at the critical moment to the human actor. It is a specific form of 'warfare at a distance' in space and/or time.

The second arises when there is no real-time human controller, the unmanned system working and attacking independently on predetermined parameters[448] -the class of autonomous unmanned vehicles. Those with a careful approach to technology might fear a higher humanitarian failure rate than when human beings carry out the tasks. They might fear that cold machines would always shoot when their parameters tell them to, there being no option for showing mercy depending on the circumstances. Of course, the opposite is similarly true. When a condition does not qualify, irrational rage ('going mental') that causes innocent civilians to die will equally not occur. In my opinion, it is near impossible to determine whether cold, mercy-free logic is humanitarily riskier or not than the potentially irrational processes of the human mind. All in all, it leads Schmitt to conclude that, however logical the notions of 'larger distance, less morality' and 'no man, no morality' might be, there is 'no scientific basis for concluding that human perception and judgment are necessarily more acute or reliable than that of machines'.[449]

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[446] As stated in the company presentation of General Atomics at Milcom '08.

[447] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.

[448] ibid., p. 16.

[449] ibid., p. 52.

What is more fundamental than the question 'who does a better job', is the question of accountability. The moral question of who should be held accountable when something goes wrong arises when an application of force is independently instigated and carried out by an unmanned weapons system. To some extent, this problem is comparable to the issue of accountability in the previous paragraph, only graver. Technological 'circumstances' predetermine the leverage room for the human actor, but in this case the human actor is completely removed from the real-time decision-making process.
When an unmanned vehicle fails and causes too much collateral damage, do we hold the programmer who set the parameters accountable? Or perhaps the designer of the optical sensors who misregistered input? Maybe the constructor of the outer protective case through which dirt slipped onto the circuit board? Or do we deem it an unfortunate technological error, lifeless technology a handy scapegoat to rid ourselves of accountability?

When accountability is diffused or even rightly placed on a non-human actor, the laws of war lose their grip on regulating and judging conduct in war. It could potentially lessen the care taken regarding non-combatants and respect for the laws of war -no-one feeling ownership or responsibility for the problem.

§5.4 The laws of war

The relation between unmanned vehicles and the laws of war has two main elements. First, the laws of war govern the force applied through any means, including unmanned vehicles. Second, the laws of war hold all who apply force accountable. Combining these two elements leads to tensions in accountability for the way force is applied through unmanned autonomous weapons systems. However, the laws of war do not provide regulation specifically tailored to the use of autonomous weapons systems. With regard to the discrimination of proportionality this is no wonder. Whether one uses a rifle, a bomber, or a UCAV, the principles remain the same. We are guided by the same set of general principles applicable to all applications of force as previously analyzed in §4.4: discrimination, proportionality, and humanity (the prohibition of unnecessary suffering).
When it comes to the attribution of accountability we have little to go for. Since the laws of war as they are presuppose a human actor as the ultimate actor.

§5.4.1 Current status

Discrimination
ad Article 51.4(a) of the First Geneva Protocol
Directing an attack at anything other than a specific military target is prohibited. It makes no difference whether this is done with an autonomous unmanned vehicle - the prohibition stands. As we have seen in §4.4.1, the main determinant for 'directed at' is the intention of the attacker. When the human actor is driven to the background, so is his intention. For now, we consider the non-human autonomous actor to have no will or intention. Since the precautions to be taken when choosing to deploy an unmanned autonomous weapons system form part of subsequent

Articles, a reinterpretation of this Article to extend it in that direction is neither logical nor necessary.
Article 51.4(a) holds its own and is applicable to autonomous weapons systems. They may not be used to conduct attacks directed at non-military targets.

ad Article 51.4(b)
The use of an autonomous system incapable of attacking discriminately is not allowed. Article 51.4(b) of the first Geneva Protocol offers a straightforward prohibition. However, it is possible to develop autonomous devices that are able to discriminate or that can be programmed to attack a predefined set of military targets. Hence, the principle of distinction cannot be stretched to claim that all autonomous systems are prohibited.
With regard to autonomous systems capable of applying force discriminately but incidentally conducting an indiscriminate attack, the laws of war are also clear. Such acts are prohibited under Article 51 of the first Geneva Protocol. Here, however, the matter of accountability rises. Whereas a pilot applying force with excessive collateral damage can be held individually responsible, the same theory cannot be applied to an autonomous system. This matter will be discussed further below.

ad Article 51.4(c) io. Article 51.5(b)
There is no reason to expect autonomous weapons systems to be inherently less or more inclined to cause collateral damage than other methods of attack. All outcomes will depend on the quality of its sensors and the reliability of its algorithms. It does however, again, raise the issue of accountability when something goes wrong and an autonomous unmanned vehicle carries out an attack causing excessive damage.

Unnecessary Suffering
ad Article 35.2
There seems to be a general sense that being killed by an autonomous system is somehow 'worse' than being killed by another human being.[450] This has led some to argue that the use of autonomous weapons systems is inherently unethical.[451] However, there is little solid ground to base this approach on. The practical physical suffering of taking a bullet is not different because a robot instead of a fellow human has fired the shot. Arguing greater mental suffering would be a long shot and highly subjective. When an autonomous weapons system inflicts heavy pain before killing, it violates the principle of unnecessary suffering, just as a human actor would when doing the same. When an autonomous weapons system kills swiftly and relatively painlessly, there is no ground to claim a violation of the same principle -no matter how surreal, unfair, inhumane, or frightening it may feel.

[450] R.C. Arkin, 'Governing Lethal Behavior: Embedding Ethics in a Hybrid Deliberative/ Reactive Robot Architecture', in: *Proceedings of the 3rd ACM/IEEE international conference on Human robot interaction* 2008, (121-128).
[451] ibid., p. 8.

Precautions
ad Article 57.2(a)
Article 57 of the first Geneva Protocol clearly lays down the precautions to be taken before applying force. Translated to the responsibilities of an individual pilot, Lazarski illustrates the bearings of this duty: "During combat, pilots must meet a specific list of criteria before employing weapons on a target. Some of these criteria include: a positive identification of the target; minimized collateral damage; and no known malfunctions with the aircraft or the weapon that would preclude it from functioning normally. The pilot makes the final choice in a rapidly changing environment and is ultimately responsible for the result. The American public and the international community hold individuals and organizations accountable for the decision to use force. The same will be true for UCAVs".[452]
When deploying autonomous weapons systems like UCAVs (Unmanned Combat Aerial Vehicles), the vehicles should be capable of taking the same precautionary measures human actors can. As far as remote-controlled or semi-autonomous unmanned weapons systems are concerned, this is not an issue.[453] The precautionary measures are taken by a human actor individually responsible for complying with the laws of war and thus accountable for violations. The matter also poses few problems in dealing with fully autonomous systems. Those systems should be able to take those measures and if not, their autonomous use is a violation of the laws of war.

ad Article 57.2(c)
With regard to advance warning, the same caveats apply as discussed in §4.4.1 There is an area in which autonomous weapons systems might even improve the practical implementation of this Article. When such systems are deployed to guard locations or clear areas, they might be programmed to be more patient than human actors. Being more resistant to small arms fire and being more disposable, they might be programmed to give warning first, only opening fire when a threat has developed into an attack.

Accountability
Individual accountability for violations of the laws of war has been firmly established since the Nuremberg tribunals. When an individual violates the laws of war, he is accountable for his actions. Problems arise when autonomous weapons systems are capable of attacking discriminately and taking feasible precautionary measures, but do not.[454] Just as a pilot can make mistakes or act wrongfully, an autonomous system can attack indiscriminately due to a malfunction.[455] The major question than arises: who to hold accountable? Autonomous weapons systems are not moral agents and cannot be given a meaningful legal personality. However, attributing

[452] A.J. Lazarski, 'Legal Implications of the Uninhabited Combat Aerial Vehicle', in: *Air & Space Power Journal* 2002, (2), pp. 74-83, p. 79.
[453] J.J. Klein, 'The Problematic Nexus: Where Unmanned Combat Air Vehicles and the Law of Armed Conflict Meet', in: ibid., 2003, p. 5.
[454] ibid., p. 5.
[455] A.J. Lazarski, 'Legal Implications of the Uninhabited Combat Aerial Vehicle', in: ibid.2002, (2), pp. 74-83, p. 78.

accountability to a human actor active in deploying an autonomous weapons system poses problems of its own. As Klein puts it: "Would accountability lie with the civilian software programmers who wrote the faulty target identification software, the UCAV squadron's Commanding Officer, or the Combatant Commander who authorized the operational use of the UCAV? Or are they collectively held responsible and accountable?".[456]

§5.4.2 Necessity to remedy

The current laws of war are based on the notion of a human being clearly present in the loop. As Walzer puts it: "Soldiers can never be transformed into mere instruments of war. The trigger is always part of the gun, not part of the man".[457] It is exactly this ultimately human nature-affected conduct in war that allows the involvement of morality and regulation by the laws of war. When there is no human actor actively engaged in the process, it is not just the trigger that is part of the machinery -it is also the entity pulling it. Of course, there is always a human involvement to some extent, the setting of parameters and rules on which the unmanned system operates being an example. However, the more remote the human activity stands from the ultimate application of force, the more remote his responsibility and in turn accountability become.

Diffusing responsibility and accountability by transferring decisions to lifeless technological systems makes it hard for the laws of war to function. The laws of war are faced with human actors who are only remotely responsible, many actual specific force applying decisions outsourced to amoral yet logical agents of technology.

The diffusion of responsibility is broad, it is caused by multiple human actors (programmer, launcher, supervisor, controller), by the distance between the human controller and the target and by the element of control assumed by the technology. The more autonomous the unmanned vehicle's operation, the more pressing this issue of accountability becomes.

Although the laws of war might lack effective coverage of such situations, they are certainly not designed to leave accountability off the table, or, worse still, to transfer the negative consequences of this lack of clarity to the non-combatants they were set out to protect.

Given the far-reaching consequences of unmanned and autonomous systems, and the threatening 'gap' between the military's enthusiasm to expand their number and functions and its accountability for their actions, it is important that the laws of war find some kind of answer to the challenges they are confronted with.

[456] J.J. Klein, 'The Problematic Nexus: Where Unmanned Combat Air Vehicles and the Law of Armed Conflict Meet', in: ibid., 2003, p.6.

[457] M. Walzer, 'Just and Unjust Wars: a Moral Argument with Historical Illustrations', 2nd ed., Basic Books: New York, 1992, p. 311.

§5.5 Possible remedies

§5.5.1 Legal

Subsidiarity

In the previous Chapter, I considered a possible role for the principle of subsidiarity. There is no place for an absolute rule of subsidiarity regarding unmanned systems. One can of course prefer human deployment to override the use of unmanned systems. However, this would be based purely on an anti-unmanned vehicles view point and not on a balanced consideration of humanitarian concern and military necessity. Firstly, military necessity in itself suggests increasing use of unmanned systems to be important, since the technology reduces risk for military personnel and enables operations otherwise impossible with manned systems. Secondly, there is no proof that an unmanned system is more humanitarily problematic than a manned operation. An unmanned system can be worse, can be better, or it can be the same. A general subsidiarity demand requiring manned operations wherever possible does not seem to fit within the framework of the laws of war. Nor does it seem to serve its goals or a general humanitarian concern.

With subsidiarity as a prominent part of the proportionality equation there would be little room for unmanned and autonomous systems. Their problem, however, lies not in an alleged imprecision or inherently greater risk of a humanitarily worse outcome. The issue lies with accountability, rather than problems surrounding preventable collateral damage.

Accountability

With regard to accountability, the previous Chapter is relevant here again. When accountability is diffused because of the use of certain technology, it is hard to legally address such a situation. Deeming all that play a part in the process accountable for the entirety of consequences does not seem feasible, or just particularly without a clear negligent or malevolent actor. Dividing accountability among the actors based on their numbers but with no qualitative assessment is equally unappealing.

Taking a broader view, attribution of accountability on higher levels of the decision-making process might offer some solace. The one launching a UCAV is not the one deciding to deploy it rather than the other options. He is not the one deciding which equipment -accompanied by its own specific set of attributes, possibilities, military potential, and humanitarian risk- is to be used in the battlespace. This accountability regarding the political and doctrinal decision-makers can be, as stated in the previous Chapter, issued on an overall basis or relevance to certain periods of fighting. It could serve to complement the case-by-case assessment of the legality of individual actors' conduct when directly engaged in an operation. This might help close a looming and unacceptable gap in which no-one is held accountable for the humanitarily damaging actions of unmanned and autonomous systems. In other words: when the conduct of military personnel directly engaged in operations is valued in consideration of the circumstances in which they operate, the laws of war

should be able to hold those who created those circumstances accountable for the resulting humanitarian consequences.

§5.5.2 Doctrinal

When discussing autonomous weapons systems, one risks focus on haunting science fiction scenes rather than assessment of realistic scenarios. It is not in anyone's interest, let alone the military's, to carelessly deploy primitive killbots into a battle-space. Next to the risk of killing one's own, killing non-combatants is not on any modern military's wish-list. Even though the deployment of successfully functioning autonomous systems is on that list, there is still great doctrinal reluctance in considering deploying the systems already available. It is true that use of unmanned systems is already widespread and generates much military enthusiasm, but those systems are often not fully autonomous and are restricted to non-combat tasks. Great caution is applied in the experimental use of autonomous weapons systems, it having to overcome many fears and 'cultural opposition' within the military -not to mention 'world opinion and cultural bias' in general.[458]
In other words, it is in the best interest of the proponent of autonomous weapons systems to proceed with caution. The autonomous system must prove to be 'accurate and reliable', operating only under 'specific employment restrictions'.[459]

This current doctrinal tendency not only slows down the deployment of new unmanned and autonomous capabilities, but also allows humanitarily negative consequences to be foreseen within the careful decision-making processes involved. These can then be taken into account before any decisions to deploy new units are made. It means that when new unmanned or autonomous functions are used, one cannot claim to be unaware of potential detrimental humanitarian effects. This in itself serves to foster caution from those making the political and doctrinal decisions to push forward in the field. While not a legal or practical warranty, it does play an important role in countering overstated fears regarding the humanitarian conesquences of unmanned and autonomous systems. The trick is to maintain and foster this doctrinal caution. Though assuring legal accountability for when things go wrong is a good thing, preventing the imperfect technology's deployment in the first place is better.

§5.5.3 Technological

Autonomy
Autonomous systems are not unthinkable for our near future, although the doctrinal hurdles are larger than the technological ones. The demands of what an autonomous system should be capable of before we are willing to deploy it are high. There is much caution and skepticism towards claims for autonomous systems, especially after the overselling around the previous wave of 'Artificial Intelligence'.

[458] A.J. Lazarski, 'Legal Implications of the Uninhabited Combat Aerial Vehicle', in: *Air & Space Power Journal* 2002, (2), pp. 74-83, p. 78.
[459] J.J. Klein, 'The Problematic Nexus: Where Unmanned Combat Air Vehicles and the Law of Armed Conflict Meet', in: ibid., 2003, p.6.

The yardstick nowadays seems an extension of the Turing test.[460] Only when the autonomous system is capable of making decisions of the same quality as human beings (e.g. distinguish equally well between combatants and non-combatants) should the autonomous systems be allowed.

Going one step further, the 'risks' of autonomous systems not being inherently moral agents could also represent benefit. Rather than being equally able to make decisions as human beings, autonomous systems could well be designed to be better at it. Although the laws of war are based on a complex weighing of factors rather than unambiguous absolute rules, it is not unthinkable that those rules could be embedded into technology.[461] It would be a very complex exercise, as the calculations of Arkin show, but not impossible.[462] This is not merely the creative idea of cutting edge scientists, but a program seriously looked into by the US military. As Dr. Allen states: "The question they want answered is whether we can build automated weapons that would conform to the laws of war."[463]

If such a project succeeds, it would be hard to argue against the use of autonomous systems solely from the viewpoint of humanitarian concern. If a drone is ordered to fire, it will fire. If a human being is ordered to, he might not. If a drone is ordered to fire only when in compliance with the laws of war, it will. When a human being is told the same, he might not.

Disposability

A different type of technological remedy lies in the autonomous system not representing a human life. It therefore has no right to self-defense and is, though at high economic cost, dispensable.[464] Where a human being cannot in absolute terms, amidst the fog of war and possibly under fire, be demanded to overcome all doubt before applying force, an autonomous system can, and should, be programmed to do so.

In addition, in terms of aerial autonomous systems, they could be programmed to fly at lower altitudes than manned aircraft -thus lowering the risk of collateral damage without increasing risk to aircraft personnel.[465]

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[460] The Turing Test is a yardstick of artificial intelligence met when a human is interacting with another human and a computer system is not able to distinguish between them in conversational interaction.

[461] Perri, as reffered to in: R.C. Arkin, 'Governing Lethal Behavior: Embedding Ethics in a Hybrid Deliberative/ Reactive Robot Architecture', in: *Proceedings of the 3rd ACM/IEEE international conference on Human robot interaction* 2008, (121-128), p. 8.

[462] ibid.

[463] T. Shipman, 'Pentagon hires British Scientist to help build Robot Soldiers that will not commit War Crimes', in: *The Daily Telegraph* 2008.

[464] R.C. Arkin, 'Governing Lethal Behavior: Embedding Ethics in a Hybrid Deliberative/ Reactive Robot Architecture', in: *Proceedings of the 3rd ACM/IEEE international conference on Human robot interaction* 2008, p. 11.

[465] J.J. Klein, 'The Problematic Nexus: Where Unmanned Combat Air Vehicles and the Law of Armed Conflict Meet', in: *Air & Space Power Journal* 2003, p. 8.

Combined, embedded legal parameters and a higher rate of sacrifice acceptance, could very well counter any humanitarian concerns posed by autonomous weapons systems, the overall humanitarian effect possibly being beneficial. This is not to say that regulating the downsides should be left aside. Overall though, it seems clear that the humanitarian perspective for the use of autonomous weapons systems is far from being unequivocally negative.

§6 Cyber Warfare

Related to the aspect of unmanned warfare is cyber warfare. Our societies, military as well as civilian, rely heavily on networked systems. A large part of the work done by those systems is automated without a human decision necessary to further the work. One part of the system being harmed can quickly and easily spread without a human begin noticing. The dependency of society on these interconnected information infrastructures has created new vulnerabilities. Physically destroying roads and power structures still represents great harm to society, although similar effects can now be achieved through less obtrusive, less expensive, less risky and less visible means. As Detter states: "These are not those which harm individuals, in any physical sense, but tools which may incapacitate defense capabilities and, in that way, destroy an enemy without even approaching a battlefield".[466]

§6.1 What is it?

Cyber Warfare can be conducted from a large distance and in a number of ways. One can alter small things while remaining undetected, causing systems to function in ways other than they were intended. Equally, one can use Computer Network Attacks (CNA) to paralyze entire systems.[467] One can aim at destroying a system or network e.g. through viruses; at misleading and disrupting by changing information in the network; and at suspending services e.g. by overloading a system with DDoS attacks[468] -the possible targets ranging from automated defense systems and financial infrastructure to power plants and communication hubs.[469] Take for instance the GPS systems that the military and civilians alike are now so heavily dependent upon. One could launch space missiles to take down all GPS satellites, or alternatively hack into the Protocols and alter their operational algorithms. I am not saying the latter is easy, but it is less costly and obvious to those suffering the attack, while achieving similar strategic results.

Cyber Warfare is not just the domain of small terrorist groups or adventurous hackers, even though it has an extra appeal to unconventional fighters. As an alternative mode of warfare it offers a real chance of success, very different from

[466] I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p. 272.

[467] M.N. Schmitt, H.A. Harrsion Dinniss and T.C. Winfield, 'Computers and War: The Legal Battlespace', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2004, p. 2.

[468] DDoS: Distributed Denial of Service. Can be as simple as having multiple computers requesting information from a website at the same time, overloading a system's capacity.

[469] I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p. 272.

their chances in attempting to engage a technologically superior enemy conventionally.[470] It is now also an element of general strategy for traditional armies. It might help to think of a distinction between kinetic and non-kinetic weaponry. The military sets out to achieve strategic goals, not necessarily to blow things up and shoot people. Cyber Warfare offers an arsenal of non-kinetic force, weapons that can be applied to achieve tactical and strategic military goals without requiring the physical destruction of targets.[471]
With an increasing reliance on networked systems to help or even replace human soldiers, this type of warfare has a bright future ahead. The military benefit of successfully targeting the network will continue to grow.[472]

§6.2 Driving technology

Describing the technologies driving Cyber Warfare is both simple and complex. It is simple, since most readers will be familiar with computers, mobile devices connecting to the internet wirelessly and viruses bogging down the systems that they use.
It is also complex, as the number of technological devices applicable to Cyber Warfare are endless. There is no real 'weapon' *per se*. There is not a technology whose sole purpose is the waging of Cyber Warfare. The same technology enabling us to work in a technological networked environment can be both used to wage Cyber Warfare and become a target of it.

§6.3 Humanitarian challenge

The biggest challenge lies in the potential objects and functions that could be affected by acts of Cyber Warfare. In an essentially networked environment, it is difficult to pinpoint an attack to only affect military targets. Most networks are crucial in supporting numerous systems -civilian and dual use ones included.[473] The chances of a Cyber Warfare attack aimed at a military target also afflicting civilians are immense. A Cyber Warfare attack does not take out a tank, an airplane, or a soldier. It takes down a navigation network, air traffic command, or power supplies.[474] In addition, the target at which the attack is aimed in Cyber Warfare is significantly less distinct than in Conventional kinetic warfare -the reach in terms of 'eventually affected objects' could be far greater. The attack might be aimed at a

[470] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.
[471] W. Arkin, 'Not Just a Last Resort?: A Global Strike Plan, With a Nuclear Option', in: *The Washington Post* 2005, p. 1.
[472] M. White, 'The Fruits of War: how Military Conflict Accelerates Technology', Simon & Schuster: London, 2005, p. 345.
[473] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 42.
[474] M.N. Schmitt, 'The Impact of High and Low-Tech Warfare on the Principle of Distinction', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2003, p. 10.

computer network managing energy infrastructure, but might cause a hospital to suffer prolonged blackouts, hundreds of people possibly dying as a result.
With most military targets depending on many of the same networks that civilian society does, most of the potential targets for a Cyber Warfare attack are to some extent dual use. In addition, the increasing reliance on networked functions increases the military value of those targets, lowering the threshold for their permitted attack. According to the proportionality rule, the collateral damage required for such an attack to be prohibited would increase dramatically. As the civilian reliance on those same or connected networks increases, so does the potential for civilian harm. With the latter also affecting claims of collateral damage though, this growth in all aspects might balance itself out. However, a tendency towards a broader interpretation of what targets can be legitimately attacked in Cyber Warfare is looming.

§6.4 The laws of war

§6.4.1 Current status

Cyber Warfare is an area to which no specific regulation is devoted within the laws of war, leaving us with the familiar general principles applicable to all war related conduct.[475]

Discrimination
The principle of discrimination demands all application of force to represent military necessity in order to be legal.[476] Although Cyber Warfare mostly goes without the application of kinetic and/or physical force, there is no reason to be more lenient in respect of the targets it can legally attack. Acts of Cyber Warfare have to meet the same standard of discrimination we have already seen posed by Article 48 of the first Geneva Protocol.

Inherently indiscriminate
The principle of distinction primarily prohibits the use of inherently indiscriminate means and methods. As most of our modern means of helping us to discriminate between combatants and non-combatants are computer-based, it is easy to grasp that computers in themselves are not incapable of discrimination. They can either be programmed to destroy everything, or to target with great accuracy. The use of computers in attack is therefore not prohibited, although the attack must still be targeted at a military objective and meet with the demands of proportionality.[477]

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[475] M.N. Schmitt, H.A. Harrsion Dinniss and T.C. Winfield, 'Computers and War: The Legal Battlespace', ibid.2004, p. 5.
[476] R.W. Aldrich, 'The International Legal Implications of Information Warfare', USAF Institute for National Security Studies: Colorado Springs, 1996, p. 7.
[477] M.N. Schmitt, H.A. Harrsion Dinniss and T.C. Winfield, 'Computers and War: The Legal Battlespace', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2004, p. 5-6.

Proportionality

Means and methods used discriminately must meet the proportionality demand as phrased in Article 51.5 of the first Geneva Protocol. The non-combatant suffering may not be excessive with regard to the anticipated military gain. Questions might arise as to what extent suffering resulting (indirectly) from an act of Cyber Warfare should be taken into account in balancing proportionality. The networked character of the infrastructure attacked by Cyber Warfare makes unforeseen and unintended consequences more likely than when attacking physical structures. Of course, when arguing more lenience toward unforeseen collateral damage, pointing at the nature of cyberspace can only allow one to go so far. Extending the argument too much suggests a weapon with likely effects cannot be properly foreseen. If this were the case, it could certainly not be controlled enough to meet the demand of discrimination. The obligation to take precautionary measures cannot be reconciled with too lenient a view regarding unforeseen damage as 'just too bad'.[478]

However, the grey zone between leaves room for debate, especially when factors on the defensive side also contribute to the damage done to non-combatants (weak security, irresponsibly linked systems, faulty backup facilities etc.).

Perfidy

Article 37 of the first Geneva Protocol states:

> It is prohibited to kill, injure or capture an adversary by resort to perfidy. Acts inviting the confidence of an adversary to lead him to believe that he is entitled to, or is obliged to accord, protection under the rules of international law applicable in armed conflict, with intent to betray that confidence, shall constitute perfidy.[479]

We have already discussed the difference between legal ruses and illegal perfidy. These principles are equally applicable in the use of Cyber tactics to wage war. Chances are that you yourself have suffered a virus on your computer system. This was probably not the result of you writing a virus and executing it yourself, or opening a 'virus.exe' e-mail attachment from a close and trusted friend recommending it: 'Hi, here's a great little virus that will destroy all your valuable data. Do not forget to double-click and lose everything!'. Most Cyber attacks come in disguise, be it an e-mail telling you someone loves you, pictures of attractive female tennis players or an external hacker posing as an internal system terminal by cloning its identification data.

Depending on the circumstances, such trickery could be either a ruse or a perfidious act. The crucial element is whether or not the victim was wrongfully convinced of communication with a trusted source recognizable by emblems, symbols, signs or status protected under international law.[480] One might argue that posing, even digitally, as being part of the enemy's military or a neutral party constitutes perfidy. It might be as simple as masking as member of the ICRC, sending a virus disguised as

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[478] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art. 57.2.

[479] ibid., Art. 37.

[480] R.W. Aldrich, 'The International Legal Implications of Information Warfare', USAF Institute for National Security Studies: Colorado Springs, 1996, p. 10.

a report on alleged war crimes. This would violate the laws, regardless of the damage ultimately done by the virus.

§6.4.2 Necessity to remedy

There is no reason to regard Cyber Warfare as inherently inhumane or any worse than more Conventional forms of warfare. In fact, it might well offer more humane results in taking out an enemy's fighting capability without the need for kinetic force. However, it might also render horrifyingly inhumane results. Medical and food facilities could be disrupted for extended periods as (indirect) consequences of the disruption of society's networked structures.

Cyberspace and battlespace
Looking at these provisions of the Geneva Protocol as also being part of customary international law, a technical complication arises. The Geneva Conventions are applicable to armed conflict at land or at sea. Other Conventions deal with air and space. Cyber Warfare, however, takes place in 'cyberspace'.[481] Of course, servers, hubs, nodes, terminals etc. exists in real space, but are not restricted to land, sea, air, or outer space. Even a simple personal computer might link to the internet via land (cable) or space (wireless LAN, satellite uplink). The shift from battlefield to battlespace has now been extended to warfare within the virtual realm of cyberspace.
In addition, an act of Cyber Warfare might make use of communications technology based in outer space (satellites). In that case, we cannot speak of war at sea or over land. Cyber Warfare, by its very nature, is not restricted neatly to one or two realms. There is no clear moment of crossing the border between realms. It can take a path over land, air, sea and space, bouncing back and forth between them. This is not necessarily the result of an elaborate scheme made up by the attacker. It is due to the World Wide Web being programmed to route information the quickest way possible at any given time. This could equally be directly from A to B or from A to B via multiple hubs in and outer space.

Hidden perpetrator
Earlier in this Chapter, we noted difficulties arising from large distances between the one applying force and the target. We have also seen difficulties arising from a virtualization of the point of view of the one applying the force. Cyber Warfare takes these issues a few steps further. First, distances in space and time are complicated by the attacking source's location being obscured. A network attack might come from your neighbor, but be routed in such a way that it travels around the world a few times before reaching you.
This makes it very hard to find out who is responsible for the act of Cyber Warfare and thus who should be held accountable. In a military strategic sense, this is highly problematic. An attack from an unknown source makes it nearly impossible to respond, be it with force or diplomacy. From the side of the *jus ad bellum* this is problematic, since one can hardly establish the legality of force used if one does not know who used it. From the *ius in bello* viewpoint, problems lie with the lack of

[481] ibid., p. 7.

accountability. This difficulty in finding out who is accountable could make this kind of warfare more tempting. More worryingly, it might also tempt violation of the laws of war since one has a very good chance of never being caught for a misdemeanor.

Spillover effects

An act of Cyber Warfare not only has to be aimed at a military target, but also has to meet demands of discrimination. This is more complicated with regard to Cyber Warfare than with more Conventional methods. Disrupting a networked object by, for example, rerouting its parameters might disable military communications or satellite navigation. Such efforts made without spilling over to other, civilian targets, cannot be said to be prohibited. Even if civilians are affected, the legality might still stand. Losing all satellite navigation capability is a significant problem for civilian traffic in addition to a large blow to military effectiveness, but the civilian costs are much lower than a bomb hitting a control tower and collaterally killing twenty civilians.

Another larger issue lies with the spillover throughout a network that an act of Cyber Warfare might create. Disrupting communications might lead to failures in the power supply. This would not only increase the military gain, but might also cause disproportional humanitarian suffering. Of course, the fact that an attacker cannot foresee the full extent of damage done by his actions does not rid him of responsibility for it. Article 51.4(c) is clear in stating that indiscriminate, and thus prohibited, attacks consist of: "those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol".[482] Weapons that cannot be controlled once they are deployed are prohibited. Granted, in its drafting the authors were more concerned about the use of free floating contact mines, but the logic applies to Cyber Warfare as well.[483]

An act of Cyber Warfare is only allowed when using means and methods able to be used in a discriminate fashion. If the nature of cyberspace complicates the control over a weapon (virus, DDoS attack), that weapon is not allowed to be used.

However, there is a grey area to be dealt with. The extent to which an attack causes spillover effects and thus more consequences than could be reasonably anticipated by the attacker varies greatly, is dependent upon many circumstances. The indirect and unforeseen (sometimes even unforeseeable) consequences often only come to the fore over an extended period of time. Rather than an attacker not immediately realizing the full extent of the damage done by his actions, he might not ever be aware of them. The longer it takes before certain consequences arise and the more indirect their relation to the original act of Cyber Warfare, the less clear the accountability of the original perpetrator is.

This is not unique to Cyber Warfare, but the chances of it occurring are certainly larger. Conventional warfare can also have long-term consequences disrupting

[482] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art. 51.4(c).

[483] K.W. Kuschner, 'Legal and Practical Constraints on Information Warfare', in: *Air & Space Power Journal* 1996, p. 4.

society, although the extent to which this damage is taken into account in assessing the proportionality of an isolated act of warfare is limited.

In this case, as with the other war-changing tendencies discussed in this Chapter, the timeframe is an issue. The nature of Cyber Warfare is often a small act having a specific effect but with many subsequent aftereffects. The initial move sets in motion a spiral of events only fully recognized over a prolonged period of time. The act itself might have been weeks or months ago by the time the full effects are realized. The more effects one wishes to take into account, the more difficult it becomes to legally execute an act of Cyber Warfare. The approach of looking at the 'frozen moment in time' when the attack was carried out makes little sense with the ongoing nature of the aftereffects. Nonetheless, this problem noted, acts of Cyber Warfare cannot be deemed inherently less humanitarian than other methods achieving the same military goals. In a good number of cases, it might even be a 'less than lethal' way of achieving military gain. The laws of war have to remain in their balancing act. A one-sided interpretation aimed at restricting Cyber Warfare's legality as much as possible might not offer the most humanitarian benefit.

§6.5 Possible remedies

§6.5.1 Legal

Cyberspace
With Cyber Warfare not being restricted to clearly defined areas and the laws of war being directly applied to warfare at land or at sea, the possibility of debate surrounding the laws' inapplicability arises. Of course, one could argue that the fundamental principles of the laws of war are applicable to all, in all acts of armed conflict, whatever their nature.
Earlier this Chapter we noted that those basic principles are, perhaps remarkably, reasonably well suited to regulating Cyber Warfare. In my view, creating an entire set of principles and laws tailored to Cyber Warfare would not be the best approach. Clearly codifying and extending the existing principles and rules to cover Cyber Warfare would suit better.

Hidden perpetrator
To be blunt: law has few tools to fix this issue. The law requiring that one makes oneself known is a nice way of closing the gap on paper, but will have little effect in practice. If one violates such a rule by not making oneself known, we are back to square one, faced with the problem of still being unable to identify who it is that should be punished.

Subsidiarity
When discussing other current important changes in the way wars are fought, I already pointed to the reinforcement of the subsidiarity principle to remedy challenges to the laws of war. The same goes for the challenges posed by Cyber Warfare, although subsidiarity would work slightly differently in this case. Instead of demanding less grave means, it would introduce an obligation to use the Cyber

Warfare means least likely to spillover and extend damage to objects other than the ones targeted. One could imagine this effectuated by a virus programmer not only building in parameters on which to act, but also on which not to act.

Timeframe
Although similar to the previous suggestion, the reason to take a broader view in addition to assessing the legal merits of isolated acts of warfare is slightly different. It lies not so much in the conditions resulting from choices made in the higher echelons of political and military control, but in the higher likelihood of spillover and long-term effects in Cyber Warfare.
The fact that not all of these consequences can be reasonably foreseen should, however, not simply excuse perpetrators and allow the victims taking the brunt. Although the consequences themselves might not be reasonably foreseen, the fact that unforeseeable, humanitarily negative consequences will occur certainly *is* predictable. This inherent uncertainty accompanying most acts of Cyber Warfare is a risk that should be carried by the party deciding to use these means and methods of warfare.

Special protection of objects
Cyber Warfare poses a very direct threat to the fabric of society and vital civilian processes. Taking out power grids and communications systems could bring tremendous harm to non-combatants. Since such acts can clearly serve a very important military purpose as well, these dual-use targets are not strictly off limits.
The laws of war are not new to such a problem. Some objects are rewarded special legal protection, regardless of the amount of military benefit that can be derived from an attack that would, collaterally, destroy such an object. Next to the well-known categories of medical facilities,[484] cultural objects and religious objects, Article 54 of the first Geneva Protocol states:
"It is prohibited to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population".[485]
One could interpret this clause to award protection to objects such as power plants, and other items with grave importance to the survival of a society. However, the rest of the Article lists examples that do not point in that direction: "such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works".[486]
These examples do not exclude other objects from falling under this protection, although it does set them up to challengeable interpretations. Since the examples listed all point to matters of sustenance, arguing that objects such as power plants are also protected due to their indispensability to the civilian population's survival would, in my view, be broadening the Article's coverage. One could argue that modern information network infrastructure is very important in society, but not vital.

[484] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art 12.
[485] ibid., Art. 54.2.
[486] ibid., Art. 54.2.

In direct terms, the population can survive without internet and telephone. However, when taking into account the indirect effects, the picture might change. Crucial facilities for production and distribution of food, medical care, and public order are currently heavily dependent on information and communications technology. As Schmitt states, a snowball-effect could have grave consequences for civilians: "an attack on an electrical grid may disrupt water treatment, which in turn may affect sanitation and result in a health crisis for the affected population".[487] One could, of course, take this as a warning of us becoming too dependent on technology, placing responsibility on the attacked side for not having separated military and civilian networks.[488] However, one could also still deem the technology important enough to grant it legal protection under the laws of war.

Certainly, these consequences should already be taken into account under the proportionality principle. However, the further down the mountain the snowball rolls, the less pressing the accountability for foreseeing what it will take with it.[489] Personally, I think scope for such a broadening cannot be found within the current Article. It does, however, offer the logic to plea for an extension. Such an extension could serve to remedy the new threats posed by Cyber Warfare in a fashion fitting with the existing rationale of the laws of war.

§7 Non-lethal weapons

Non-lethal weapons might sound like the humanitarian silver bullet. You can still fight and nobody dies. Of course, reality is less simple and less positive.

Historically, war has been about the physical disablement of enemy objectives and personnel. The focus lay on effective disablement, not on diminishing the consequences for the ones being hit. However, civilian and police technology, concern for the 'hearts and minds' of the population living in the battlespace and witnessing the operations and their effects, and increased media coverage showing people back home the effects for which they are electorally responsible, all contribute to the modern desire for an alternative to killing an enemy with bullets.

It should not come as a surprise that the number of 'less-than-lethal' and non-kinetic weaponry in the battlespace is still increasing.[490] This is not the result of militaries going soft, but the reflection of a strategic shift. It complies with what Breemer describes as "a transition, in thought and practice, from a way of warfare that is centered on the notion of destruction to one that has paralysis as its "center of gravity".[491]

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[487] M.N. Schmitt, H.A. Harrsion Dinniss and T.C. Winfield, 'Computers and War: The Legal Battlespace', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2004, p. 8.

[488] ibid., p. 10.

[489] ibid., p. 9.

[490] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 55.

[491] J.S. Breemer, 'War as We Knew it: the Real Revolution in Military Affairs, Understanding Paralysis in Military Operations', Center for Strategy and Technology, Air War College, Air University: Maxwell Air Force Base, 2000, p. 1.

§7.1 What is it?

Non-lethal weapons are easy to understand, but a bit harder to define. Firstly, it is not theoretically impossible for someone to succumb after being hit by a non-lethal weapon. The 'non-lethal' part lies in death not being the purpose of the weapon. Secondly, being hit by a non-lethal weapon is not to be seen as entirely harmless. Permanent injury can still occur, depending on the specifics of the weapon. Examples might paint a better picture than mere definitions. Fairly common non-lethal weapons include tear gas, flashbangs, sticky foam, heating microwaves, disorienting laser beams or noises, corroding chemicals, defoliating substances and carbon fibres disrupting power grids among many others.[492]

§7.2 Driving technology

The rise of non-lethal weaponry is not the result of a technological breakthrough suddenly making them possible. Some of them, like the net-cannon, would have been possible long before. Others find their origin in more recent advances in chemistry, like sticky-foam.
The rise in number and variety of non-lethal weapons is the result of shifts in political and doctrinal focus. The desire to have such weaponry spurred creative minds to design and produce them. The call from the military for means to disable an enemy without killing him spurred many to take a closer look at all manner of technology through different colored glasses. Though technology is indispensable in creating all sorts of inventive ways to 'disable but not kill', it is much more of an enabler than a driver. The range of technological fields contributing to the arsenal of non-lethal weapons is virtually unlimited. The number of effects that can be useful is large, the number of ways to achieve those effects exponentially larger.[493] Disorientation, pain, nausea, blindness, and immobility can all come about, whether by chemical or biological agents, sonic frequencies, laser beams, heating waves or nanobots.

§7.3 Humanitarian challenge

Opponents of non-lethal weapons often point out a concern that non-lethal weapons lower the threshold for violence, endangering the protection of civilians as a result. It is certainly a difficult matter to decide where the line should be drawn regarding the 'less civilians dead, more permanently injured' situation. How many permanent injuries outweigh the sparing of a life? In addition, the notion that any injury is more humane than death is not shared by all. The debate on whether or not to prohibit blinding laser weapons raised the notion of certain non-lethal weapons actually being 'worse than lethal'.[494]

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[492] K. Homan, 'Van Pepperspray tot Lasergun', Rathenau Instituut: Den Haag, 2005, p. 52.

[493] M.N. Schmitt, 'Bellum Americanum: The U.S. View of Twenty-first Century War and its Possible Implications for the Law of Armed Conflict', in: *Michigan Journal of International Law* 1998, 19 (Summer 1998), pp. 1051-1090, p. 1066.

[494] C. Coker, 'The Future of War: the Re-enchantment of War in the Twenty-First Century', Blackwell: Malden, 2004.

Whether non-lethal weapons truly pose a humanitarian challenge is a difficult and inherently subjective debate. It can obviously be said to be of clear humanitarian benefit if someone is only temporarily disabled by a non-lethal weapon as opposed to being indefinitely disabled by a lethal one. However, as the ICRC points out, not everyone disabled by a bullet dies from it, it happening to 'only' a quarter of those shot.[495] This as opposed to being disabled by a blinding laser weapon that causes permanent blindness in almost all cases. Of course, in most cases in which one survives being hit by a lethal weapon, one will still suffer permanent injury comparable to that done by non-lethal weaponry.

There is also a challenge to the humanitarian equation in banning certain non-lethal weapons. They can enable the military to achieve their goals with less violence. Regarding the blinding laser weapon example, one can imagine a combat zone full of blind combatants no longer able to engage in combat, instead of the combat zone filled with corpses. The focus on banning blinding laser weapons carries, to some degree, an irrational element fuelled by the horror of becoming permanently blind. The alternative, however, is not objectively more humanitarian. Or, in the clear words of General Clark: "But then, there are these quirky things: like we do not mind decapitating you, tearing your legs off, but please do not blind people with lasers - that is too horrible".[496]

Whether one deems a high chance of dying to be more or less horrible than a higher chance of grave injury has persistently proven to be an issue of personal opinion. In my view, non-lethal weapons carries the potential to form a humanitarily beneficial contribution when used in stead of lethal weapons or to prevent situations from escalating to where lethal violence is necessary.

§7.4 The laws of war

§7.4.1 Current status

There is no specific body of international law concerned with non-lethal weapons as such. Nor are all pre-existing rules developed with lethal weaponry in mind adaptable to this new class of weaponry.[497] The repeatedly discussed rules of the laws of war regarding all weaponry are of course also applicable to non-lethal weapons.[498] In addition, a few Treaties do pay explicit attention to non-lethal weaponry. Their merits will be discussed in this paragraph.

[495] N. Elm, 'The Business of Unethical Weapons', in: *Business Ethics: A European Review* 1998, 7 (1), pp. 25-29, p. 28.

[496] J. Der Derian, 'Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network', Westview Press: Boulder, 2001, p. 196.

[497] D.A. Koplow, 'Non-Lethal Weapons: the Law and Policy of Revolutionary Technologies for the Military and Law Enforcement', Cambridge University Press: Cambridge, 2006, p. 35.

[498] ibid., p. 44.

Special Provisions

Chemical Weapons Convention

Logically, the Chemical Weapons Convention applies only to non-lethal weapons using chemical agents. Since chemical agents are often 'dual-use', i.e. also being applied for peaceful purposes, only 'toxic chemicals' are prohibited. The definition of toxic not only covers deadly chemicals, but also those capable of 'temporary incapacitation or permanent harm' -thus encompassing the intended and/or likely effects of non-lethal weapons.[499] This should, however, not be mistaken for a prohibition on devices using toxic chemicals. Non-lethal weapons are still allowed under the explicit clause of 'law enforcement including domestic riot control purposes'.[500] However, the fact that these weapons themselves are allowed does not mean they can be used for warfare. Article I of the CWC clearly states: "Each State Party undertakes not to use riot control agents as a method of warfare".[501]

Regarding these provisions, it would take a highly flexible argument to suggest much room for the use of chemical non-lethal weapons in war. Anyone holding a negative opinion toward the humanitarian value of non-lethal weaponry might be relieved at this, since at least the chemical variety seems banned from the battlespace. Anyone seeing non-lethal weaponry as an opportunity for more humanitarian ways of waging war could be concerned though. As the laws intended to improve the humanitarian condition apparently turn out to be counterproductive. In this case, the legal barrier against the use of chemical non-lethal weaponry would actually ensure the use of more lethal weaponry.

Depending on one's stance, the CWC either does a good job preventing (at least) some non-lethal weaponry, or poses a barrier to the humanitarily beneficial substitution of non-lethal for lethal weaponry.

Biological Weapons Convention

The effect of the Biological Weapons Convention (BWC) on the legality of non-lethal weapons' use is slightly blunter than that that of the CWC.[502] As far as biological non-lethal weapons go, the Treaty prohibits their use, leaving no exception for riot control purposes. Article I of the BWC states:

> Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain:
> (1) Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

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[499] ibid., p. 36-37.

[500] Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, Paris, 1993, Art. II.9(c).

[501] ibid., Art. I.5.

[502] D.A. Koplow, 'Non-Lethal Weapons: the Law and Policy of Revolutionary Technologies for the Military and Law Enforcement', Cambridge University Press: Cambridge, 2006, p. 42.

(2) Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.[503]

Thus, the assessment of this regulation's merits is much the same as with regard to the CWC: it depends on one's opinion of the humanitarian merits of non-lethal weaponry.

Convention on Certain Conventional Weapons

The previous example of blinding laser weapons is the exception to the rule. It is clearly and expressly prohibited as a non-lethal weapon. Moreover, they were prohibited before being deployed in battle[504] -another exceptional feature of Protocol IV to the CCW.[505]

As the discussion on the merits of non-lethal weapons shows, some non-lethal weapons stir considerable emotion.[506] This was particularly the case with blinding laser weapons. The notion of permanently blinding combatants (let alone non-combatants collaterally) to place them *hors de combat* does not fit well with a humanitarian image of non-lethal weapons being preferable to lethal ones. Protocol IV had to walk a thin line, the notion of lasers in the battlespace itself not being the core of the issue. Lasers are common and mostly function as a targeting aid, improving the precision of weaponry in general. Thus, ultimately, only weapons that intentionally cause irreparable permanent blindness are prohibited. Blinding a person as a collateral effect is even expressly accepted.[507]

Here we witness a clear obstacle to the development of non-lethal weaponry. As long as they replace lethal weaponry with a temporary disabling effect, they are, though cautiously, welcomed as being humanitarily benign. However, when their *modus operandi* consists of disablement through permanent damage the image changes. The fact that non-lethal weapons, whatever harm they cause, do not kill is not enough. When faced with the viable alternative being lethal weaponry replacing blinding laser weapons, the international community has chosen to take the risk of that alternative, banning blinding laser weapons from warfare.

Once more, the answer to the question of whether this prohibition is humanitarily beneficial or not depends on one's opinion of whether risking blindness is worse than risking death.

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[503] Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, London, Moscow, Washington, 1972, Art. I.

[504] Although some allegations have been made by Argentinean pilots that they were disoriented by British lasers, permanent blindness as result of laser weaponry has not been reported. Also: N. Elm, 'The Business of Unethical Weapons', in: *Business Ethics: A European Review* 1998, 7 (1), pp. 25-29, p. 28.

[505] McClelland, 'Conventional Weapons: A Cluster of Developments', in: *International and Comparative Law Quarterly* 2005, 54 (3), pp. 755-766, p. 759.

[506] D.A. Koplow, 'Non-Lethal Weapons: the Law and Policy of Revolutionary Technologies for the Military and Law Enforcement', Cambridge University Press: Cambridge, 2006, p. 42.

[507] ibid., p. 43.

General Provisions
Discrimination
The obligation to only employ weapons capable of distinguishing between combatants and non-combatants and to deploy them accordingly is no different for non-lethal weapons. The same rules, challenges and demands we have come across before in this Chapter apply.[508]
With regard to non-lethal weapons, one caveat has to be mentioned. Although not all, a significant portion of non-lethal weapons originate from a desire to control and/or contain large numbers of people. These mass-immobilizers are indiscriminate by nature and thus cannot be legally deployed in war. One could argue though that this prohibition is not humanitarily beneficial *per se*. Temporarily immobilizing a group of people without permanent harm might be preferable to killing specific individuals in that group, regardless how discriminate the plan was executed.

Unnecessary suffering
Most non-lethal weapons are covered by the laws of war through the application of their general principles and clauses. Use of non-lethal weapons should be discriminatory and proportional, not causing unnecessary suffering. Herein again lies the difficult part. Where a direct lethal hit has to be scrutinized in terms of proportionality and discrimination, it causes no unnecessary suffering since it is directly lethal. A non-lethal weapon, however, might spare a life but cause unnecessary suffering. Being permanently blinded just a few seconds before dying would hardly constitute unnecessary suffering. However, being permanently blinded without being killed is explicitly prohibited, deemed to lead to unnecessary or at least inhumane suffering. In a bitter logic, placing the victim hors de combat by other means could also prevent the suffering: a direct lethal hit.

The fact that non-lethal weapons are designed to place an enemy *hors de combat* (which is mostly accompanied by some kind of suffering) without killing him, changes the practical outcome of applying this once purely sound principle. Lethal weapons bring suffering but often bring death as well. Death has little benefit over incapacitation, but carries the legal benefit of immediately putting an end to suffering, whether necessary or unnecessary. Non-lethal weapons spare lives, but might prolong suffering. Paradoxically, the prolonging of suffering (and thus prolonging the time the enemy is *hors de combat)* might just be the aspect that would allow a military to let the enemy live.

The principle of the prohibition of unnecessary suffering was not designed with a dilemma between lethal and non-lethal weapons in mind. The choice was between dying with or without prolonged suffering. Bullets were being devised not only to kill, but to kill slowly and painfully, with no added military benefits. The laws of war aimed at opposing such tendencies. When these old principles are confronted with the unforeseen notion of non-lethal weaponry they can have different, even

[508] ibid., p. 45.

counterproductive effects. The rules resolved an old juxtaposition, but might cause further problems to a new one.

§7.4.2 Necessity to remedy

As repeatedly stated, there is no unequivocal assessment of the impact of non-lethal weaponry in the battlespace. Not even in taking a purely humanitarian point of view does it become clear how to treat non-lethal weapons. The necessity to remedy is thus equally dependent on one's opinion regarding the degree to which non-lethal weapons offer a chance to improve the humanitarian condition in the battlespace. Some may feel that they actually represent a threat. Taking the view that they do offer a positive solution, one could argue that the laws of war should be remedied - eradicating humanitarily counterproductive barriers resulting from applying the same rules to both lethal and non-lethal weapons.

Leaning towards the second stance, one could be quite satisfied with the current laws of war. With no discrimination between lethal and non-lethal weapons, the same standards regarding suffering have to be met by both. However, in taking this stance, a few further dilemmas arise that also need to be addressed.

Worse than lethal notion

One such dilemma regards how the laws should value permanent injuries caused by non-lethal weapons. As we have seen with blinding laser weapons, an 'everything is better than death' approach does not reflect general consensus. From a legal point of view, such an approach would have the benefit of clarity: the line between being injured and being dead can be clinically and objectively drawn. Since this approach receives no consensus, the laws of war have to, once again, deal with a distinction based on interpretation, personal preference and a grey area. While permanent blindness is apparently considered 'worse than lethal', clearly not all permanent injury surpasses death in this sense. Permanent injury is as old as warfare itself and often the result of being hit by lethal weaponry. In fact, the percentage of victims hit by lethal weaponry actually dying is relatively small. Logically, there has never been a decree demanding that all combatants who are injured be killed as soon as is possible. In fact, the entire notion of *hors de combat* is set to save injured combatants from being harmed further.

The idea that some non-lethal weapons have 'worse than lethal' effects is a major factor in current debates on the laws of war. The hypothetical examples and subsequent debates are countless. Often, the starting point is a sense of horror regarding a certain effect like permanent blindness. Outrage and a feeling that something should be done to prevent it follow. Only later, if at all, is the question raised about the alternatives. What will happen if blinding laser weapons are banned? The chances are slim that instead of being blinded, the combatants will be left in peace. Chances are they will be targeted with other weaponry, non-lethal or lethal. In the latter case, we are back to an ultimately philosophical, personal, controversial matter: are some things worse than dying?

In my view, there is no clear line of demarcation once we accept that some things are 'worse than lethal' and should be banned even with the probability of people being killed instead. Of course, this is not a problem *per se*. The problem arises when we start banning specific weaponry, based on a gut feeling of horror and without rational distinction between the one and the other. When these gut feelings lead to adaptations in the laws of war banning them altogether, the power of the laws in general could be detrimentally affected. If weapons are judged not on their objective effects, but on the feelings we have when thinking about them, the power of the rational logic behind the laws of war is undermined.[509] Of course, this notion follows from a personal opinion doubting the merit of introducing a notion such as 'worse than lethal' into the laws of war. When one is permanently blinded, at least the choice remains whether or not one wants to continue living.
It is hard to see the laws of war find a clear standard other than the distinction between 'injured but alive' and 'dead'. Personally, I could think of things I would fear more than death, but those would be highly subjective. Some would prefer death to slowly going insane, others would prefer death to losing their limbs and, of course, there would be those who would prefer it the other way around.

Biological and Chemical Catch 22
As we have seen, some weaponry is banned not because of its effects, but because of the elements of its working mechanism. This is the case with chemical or biological agents. With regard to lethal weapons, this posed little humanitarian challenge. Chemical and Biological lethal weapons offer very little promise of delivering an alternative to Conventional lethal weapons with humanitarily beneficial effects. Crucially though, with regard to non-lethal weapons, this is somewhat different.
When there is a solid probability of developing live-saving non-lethal chemical or biological weapons offering a viable alternative to Conventional lethal weapons, humanitarian gain could be found. In terms of chemical and biological weaponry, regardless of potentially humanitarily beneficial research, development and deployment of non-lethal offensive alternatives for waging warfare might be, it goes against the current laws of war. One could thus argue more leniency in the legal regime to offer a chance to reap these kinds of benefits. However, changing those laws would run the risk of opening the chemical and biological Pandora's box, potentially releasing repercussions for the lethal as well as the non-lethal applications simultaneously.[510]

[509] C. Dunlap Jr., 'Law and Military Interventions: Preserving Humanitarian Values in 21st Conflicts', in: *Humanitarian Challenges in Military Intervention Conference* 2001, p. 16.
[510] K. Homan, 'Van Pepperspray tot Lasergun', Rathenau Instituut: Den Haag, 2005, p. 57.

§7.5 Possible remedies

§7.5.1 Legal

Proportionality and Discrimination
Depending on one's view on the necessity to remedy, the law could accommodate that in a few ways. Currently, we have some specific provisions banning specific non-lethal weapons on different grounds (biological, chemical, blinding). In addition, the rules and principles regarding lethal weapons apply to non-lethal ones as well. This combination leads to a crooked balance between lethal and non-lethal weaponry. They have highly different characteristics, modes of application and effects. The applied principles are clearly designed with lethal weaponry in mind. It encourages the military to apply lethal force discriminately, to not cause too much suffering before killing while also killing as little as possible in achieving military goals.
It would be sound to adapt the laws of war to the new class of non-lethal weaponry. It could be militarily effective as well as humanitarily beneficial to apply a non-lethal weapon indiscriminately. It would harm more individuals -combatants and non-combatants alike- but the harm could be less grave. Of course, proportionality has a role to play here as well. The acceptable number of non-combatants harmed in a non-lethal fashion in order to achieve a military goal is not limitless. In addition, the non-combatant suffering should be a point of focus when comparing a lethal but more discriminate attack to an indiscriminate but non-lethal one. Harming a larger number of non-combatants in a non-lethal way might be preferable to killing a smaller number.

Subsidiarity
In addition, without the focus on the effect of death, the laws of war regarding non-lethal weapons must deal with the variety of non-lethal effects that the weapons can cause. There is a clear opportunity for subsidiarity to be a prominent principle here. I have argued that this principle should gain prominence with respect to lethal weapons. This is because the range of lethal weaponry has grown, the total effects from the application of lethal force varying greatly depending on the means and methods used. With regard to non-lethal weaponry, this notion gains an extra dimension: rather than noting variation in the total effects alone, the effects on every individual affected will also vary greatly depending on the non-lethal means and methods chosen. A legal demand for choosing the means and methods least harmful while remaining effective would make sense in such a context. The chances are that it would also serve humanitarian interests better than the current equal treatment awarded to lethal and non-lethal weaponry.

The principle of subsidiarity could also serve a purpose in bridging the then separated legal realms of lethal and non-lethal weapons. The reinforcement of the principle of subsidiarity in general, as advocated repeatedly in this Chapter, could take non-lethal weapons into the broader account. When a military goal can be achieved with equal effectiveness by using non-lethal weapons over lethal weapons, the law should voice a preference towards using the former when estimated to cause less suffering than the latter in specific situations.

§7.5.2 Doctrinal

A possible 'remedy' lies in preventing the problem. The issues will not occur when non-lethal weapons are not used. There is reason to believe that the reluctance to use non-lethal weapons is, in some cases, larger than the reluctance to use lethal alternatives. While the laws of war do not prohibit non-lethal weapons and will in many cases take kindly to their use over lethal weaponry, they are only used with great caution. Sometimes the military refrains from using them altogether, despite preferring them from a humanitarian point of view. This lies in the possible media consequences stemming from the use of non-lethal weapons. However humanitarily undesirable, a killed enemy or civilian is just that. When televised, it is silent proof of the pity of war. When people are hit with non-lethal weapons, they are hurt, they scream, possibly even visibly entangled in wires, nets or foam. An example from the US efforts in Somalia can illustrate this: "If the sticky foam had been used to cover unattended portions of barbed wire during the night, in the morning we would have found a dozen Somali youths stuck to the wire, entangled in a bloody trap. Removing the trespassers from the wire would be difficult and not play well on CNN".[511]

This reluctance might prevent the humanitarian challenges posed by non-lethal weapons from occurring more often. The question remains, however, as to whether this provides humanitarily preferable results overall. When, as an alternative, lethal weapons are 'successfully' deployed, one stands to loose more from a humanitarian perspective than is gained by not using non-lethal alternatives.

§8 Precision Weaponry

> BY ANY HISTORICAL STANDARD THE TECHNOLOGICAL ADVANCE IN WEAPONS ACCURACY HAS BEEN IMMENSE: AFTER CENTURIES OF WARFARE IN WHICH THE VAST MAJORITY OF ORDNANCE EXPENDED HIT NOTHING EXCEPT UNOCCUPIED LAND OR SEA, TODAY MOST WEAPONS ACTUALLY HIT THEIR INTENDED TARGETS.[512]

The increase of precision enabled by technology is one of the most discussed innovations in warfare. This is partly due to its enormous influence, but in part because it also sells well as a humanitarian PR-story. To be precise, 'precision' and 'accuracy' are two different things. As Schmitt points out, though the weapons can be very accurate, precision also depends upon a human element.[513] Where accuracy characterizes the ability of technology to strike a specific location, precision reflects a broader process in which the proper identification of targets, timing and delivery

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[511] Marine officer as quoted in: C. Coker, Asymmetrical Warfare: Ends or Means? In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 319-340, p. 326.

[512] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 35.

[513] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.

skills also play crucial roles.[514] In other words, very accurate weapons can still be used very imprecisely.

§8.1 What is it?

Precision weaponry is a misleading term. Essentially, it is technology sufficiently accurate to make precision bombing or striking possible. It is the technical innovation that, when deployed right, allows strikes to stay reliably on course and hit the destination they are sent out to. A *conditio sine qua non* for precision is the reliability of the accuracy of the technology used.
Although an important factor, we should note that technology is not the sole factor of relevance here. It is possible that inaccurate technology is not even the main reason for mishits and collateral damage. Incomplete knowledge of the target area, a lack of understanding or inability to grasp the effects of the force applied, and multiple strikes resulting from mishits can all lead to highly accurate weaponry being delivered imprecisely.[515]
The 1991 Iraq war is probably the best example of the then promised 'new' warfare. For the military, precision targeting from a distance suggested that the war could be won from the air alone.[516] For the public, developments promised them never-before-seen coverage, allowing the war to be followed live on CNN as an arcade-like green-lighted spectacle.

§8.2 Driving technology

> PROGRAMMING A JDAM WAS LIKE ADDRESSING A FEDEX ENVELOPE; YOU JUST TYPE IN THE GPS COORDINATES, AND THE BOMB GOES WHERE IT IS TOLD.[517]

Precision weaponry requires highly accurate technology, primarily in the field of munitions and delivery systems. Precision weaponry is perhaps most characterized by PGMs (Precision Guided Missiles). These munitions can be guided by a number of different means. The first is via remote control from a human being guiding the weapon to its target. The second is autonomous after launch, as the missile uses sensors to find its way. The third type, 'fire and forget' as Owens calls it, carries electronics receiving information on which to base its course.[518]

Being able to accurately apply force to a designated location does not do much good when the location of the target is unclear. The innovations in audiovisual registration technology, high-speed data transfer and information-processing techniques are

[514] M.N. Schmitt, 'Precision Attack and International Humanitarian Law', in: *International Review of the Red Cross* 2005, (859), pp. 445-466, p. 1.
[515] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 55.
[516] J. Keegan, 'The Iraq War', Pimlico: London, 2005, p. 79.
[517] B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 98.
[518] W.A. Owens and E. Offley, 'Lifting the Fog of War', 1st ed., Farrar, Straus and Giroux: New York, 2000, p. 143.

essential to purposefully turn accurate weapons technology into precision weaponry.[519]
Radar, sonar, satellites, unmanned spy-planes and light-sensing devices all deliver high resolution, real time vision and sound of what is going on far away from the one receiving the information's location.[520]

§8.3 Humanitarian challenge

> 'PRECISION' AND HIGH-POWER, HIGH TECHNOLOGY WEAPONRY CAUSE A HIGHER RATIO OF CHILD-TO-ADULT DEATHS THAN RELATIVELY PRIMITIVE DEVICES SUCH AS HANDHELD FIREARMS AND MANUALLY-TRIGGERED ROADSIDE BOMBS. IT APPEARS THAT WHATEVER THEIR MILITARY ADVANTAGES AND BENEFIT TO SOLDIERS, STAND-OFF WEAPONS WHICH PUT A SUBSTANTIAL DISTANCE BETWEEN SOLDIERS AND THEIR INTENDED TARGETS ARE THE MOST LIKELY TO CAUSE UNINTENDED HARM TO BYSTANDERS. LOWEST IN 'CHILD LETHALITY' WERE HANDHELD FIREARMS, WHICH SUGGESTS THAT CLEARLY-IDENTIFIABLE CIVILIANS ARE MORE LIKELY TO BE SPARED WHEN COMBATANTS ARE ABLE TO PERSONALLY CONTROL AND DIRECT THEIR FIRE.[521]

Precision weaponry has both positive and negative effects on the humanitarian situation.[522] Increased accuracy is a humanitarian blessing in several ways. Firstly, by hitting considerably closer to (or even right on) the target, the risk and size of collateral damage is decreased. Secondly, by increasing the chances of hitting the target, the number of attempts can be decreased.[523] Thirdly, greater accuracy enables the desired effect to be achieved with less kinetic force.[524] However, there are a number of side-effects threatening this humanitarily positive record. These side-effects will be discussed below. Precision weaponry in itself offers a mixed blessing, the humanitarian outcome dependent on the human choices made when using it.[525]

More targets
Mention has to be made of a rather ironic effect. The increase in accuracy has made it possible to strike targets that were previously out of bounds.[526] A military object in a highly populated area can now be targeted, since the accuracy enables a strike on

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[519] C. Dunlap Jr., 'America's Asymmetric Advantage', in: *Armed Forces Journal* 2006.
[520] W.A. Owens and E. Offley, 'Lifting the Fog of War', 1st ed., Farrar, Straus and Giroux: New York, 2000, p. 12.
[521] I.B.C. (organization), 'A Dossier of Civilian Casualties 2003-2005', Iraq Body Count: 2005, p. 11.
[522] B. Jeanty, 'The Difficult Balance between Military Necessity and Unnecessary Suffering', Directorate for Securtiy Policy: 2006, p. 1.
[523] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.
[524] M.N. Schmitt, 'Precision Attack and International Humanitarian Law', in: *International Review of the Red Cross* 2005, (859), pp. 445-466, p. 7.
[525] J. Marshall Beier, 'Discriminating Tastes: 'Smart' Bombs, Non-Combatants, and Notions of Legitimacy in Warfare', in: *Security Dialogue* 2003, 34 (4), pp. 411-425, p. 421.
[526] M.N. Schmitt, 'The Impact of High and Low-Tech Warfare on the Principle of Distinction', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2003, p. 9.

it with proportionate collateral damage. While increased accuracy has narrowed the range of collateral damage and technologically-responsible mishits, it has broadened the entire range of potential targets. Previously, as Schmitt argues, there was a *de facto* built-in protection for civilians. They were protected via the proportionality clause -by the *imprecision* of weapons technology.[527] The increased accuracy has ended this 'protection'.[528]

Military targets that are closer to civilian objects can now be targeted more precisely. Another indirect side-effect that partially follows is an inclination to take a broader view of what constitutes a military target. Dual use targets often had an additional problem of not being able to be hit precisely enough for military benefit to outweigh collateral damage. More accurate weaponry offers the potential to translate theoretically broader interpretations into practical action. This tendency was visible within NATO military effort in Kosovo. The almost exclusive reliance on aerial force proved to be almost too successful, NATO running out of fixed targets. With the air bombardments being much less successful against Serbian ground forces, attention shifted to targets with civilian use as well: "The extraordinary fact about the air war was that it was more effective against civilian infrastructure than against forces in the field. The irony here was obvious: the most effective strike of the war was also the most problematic. Hitting the grid meant taking out the power to hospitals, babies' incubators, water-pumping stations".[529]

Lowering the threshold

Precision weaponry does not escape the eternal paradox of weapons and humanitarian concern. The extreme point of view reflects the idea that the more brutal the weapons, the shorter the war and the higher the threshold to start waging it. With regard to precision weaponry, the opposite threat occurs: the more precise the attacks are, the lower the threshold to start using them.[530] Perhaps even more important, those attacks are perceived to be more precise and morally and legally easier to justify, lowering the threshold for their employment.[531] More precise attacks means more attacks overall. More attacks means more humanitarian suffering -especially when practice under-delivers on promises.[532] Going even one

[527] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 54.

[528] Some remarks can be made alongside this point of view. It reflects an accurate comparison of the old legal theoretical situation with the new legal theoretical situation. However contrary to the laws of war, it can not be said that in earlier wars, no densely populated areas were hit with inaccurate weaponry. In addition, the proportionality clause has always been measured in relative degrees. Given the much less accurate state of technology, the margin of collateral damage still acceptable under the proportionality clause was arguably larger.

[529] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 108.

[530] C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999, p. 24.

[531] J. Marshall Beier, 'Discriminating Tastes: 'Smart' Bombs, Non-Combatants, and Notions of Legitimacy in Warfare', in: *Security Dialogue* 2003, 34 (4), pp. 411-425, p. 413.

[532] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, pp. 61-62.

step further, concerns have been raised that more accurate technology is sometimes compensated by the one deploying it taking less care.[533] This is not a theoretical possibility derived from logic, but is known to have occurred in practice. In the words of Colonel Baldwin of the U.K. armed forces deployed in Iraq: "There was less of a reluctance to use them because of the increased reliability".[534]

§8.4 The laws of war

§8.4.1 Current status

Again, we are dealing with a highly relevant theme in modern warfare. Though there is no specific regulation tailored towards precision weaponry, the laws of war's main attempt can be said to make application of force as precise and restricted as possible. Precision weaponry makes it possible to achieve higher standards than ever before. This does not render the laws of war redundant, however, as its principles remain valid and applicable to new standards and possibilities. The same general principles as discussed in previous paragraphs are crucial here as well.

Discrimination
Precision weaponry cannot be said to be inherently indiscriminate. If it were, it would not be called precision weaponry and would be strictly prohibited under Article 51 of the first Geneva Protocol.
Accurate weapons technology offers the best chance to conduct an attack in accordance with the laws' demands of distinction and proportionality. However, that chance must be taken -the force still has to be applied discriminately. The mere fact that the increased accuracy enables more precise attacks raises the bar. We have seen that the laws of war tend to take many circumstances as a given in judging human conduct. The fact that one used precision weaponry is perceived a sign of good will, but certainly does not compensate for reckless behavior. Indeed, the levels of feasible precision seem to promote less permissiveness towards missed targets and faster claims of indiscriminately conducted attacks.[535] As Schmitt notes: "Consider aerial bombing during Second World War. Bombs dropped by a B-17 had a CEP of approximately 3,300 feet; to achieve a high Pd against a point target required roughly 1,500 sorties dropping 9,000 bombs. Since even modern unguided bombs have CEPs a fraction of this figure, today a weapon system with a CEP of over 3000 feet would surely be deemed indiscriminate. As precision increases, the interpretation of the Article 51.4 phrase "not directed at a specific military objective" will become ever more demanding".[536]

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533 H.R.W. (organization), 'Off Target: The Conduct of the War and Civilian Casualties in Iraq', Human Rights Watch: New York, 2003, p. 97.
534 as quoted in: ibid., pp. 112-113.
535 M.N. Schmitt, 'Precision Attack and International Humanitarian Law', in: *International Review of the Red Cross* 2005, (859), pp. 445-466., p. 455.
536 ibid., p. 10.

The same goes for assessing the proportionality of an attack. The fact that the laws of war take the circumstances as a given this time acts in favor of humanitarian concerns. A more precise strike will create less collateral damage than a less precise strike, all other elements considered equal. This means that 'precision weaponry' as such offers no tension with the proportionality clause. Technological accuracy makes it easier, not harder, to meet the same standard. However, with proportionality being a relative principle, the increased capability to decrease collateral damage raises expectations and the scrutiny with which an attack will be judged.[537]

Precautions

As we have seen, Article 57 of the First Geneva Protocol requires an attacker to take all 'feasible' precautions to avoid and minimize collateral damage. The choice of means and method is also relevant (though its prominence can be discussed). Next, the availability of weapons technology is a factor in determining whether 'everything feasible' is done. The more precision weaponry one has, the harder it becomes to explain why it is not used for a specific attack.[538]

Nevertheless, the fact that it becomes harder to explain does not mean it is impossible. The laws of war do not demand one to use the most precise means and methods in an absolute sense. There is no obligation to use the most precise weaponry available, not even when it is available directly to the commander deciding upon the attack.[539]

A step further, one might argue that one is bound to acquire the 'latest and greatest' and buy only the most precise weaponry in its class. Such an obligation however, cannot be derived from current regulation. Any weapon that is not expressly forbidden is allowed to be used within the framework of obligations the laws of war dictate.[540]

In short, precision weaponry fits neatly into the current laws of war. They are designed to be able to be as militarily effective as the laws of war permit. If one were only to focus on reaching military tactical goals, an indiscriminate but more powerful bomb would do the trick equally well. The desire to abide by the laws of war and spare non-combatants is what has driven the large investments into and considerable returns from accuracy in technology.

§8.4.2 Necessity to remedy

Protecting humanitarian interest

We have seen two main humanitarian challenges posed by precision weaponry.

The first is the extension of targets that can be attacked discriminately and proportionately. Although one could suggest that the less targets that are attacked, the lesser the chance of inhumanitarian results, this development is not suited to be legally countered. The laws of war are not set to restrict warfare by listing targets that one might be permitted to attack. The laws of war set a general demand of

[537] ibid., p. 11.
[538] ibid., p. 13.
[539] ibid., p. 14.
[540] ibid., p. 13.

military necessity, general demands of discrimination and prohibit specific potential targets from being attacked (e.g. hospitals, religious objects). The fact that a larger number of objects can be legally attacked is the military side of the coin showing beneficial accuracy on the other. Whether or not this results in a positive humanitarian net effect is not a matter for the laws of war to deal with.

The other downside, a potential lowering of the threshold for war -especially when combined with the risk aversion which I will discuss in the next paragraph- is not suitable for remedy by the laws of war either. The laws of war do not deal with general prevention of warfare. The rules regarding legitimate warfare and legitimate conduct during warfare are distinguished by intent. The laws of war hold no opinion on whether one should fight a war or not. Whether it is done out of passion, struggle for survival or because precision weaponry made it more feasible is not subject to the laws of war.

Protecting military interest

We have also seen that the image of precision weaponry has been oversold. The expectations have been raised higher than what is practically feasible, sometimes exceeding the standards set by the laws of war. This in itself is not something that should be legally remedied. However, when interpreting the laws of war, it is good to keep in mind that while non-combatant harm-free warfare is a laudable goal to strive for, it is not demanded under the laws of war.

Reinterpreting the laws of war to pose demands that are theoretically achievable though not reasonable in practice shifts the weight away from military interest -a pillar under the laws of war. Demanding military to purchase and use the most accurate (and often most expensive) technology on the market is not a demanded under the laws of war. Attempts to re-interpret the laws to suggest such a demand is unacceptable. This is not because the laws of war should not applaud potential humanitarian improvements, but because it would turn the laws of war into advocacy of idealism. This is not their purpose. They exist to maintain and walk a tightrope of examination balancing humanitarian ideals and military interests, however unsatisfying those results might sometimes seem.

§8.5 Possible remedies

Context

Keeping promises

Precision weaponry is often praised as a prime example of how waging war can be done humanitarily. Though this holds some truth, selling it on the merits of theoretical possibilities is overselling it when it comes to ultimate, concrete practical results. This in turn creates its own counterweight by raising expectations among the public that are hard to meet. When promising extreme precision, one puts oneself under greater scrutiny. After a promise that almost all collateral damage could be ruled out, ultimately any collateral damage will be seen as wrong.

This is not unique to precision weaponry, but a common threat throughout the history of weapons technology. History offers more examples of technological innovations where only the best was expected but out of which much worse came true. In the phase leading up to the First World War, most experts expected war to be 'short, sharp, and decisive' as a result of the great technological changes in weaponry. Those contradicting it were set aside as amateurs. A famous example of such an ignored visionary is Ivan Bloch, who expected that "the increased rates of firepower at the disposal of the defenders would make infantry attack suicidal, and that the war would quickly become a stalemate".[541]
The Second World War showed a similar development regarding aerial warfare. Practice proved that generally expected levels of precision would not be achieved. "The Germans and the British quickly realized that daylight raids subjected the bombing aircraft to unacceptable levels of losses, from defending anti-aircraft fire and from interceptors. They each, therefore, shifted the weight of their strategic bombing raids to the night. Nighttime raids were highly inaccurate".[542]

This process of overselling bites back at the image of precision weaponry. Its merits are widely used for PR purposes to sell a humanitarian benefit. In the words of Der Derian: "The overselling of precision weaponry made the usual mistakes of warfare appear to be aberrations, if not war crimes".[543] The problems occur in two ways. Firstly, mistakes were not part of the PR-promises. Secondly, in boasting the latest and greatest, expectations rise that every military operation will be based on those weapons. However, in reality there is not enough stock and not enough money for every operation to be carried out at the most technologically sophisticated level possible. Take, for instance, the 1991 Iraq war -mostly seen as demonstration of precision weapons *par* excellence- which was fought with 'only' seventy percent 'smart' weapons.[544] The eventual consequence was that every instance of collateral damage was viewed as wrong.[545] This effect is multiplied by media coverage and (democratic) governments' dependence on public support.[546] From the humanitarian point of view this might be a positive shift, offering a non-legal remedy to the humanitarian challenges precision weaponry brings as we have seen earlier in this section. There is one caveat however, as this built-in remedy towards larger scrutiny is not the same as that invoked by the laws of war. The tension leads to an increasing mismatch of interpretations, since the laws of war still deem collateral damage acceptable when due care is taken and the military benefit is large enough. Public scrutiny tends to view all collateral damage as a breach because the promise was

[541] J.J. Weltman, 'World Politics and the Evolution of War', Johns Hopkins University Press: Baltimore, 1995, p. 90.
[542] ibid., p. 132.
[543] J. Der Derian, 'Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network', Westview Press: Boulder, 2001, pp. 201-202.
[544] J. Keegan, 'The Iraq War', Pimlico: London, 2005, p. 142.
[545] R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 79.
[546] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 35.

otherwise. This erodes the weight of military interest in the balancing act the laws of perform.

§8.5.1 Legal

Subsidiarity
The reinforcement of the subsidiarity principle is also relevant in this context. As stated earlier, the principle should not be codified in an independent absolute sense. It might be understandable to desire such a thing, since the laws of war do not prohibit the use of less accurate technology when more accurate options are available. As Rogers states: "So long as weapons are not prohibited, States can use the weapons that are available to them".[547] In addition, the laws of war could take the level of accuracy of the technology used into account when assessing the effects of the attack.

With regard to precision weaponry, one would counter ambitions to fight with the most accurate technology available when one continually raises the bar. It would lead to a double standard in which poorer fighting parties would be allowed to fight less discriminately, the technology their money could buy being less accurate than the most modern one of their richer adversary. Double standards risk eroding compliance. What looks humanitarily better on paper might not have that effect in practice.

The principle of subsidiarity could again have beneficial effects as part of the proportionality equation. Granted, this would raise the bar for affluent high-end technology States as well, but in a more limited and reasonable manner. When using the most accurate technology available, one shows a solid intention of willing to fight proportionally. In such a case, the subsidiarity principle might exonerate the military for not keeping the promises the precision weaponry PR-machine has made -instead scrutinizing the practically applied measures to discriminate between combatants and non-combatants.

Accountability
Accountability for acts is mostly attributed to the person actually carrying out the act. This person might not be the only one, however, whose decisions have a major impact on the outcome. The military in the field does not have the full arsenal of existing weaponry at hand -all is not available on the spot where the precision of an attack is decided. Again, doctrine and policy are also crucial in determining (and limiting) the number of options left at the point of the actual attack being carried out. With regard to precision weaponry, the cost factor is an important one in the upper echelons of political and doctrinal decision-making.

A factor threatening the harvest of theoretical benefits sown by accurate technology is the problem regarding the higher costs of waging warfare precisely. Precision does

[547] A.P.V. Rogers, 'Law on the Battlefield', Manchester University Press: Manchester, 2004, p. 104.

not come cheap. It is dependent on highly sophisticated and expensive technology.[548] Despite the fact that technology becomes cheaper over time, it will always be more expensive to drop the most accurate, high-end bomb than to deploy a much cheaper explosive that is less accurate. These costs are burdened by the society whose army uses the more accurate and more expensive weaponry. Dunlap pictures this dilemma quite harshly in stating: "A new question for statesmen and soldiers: to what extent must a nation's people sacrifice in order to acquire systems to protect enemy civilians?"[549] Surely, this focuses on the 'enemy-friend' distinction the laws of war wish to prevent, although it does represent an important political factor to be taken into account. The responsibility for the actual attack lies with the soldier and his military commander. The responsibility for the procurement of new weapons systems lies on a higher, political, level.[550] In practice, the most accurate (and most expensive) technology will not always be used.[551] An illustration of this can be found in the words of Colin Powell: "I hope you realize that every time you fire another one of those cruise missiles, you know, it is two million bucks flying off into the air".[552]

An assessment of the overall legality of conduct in war should not be restricted to what is done by the military on the ground. When they do the best they can to discriminate, but are equipped with inaccurate technology to save a few dollars, the goals and principles of the laws of war have also been disregarded.

§9 Casualty-transfer

As we have seen, technology enables changes in the way we fight. However, the availability of technology does not force anyone to buy it, let alone use it. We can still decide to fight with sticks and stones. Technology in itself does not bring about the changes.[553] A choice has to be made at the doctrinal level regarding which of the technological innovations we use and which we do not. Increasing a bomb's payload enables you to either take out the same targets as before with smaller demands from the delivery system, or to hit larger targets than before.[554] When looking at the enormous developments with regard to precision weaponry and the possibility to

[548] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 16.

[549] C. Dunlap Jr., 'Technology and the 21st Century Battlefield: Recomplicating Moral Life for the Statesman and the Soldier', Strategic Studies Institute, U.S. Army War College: Carlisle, 1999, p. 16.

[550] B. Jeanty, 'The Difficult Balance between Military Necessity and Unnecessary Suffering', Directorate for Securtiy Policy: 2006, p. 1.

[551] H.R.W. (organization), 'Off Target: The Conduct of the War and Civilian Casualties in Iraq', Human Rights Watch: New York, 2003, p. 61, p. 112.

[552] as quoted in: B.D. Berkowitz, 'The New Face of War: How War will be Fought in the 21st Century', Free Press: New York, 2003, p. 89.

[553] J.A. Lynn, 'Battle: a History of Combat and Culture', Westview: Boulder, 2003, p. xvii.

[554] M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 348.

fight from an increased distance, a comparable dilemma presents itself. It is not resolved at the last moment by the military on the battlefield, but in earlier stages, in policy and doctrinal choices. Since the laws of war remain focused on military conduct and the actions themselves, in this particular area, they seem to arrive rather late at the party.

§9.1 What is it?

Precision weaponry offers two distinct promises. Less risk for non-combatants near a target and less risk for the one applying the force. However, these promises are not met at the same time. Leaning more to the one means leaning further away from the other. The dilemma thus comes down to the following. Either one uses the more precise weapons under the same circumstances as their predecessors, thereby maintaining the risk for one's own military to increase the precision on impact and decrease the risk (and amount) of collateral damage. Alternatively, one maintains the level of accuracy upon impact and reduces the risk for one's own troops by delivering the new, more precise weapons from a larger distance than their predecessors. This places those near the targets at more risk.
This choice has significant consequences for the humanitarian equation and reflects wider issues of risk distribution among military personnel, the adversary and potentially relevant non-combatants. This distribution of risk, in real terms, boils down to the transfer of casualties. It is possible that precision capabilities have led policy makers to believe clean, risk-free war is possible.[555] They want to reap the benefits of both possibilities offered by precision weaponry: lower risk for the military and lower risk for the civilians in the battlespace.[556] However, as Ignatieff states, these demands are in direct contradiction.[557] Practice is less lenient -having your cake and eating it too is not an option. Of course, in some particular cases the collateral damage is minimized and the pilot survives. However, at the aggregated level on which policy and doctrinal choices are based, it is likely to be either the pilot and his highly expensive aircraft, or a few dozen non-combatants near the target that suffer.

The rise of casualty-transfer warfare
However perfectly fitting in modern society, the dominance or at least great influence of casualty-transfer in the armed forces is not an entirely new phenomenon. The Romans often valued minimizing their own casualties over maximizing those of the enemy.[558] Maneuver warfare in the pre-Napoleonic era was also aimed at avoiding casualties, protecting military personnel at an increased

[555] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 198.
[556] A.A. Stahel, 'Dissymmetric Warfare versus Asymmetric Warfare', in: *International Transactions in Operational Research* 2004, 11 (4), pp. 435-446, p. 442.
[557] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 61.
[558] Luttwak, as referred to by: R.M. Cassidy, 'Russia in Afghanistan and Chechnya: Military Strategic Culture and the Paradoxes of Asymmetric Conflict', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2003, pp. 47-48.

burden to civilians (by replacing battles with city-sieges for example).[559] Within the time frame of the modern codified laws of war however, casualty-transfer is a fairly new phenomenon. Of course, hardly anyone has ever very much liked the idea of getting killed by the enemy. However, general doctrine and policy have tended not to be particularly casualty averse, especially in the Western warrior culture. As we have seen earlier, warriors using short distance weaponry (e.g. swords) were seen as morally superior, those fighting with bow and arrow deemed to be displaying cowardice.[560] Long-distance weaponry did not fit chivalrous ideas of noble peers engaging each other on the battlefield.[561] In the eyes of Herodotus, "a wish to kill but not to die in the process" was "the most dangerous tendency in war".[562]

Developments as described earlier in this Chapter have changed the view on risk attribution. Risk asymmetry is not only acceptable, but has become a key element of modern Western military doctrine. Perhaps the most extreme example up to date was the decision to drop atom bombs on Hiroshima and Nagasaki at the end of WWII. This was not the only option. Invasion of Japan by conventional means was also on the table. The projected maximum casualty rate of 36,000 US military personnel was deemed too high a price. Ultimately, some 300,000 Japanese, mostly non-combatants, died immediately, another 300,000 estimated to have died from the indirect effects of the bombing.[563] Ever since, the number of similar policy and doctrinal decisions made are numerous, though less vivid and clear than this extreme example.

This development went hand in hand with innovations in precision weaponry. The early 1990s Iraq War was fought with "virtually no risk to U.S. troops".[564] General Schwarzkopf stated "I do not want my troops to die. I do not want my troops to be maimed" and General Powell, when talking about the numbers of civilian and Iraqi military casualties, stated: "It is really not a number I am terribly interested in."[565] This same attitude was also displayed by the US in Somalia, Haiti, and Rwanda.[566]

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559 J.S. Breemer, 'War as We Knew it: the Real Revolution in Military Affairs, Understanding Paralysis in Military Operations', Center for Strategy and Technology, Air War College, Air University: Maxwell Air Force Base, 2000, p. 14.

560 J.A. Lynn, 'Battle: a History of Combat and Culture', Westview: Boulder, 2003, p. 7 and M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 30.

561 W.H. McNeill, 'The Pursuit of Power: Technology, Armed Force, and Society since A.D. 1000', University of Chicago Press: Chicago, 1982, p. 172.

562 M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, pp. 31-32.

563 M. White, 'The Fruits of War: how Military Conflict Accelerates Technology', Simon & Schuster: London, 2005, p. 117.

564 R. Clark, 'The Fire this Time: U.S. War Crimes in the Gulf', 1st ed., Thunder's Mouth Press: New York, 1992, p. 38.

565 as quoted in: ibid., p. 41.

566 S. Lambakis, J. Kiras and K. Kolet, 'Understanding "Asymmetric" Threats to the United States', in: *Comparative Strategy* 2002, 21 (4), pp. 241-277, p. 245.

Next, there is the argument, as made by Schmitt, that reducing risk for modern military personnel is not contrary to the laws of war, but a result of applying the proportionality equation. As the importance of highly skilled individuals rises and their interchangability reduces, the military advantage of preserving their lives also increases. "It is this military advantage, combined with destruction or damage to the objective, which must be weighed against the collateral damage and incidental injury. War fighters have always sought to minimize casualties to their forces; nothing has changed. The extent of casualties is simply one of several military advantage components weighed in the proportionality balancing".[567]

Kosovo and beyond

The landmark war-fighting effort displaying casualty aversion leading to actual casualty-transfer was the NATO activity in Kosovo 1999. This time, the policy and doctrinal choices led to heavy reliance on air power, not substantially supported with ground troops.[568] Another striking feature was that this choice was made explicitly and even publicly announced.[569] This doctrinal choice initially pleased air power advocates, but later on, criticism emerged. For example, the high altitude at which the bombers flew on several occasions led to the discharge of high value precision munitions on inflatable rubber models resembling military objects.[570] Of course, charges of decreased efficiency and effectivity due to the large distance between bomber and target do not strike at the core of the casualty transfer argument.[571] However, each application of force missing its target places non-combatants in the area at risk without any achieved military benefit. This is especially so when the only acceptable option to increase the war effort is by doing more of the same.[572] Chances are, the target has to be struck again. General risk for non-combatants is multiplied by the number of times a specific risk occurs.

The way the Kosovo effort was handled does not stand in isolation. The clear moral preference for preserving the lives of the voluntarily enlisted servicemen over the lives of civilians became emblematic.[573] Risk and casualty aversion became standard during the 1990s and have remained that way ever since.[574] Bacevich, in his thought-provoking 'The New American Militarism,' leaves no room for interpretation in

[567] M.N. Schmitt, 'Ethics and Military Force: The Jus in Bello', Carnegie Council on Ethics and International Affairs: New York, 2002, p. 6.

[568] W.A. Owens and E. Offley, 'Lifting the Fog of War', 1st ed., Farrar, Straus and Giroux: New York, 2000, p. 186.

[569] F.W. Kagan, 'Finding the Target: the Transformation of American Military Policy', 1st ed., Encounter Books: New York, 2006, p. 190.

[570] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 105.

[571] F.W. Kagan, 'Finding the Target: the Transformation of American Military Policy', 1st ed., Encounter Books: New York, 2006, p. 192.

[572] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 21.

[573] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 61.

[574] M. Byers, 'War Law: Understanding International Law and Armed Conflicts', Grove Press: New York, 2006, p. 120.

outlining his view on military efforts during the 1990s: "Throughout that decade, the hallmark of the American way of war turned out to be not "overwhelming force" but "force protection". The United States spared nothing in its efforts to avoid American casualties. The spirit informing U.S. military operations was not audacity but acute risk aversion. To minimize the prospect of U.S. losses, the armed services relied whenever possible on air power, usually administered from afar and in limited doses. If close combat seemed likely, they recruited proxies -the unfortunate experience in Somalia suggesting that Americans had no stomach for casualties".[575]

Certainly this is not to say that military personnel run no risks at all or that their conduct in fighting is the reason for the casualty transfer. The women and men serving in modern armies face significant risks, often from hidden threats. They generally take measures to protect non-combatants at their own peril, even when facing enemies not reciprocating their abidance by the laws of war. The responsibility for current casualty transfer lies is in the echelons of higher decision-making -the military and civilian staff shaping policy and doctrine. For them, a turn back to more evenly attributing risk among parties present on the battlefield is unlikely in the near future. Current developments indicate the development of risk-aversion to be ongoing: local allies substituting one's own presence on the ground, increases in hiring private contractors to perform military functions in the combat zone, and the increased deployment of unmanned weapons systems all indicate that risk aversion as a stable element of military doctrine is a challenge the laws of war will have to deal with.[576]

§9.2 Driving factors

Since this issue is more related to policy and doctrine than weapons technology *per se*, the factors of influence are broader. However, even those non-military factors have a technological drive behind them. Telecommunications and mass media can hardly be said not to rely on the technological breakthroughs of the last decades.

Technology

The doctrinal choice to reduce risks and transfer casualties does not stand alone. The fact that there is an option to operate militarily effectively without running high risks is enabled by technology. Technology and doctrine mutually influence one another. Before technology enabled large distances between the attacker and the attacked, the political elites had fewer qualms in sending thousands of young men to die on the battlefield in order to achieve a political or military objective. The introduction of aerial warfare changed this reasoning, as Spaight noted in 1924: "The height at which the raids were for the most part carried out were such as to make any real precision impossible. In 1915 bombing from even less than 10,000 feet appears to have been regarded as a haphazard undertaking".[577] He continues to describe the

[575] A.J. Bacevich, 'The New American Militarism: How Americans are Seduced by War', Oxford University Press: New York, 2005, pp. 57-58.

[576] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 81.

[577] J.M. Spaight, 'Air Power and War Rights', 3d ed., Longmans: London, 1947, p. 233

process where the longer the war lasted, the higher one flew, the less one was willing to risk and the less important reducing damage to the 'enemy civilian' was considered.[578]

Media

Real-time communications, cheap high-quality recording equipment, mass media and the internet have made the effects of warfare highly transparent. Military casualties are no longer abstract numbers with their total and consequences only fully understood years after the war has been waged and the politicians and military officialdom responsible are out of office.[579] Today, every casualty counts as an individual. Not just numbers, not just names, but faces. Clips from home movies of the deceased soldiers playing with their children dominate media coverage of one's own military casualties. This changes the equation drastically, making the casualty-transfer to non-combatants not only a result of weighing against the risk to one's own soldiers, but to -as Shaw phrases it- 'the political risks of adverse media coverage' as well.[580] Especially in democratic societies, where public support for the warfare effort is crucial, the weight of the PR-argument is considerable.[581] Of course, the matter of public support does not only come into play regarding casualties among one's own forces. Non-combatant casualties or even the graphic killing of enemy combatants can also serve to erode public support. That said, the people's own casualties still rank first. In addition, when the public is convinced of the justness of the war-fighting effort, the number of non-combatant casualties needed to create public outcry rises.[582]

Democracy

The tendency to avoid casualties on one's own side is most dominant in democratic societies, where those in power rely on popular support to stay in power. Starting with the popular wish to reduce civilian casualties, the attitude has spread to the reduction of death and injury among military personnel.[583] Where the law makes only one distinction -civilian lives before military lives- public opinion increasingly thinks otherwise. The increased casualty aversion regarding ones own troops shifts the balance to an almost absolute goal of minimizing one's own casualties. Collateral

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578 ibid., pp. 233-34.

579 M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 37.

580 M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 355.

581 M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 1.

582 R. Thornton, 'Asymmetric Warfare: Threat and Response in the Twenty-First Century', Polity: Cambridge, 2007, p. 11-12.

583 M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005 and A.J. Bacevich, 'The New American Militarism: How Americans are Seduced by War', Oxford University Press: New York, 2005 and J. Der Derian, 'Virtuous War: Mapping the Military-Industrial-Media-Entertainment Network', Westview Press: Boulder, 2001.

damage including 'enemy' civilians is still unwanted, but has smaller political consequences. Obviously, this development deteriorates the position of non-combatants in general even though, according to the laws of war, they deserve absolutely the most attention and protection in any risk equation.

Risk society

> THE 'RISK-AVERSION' OF NEW WESTERN WARFARE HAS BEEN WIDELY NOTED. PREVENTING TELEVISION PICTURES OF 'BODY BAGS' WAS THE CENTRAL LESSON LEARNED FROM VIETNAM. IN A SOCIETY WHOSE MEMBERS ENJOY HISTORICALLY UNPRECEDENTED LONGEVITY AND PERSONAL SECURITY, LOSS OF LIFE HAS BECOME INCREASINGLY DIFFICULT TO JUSTIFY AND IDEAS OF SACRIFICE HAVE WANED. IN A SOCIETY THAT HAS DISCREETLY HIDDEN EVEN NORMAL DEATH, VIOLENT DEATH IS PARTICULARLY SHOCKING, AND GOVERNMENTS WANT TO AVOID ITS POLITICAL COSTS. SOLDIERS ARE NO LONGER CONSCRIPTS BUT RELATIVELY SKILLED PROFESSIONALS, IN WHOSE TRAINING GOVERNMENTS HAVE MADE INVESTMENTS; THEY DEMAND OCCUPATIONAL RIGHTS. THEY CAN NO LONGER BE TREATED AS 'CANNON FODDER'. THEY ACCEPT THE SPECIAL RISKS OF THEIR PROFESSION, BUT THEY AND THEIR FAMILIES WILL COMPLAIN IF THEIR LIVES ARE UNNECESSARILY OR CARELESSLY RISKED, AND SUCH COMPLAINTS ARE LIKELY TO BE MAGNIFIED IN THE MEDIA AND ELECTORAL POLITICS.[584]

Next to the influence of precision weaponry, other factors feed the risk and casualty averse attitude among policy and doctrine makers. In general, risk averse behavior and attitudes are not the monopoly of governments in general or the armed forces specifically. Preoccupation with risk, risk distribution, risk calculation, and risk management are well-known terms in our societies, which can in turn be regarded as 'risk societies'.[585]

This is not the place to reiterate the field of literature on risk society, but it is useful to point out that risk aversion in warfare is not an isolated phenomenon. It is a core activity for policy makers to analyze risk and be averse to it.[586] It should not surprise that it shows up in military doctrine as well -particularly as the *status aparte* of the military apparatus in society has also been declining. Recent decades show an increasing call for civilian oversight and civilian control over the armed forces.[587] The influence of risk management throughout society has influenced the military and helped lead to risk averse doctrines and 'risk-transfer militarism'.[588]

Imbalance of Power

Casualty-transfer warfare is a luxury mostly available to developed and fairly affluent societies. The affluence of society is often combined with conventional military

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[584] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 79.

[585] U. Beck and M. Ritter, 'Risk Society: Towards a New Modernity', Sage: 1992.

[586] A. Giddens, 'Risk and Responsibility', in: *The Modern Law Review* 1999, 62 (1), pp. 1-10.

[587] Bacevich pointly describes the relations as "the generals might drive the bus, but others chose the destination and picked the route. As to paying the fare, that was left to the soldiers in the ranks." A.J. Bacevich, 'The New American Militarism: How Americans are Seduced by War', Oxford University Press: New York, 2005, p. 68.

[588] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 71.

dominance over an adversary. Taking it one step further, one might argue that the larger the affluence and dominance of a state, the less risk of suffering casualties that state is willing to take.
Firstly, affluent societies' interests at stake in a war are often less than vital for the existence of that society, leading some to speak of 'wars of choice' rather than necessity.[589] The benefits to be gained by risking the lives of your own men are thus smaller, the price paid when they die being relatively larger as a result.
Secondly, the larger the military dominance, the greater the likelihood of overall victory and the less crucial a single tactical operation becomes. This diminished importance of a single operation makes suffering casualties in such an operation less acceptable, the measures to prevent them among one's own forces increased.[590]

On the other side of the asymmetry, tactics are used that could be seen as tending toward cowardice: IEDs, hiding among civilians, forcing civilians to act as human shields etc. However, the driving force, as we have seen in a previous Chapter, is a different one. To fight more openly would assure defeat. In addition, other common tactics from unconventional sides include suicide bombing; a method of fighting that can hardly be seen as risk averse.

§9.3 Humanitarian challenge

The casualty-transfer doctrinal choices offer straightforward humanitarian challenges. By leveraging the benefits of more accurate technology towards one's own military and one's own equipment, non-combatants present in the battlespace reap little to none benefits. Surely, one could argue that although no better, they are also no worse off than before. However, they are still worse off than they could be. Furthermore, being no better off when the PR image accompanying modern precision warfare suggests they actually are brings the risk of lowering the care taken to spare non-combatant lives.

Backlash

> THEY REASON THAT THE WEST'S COMMITMENT TO HUMAN RIGHTS IS CANCELLED OUT BY ITS UNWILLINGNESS TO TAKE CASUALTIES, AND ITS COMMITMENT TO HELP THE VULNERABLE IS CANCELLED OUT BY ITS UNWILLINGNESS TO TAKE AND HOLD TERRITORY.[591]

There is, however, also a humanitarian concern of a different kind. It lies in the erosion of humanitarian efforts taken by all parties involved in the conflict. The backlash as a result of casualty-transfer potentially leads to a downward spiral of noncompliance with the laws of war and disrespect for humanitarian values. Again, an issue of reciprocity is at stake. In warfare, a long standing implicit assumption is

[589] J.S. Breemer, 'War as We Knew it: the Real Revolution in Military Affairs, Understanding Paralysis in Military Operations', Center for Strategy and Technology, Air War College, Air University: Maxwell Air Force Base, 2000, pp. 14-16.
[590] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 51.
[591] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 204.

that imposing the risk of dying upon your enemy is accompanied by the risk of oneself also dying at the hands of that same enemy.[592] Anything short of that is, in the extreme position of this logic, viewed as terrorism or plain murder. The risk and casualty averse preferences of Western societies have not gone unnoticed by the rest of the world.[593] This can be clearly witnessed in the work of two Chinese Colonels who, with regard to the US, state: "What you must know is that this is a nationality that has never been willing to pay the price of life and, moreover, has always vied for victory at all costs. The appearance of high technology weaponry can now satisfy these extravagant hopes of the American people. During the Gulf War, of 500,000 troops, there were only 148 fatalities and 458 wounded. Goals that they long since only dreamt were almost realized: "no casualties." Ever since the Vietnam War, both the military and American society have been sensitized to human casualties during military operations, almost to the point of morbidity".[594]

By transferring casualties from your own combatants to non-combatants while still technically complying with the laws of war, the humanitarian purposes of the law are put at stake, its strength undermined by stretching interpretation to its limits. The perception of the adversary and non-combatants can be that of an unfair act, undermining mutual respect as well as respect for the laws of war.[595] Even with only a small transfer of casualty risk from one's own military personnel to adversaries and non-combatants, the perception could still be negative. As Shaw states: "And so, in comparison with the tiny numbers of Western military casualties, the numbers of both direct and indirect civilian casualties -as well as of local-allied and (even more) enemy combatants- appear large".[596] With so few casualties among one's own military, almost every non-combatant casualty seems to be disproportionate and unacceptable. It makes it hard to maintain the logic of serious humanitarian concern, undermining potentially humanitarily beneficial restraint shown by the adversary.

In addition, the adversary can exploit the fact that one tends to operate in casualty averse fashion. Deliberately focusing on increasing the number of Western casualties is becoming part of unconventional strategy.[597] Taking large numbers of lives is no longer the byproduct of an operation, but the strategic goal itself. The aim is to make

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592 M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 223.

593 S. Lambakis, J. Kiras and K. Kolet, 'Understanding "Asymmetric" Threats to the United States', in: *Comparative Strategy* 2002, 21 (4), pp. 241-277, p.257.

594 Q. Liang and W. Xiangsui, 'Unrestricted Warfare', PLA Literature and Arts Publishing House: Beijing, 1999, p. 93.

595 M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 346.

596 ibid., p. 348.

597 C. Dunlap Jr., Preliminary Observations: Asymmetrical Warfare and the Western Mindset. In Challenging the United States Symmetrically and Asymmetrically: can America be Defeated?, L.J. Matthews, Ed. Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 1998; pp vii, 343 p., p. 8.

war more inhumane, unpredictable and deadly.[598] In short, by decreasing the risk of casualties falling within Western forces, one has inspired the adversaries acting to try and increase them. Even if these two efforts cancel each other out, the risk for Western forces is the same, while the risk for non-combatants has increased significantly.

§9.4 The laws of war

§9.4.1 Current Status

> ALTHOUGH CIVILIAN CASUALTIES ARE ROUTINELY DESCRIBED AS ACCIDENTS, THIS OUTCOME IS HARDLY ACCIDENTAL. IT IS THE PRODUCT OF POLITICAL CHOICES IN THE REFINEMENT OF WESTERN MILITARY POWER AT THREE MAIN LEVELS: STRATEGY, WEAPONRY AND MEDIA MANAGEMENT. THE COMBINATION OF THESE ELEMENTS ENABLES THE WEST TO FIGHT WARS AT LITTLE HUMAN COST TO ITSELF.[599]

The laws of war are of course as applicable to casualty-transfer warfare as they are to any other form. They offer limits on the extent to which one can permissibly transfer risks to another. An attack must be carried out discriminately, the expected non-combatant damage being proportional to the military gain to be achieved. If an attack is discriminate and proportionate and does not breach specific regulations (e.g. by using chemical weapons), the attack is legal. This is regardless of whether it could have been conducted more discriminately by placing one's own military at greater risk.

As discussed, casualty transfer is generally not the result of specific conduct in war. The ultimate actions of the military personnel on which the laws of war focus are not crucial here. It is the decisions made long before the means and methods used to fight the war are determined that are important. The laws of war are no arbiter of policy and doctrine. When it comes to specific instances of casualty-transfer warfare, clear violations of the current laws of war are often not present.

The main reason for this is the laws of war's main focus on human conduct *during* warfare. They clearly demand a weighing of interests regarding the military target to be attacked and the potential suffering of non-combatants. Every military unit engaging in combat, whether a soldier on the ground or a fighter pilot in the sky, has to be prepared to have his conduct scrutinized in accordance with them. Considering all the circumstances of the specific situation, the individual's actions are weighed and judged in the light of the humanitarian concern the laws of war demand.
This focus was highly logical when they were drafted. The variety of ways to wage warfare was much smaller at the time. However, new developments in technology have brought about great, important changes to the equation. The options are no longer small in number and diversity. The laws of war no longer solidly bridge the

[598] C. Coker, Asymmetrical Warfare: Ends or Means? In Asymmetric Warfare, J.A. Olsen, Ed. The Royal Norwegion Air Force Academy: 1999; pp 319-340, pp. 319-320.

[599] M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 348.

gap between the options available. The difference in distance between the foot-soldier and the bomber pilot are not proportionately compensated for by a difference in the chances of successfully hitting the target.
The laws of war take into account the circumstances of each individual case and frame its demands in a proportionality test. They do not take into account the decisions leading up to that situation. The laws of war do not demand ground warfare where possible, or flying at low altitudes, or taking more risk to avoid collateral damage.[600] All things considered, the margins of error from a great distance are relatively low - taking into account the great distance from which bombs are dropped. In absolute terms, however, the range of error in high altitude precision bombing is considerably larger than boots-on-the-ground soldiers with guns in their hands. This brings us to a situation in which there is more care to avoid civilian casualties, the weapons used more accurate and precise than ever before, but where civilian casualties far outnumber Western military casualties and where risk is deliberately transferred to them. All this gives us reason for concern.[601]

It must be noted that some authors not only confirm that casualty-transfer warfare fails to breach any of the current laws of war, but that concern regarding the proportionality of attacks presents a 'false dilemma':

> Technology has made it possible to conduct highly precise attacks without placing one's forces at great risk. For instance, during Operation Allied Force, NATO aircraft struck targets from beyond the effective altitude of most air defense. Critics alleged that this tactic resulted in greater civilian casualties than would have been the case had the aircraft operated within the enemy threat envelope, and that therefore the attacks were disproportionate. This assertion not only confuses the principle of proportionality with the requirement to take precautions in attack, but also evidences a misunderstanding of aerial combat operations. More to the point, it wrongly excludes preservation of one's own forces as an important military advantage to be considered when conducting proportionality calculations.[602]

By this rationale, casualty transfer warfare is an element that the laws of war should not have to deal with. The current proportionality equation suffices. The protection of one's own military personnel is an important factor in weighing proportionality, since it contributes significantly to military gain. This reasoning is sound but cuts at least one corner: the traditional way of viewing 'military gain' in the proportionality equation focuses on the value of the target. Taking into account the value of the attacking equipment and personnel is an option, though one that broadens the scope of current interpretation. As a counterargument one could hold that one is

[600] D. Kennedy, 'Of War and Law', Princeton University Press: Princeton, 2006, p. 37.
[601] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, pp. 86-87.
[602] M.N. Schmitt, 'The Impact of High and Low-Tech Warfare on the Principle of Distinction', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2003, pp. 10-11.

taking the concept of military gain a step too far. If one wants to assure the military gain of not loosing equipment and personnel, not carrying out the attack is the safest way to go. Throughout this Chapter, I have repeatedly questioned too heavy a focus on humanitarian desires alone that neglects the element of military interest. The laws of war have to rest firmly on both to preserve their practical meaning. In this case though, we run the risk of focusing too heavily on the element of military interest and neglecting the humanitarian concerns.

§9.4.2 Necessity to remedy

> THE LEGITIMACY OF THIS 'COLLATERAL DAMAGE' WAS GREATLY UNDERMINED BY THE FACT THAT THE ALLIANCE WAS NOT PREPARED TO RISK EXPOSING THE BOMBERS THEMSELVES TO SERBIAN ANTI-AIRCRAFT FIRE. NATO RISKED CIVILIAN LIVES THROUGH HIGH-ALTITUDE TARGETING ERRORS IN ORDER TO KEEP ITS AIRCREWS SAFE. THE STRATEGY'S COMPLETE SUCCESS -NOT A SINGLE MEMBER OF THE NATO MILITARY FORCES LOST HIS LIFE THROUGH ENEMY ACTION- ONLY UNDERLINED ITS MORAL AND POLITICAL QUESTIONABILITY.[603]

Stating that the laws of war do not tackle this problem is not sufficient to promote its adaptation in order to do so. The question is whether, in the light of the goals of the laws of war, it is morally necessary to tackle the humanitarian concerns described above.

Michael Walzer's work can help us gain insight into the issue of moral questionability.[604] In his view, building on the long tradition of just war theory and in particular on the doctrine of double effect formulated by Thomas Aquinas, an act with likely evil consequences should meet two separate demands.[605] A sufficiently good end should compensate the potential evil, by meeting the proportionality rule. As said, the laws of war currently contain a rather limited embodiment of this proportionality rule.[606] The foreseeable evil should, within the given circumstances of the individual military delivering the final hit, be prevented as much as possible. However, this treats a number of previous (doctrine) choices and decisions as a given. According to Walzer, this is not enough: "Simply not to intend the death of civilians is too easy … What we look for in such cases is some sign of a positive commitment to save civilian lives. Civilians have a right to something more. And if saving civilian lives means risking soldiers' lives, that risk must be accepted".[607] It is a statement which fits with just war theorists morally demanding combatants to bear

[603] M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 22.

[604] M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 354.

[605] T.W. Smith, 'The New Law of War: Legitimizing Hi-Tech and Infrastructural Violence', in: *International Studies Quarterly* 2002, 46 (3), pp. 335-374, p. 360.

[606] M. Walzer, 'Just and Unjust Wars: a Moral Argument with Historical Illustrations', 2nd ed., Basic Books: New York, 1992, p. 155.

[607] ibid.

larger risks than non-combatants, leading some to state that the current warfare displays a reversal of this logic and tradition.[608]

While this moral guidance offers a clear disapproval of casualty-transfer from military personnel to non-combatants, Walzer offers a nuance that changes the picture: "But there is a limit to the risk we require. These are, after all, unintended deaths and legitimate military operations, and the absolute rule against attacking civilians does not apply. … We can only ask soldiers to minimize the dangers they impose".[609] This brings us back full circle: military personnel should minimize the dangers posed to non-combatants. This said, we cannot ask them to do so by taking more risks themselves. However, while casualties among all parties separately should be minimized, the overall risk of casualties still has to be distributed. Casualty-free war is not feasible, passing on risk in circles failing to diminish it. Moreover, casualty attribution is not merely a game of chance and fate. Policy and doctrine choices clearly shape practical outcomes, playing a large role in determining who should suffer the casualties in warfare. The law should serve to stimulate a fair balance in this casualty attribution process. The laws of war already serve this function in valuing specific actual acts of war. Every act of force is subject to the proportionality test. However, choices of policy and a doctrinal nature are not.

Some authors already conclude that, regardless of the legality of the acts, the legitimacy of casualty-transfer to non-combatants is highly questionable -as we read in Shaw's quote starting this section.[610] Though not arguing that the acts were illegal under the current laws of war, Shaw appeals to notions of fairness, balance and a certain required level of reciprocity: in order to be legitimate, risk posed upon others should be accompanied by a willingness to shoulder risk yourself.[611] As Best puts it, for the sake of "legal correctness or humanitarian principle", one has to accept losses.[612] The situation in which casualties are transferred from one military party to civilians is then at odds with the established moral criteria.[613] Van Creveld argues that the willingness to die in the process is what sets war apart form organized killing.[614] In addition, Ignatieff states: "The tacit contract of combat throughout the ages has always assumed a basic equality of moral risk: kill or be killed. Accordingly violence in war avails itself of the legitimacy of self-defense. This contract however,

608 T.W. Smith, 'The New Law of War: Legitimizing Hi-Tech and Infrastructural Violence', in: *International Studies Quarterly* 2002, 46 (3), pp. 335-374, p. 361.

609 M. Walzer, 'Just and Unjust Wars: a Moral Argument with Historical Illustrations', 2nd ed., Basic Books: New York, 1992.

610 M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 22.

611 While the tradition is long and standing, practice has always shown exceptions. Classifying an enemy as 'barbarians' or 'beasts' has always proven a solid way to reason away reciprocity.

612 G.F.A. Best, 'War and Law since 1945', Oxford University Press: Oxford, 1994, p. 62.

613 M. Shaw, 'The New Western Way of the War: Risk-Transfer War and its Crisis in Iraq', Polity Press: Cambridge, 2005, p. 136.

614 M.L. Van Creveld, 'The Transformation of War', Free Press: New York, 1991, p. 160.

is void when one side begins killing with impunity. Put another way, a war ceases to be just when it becomes a turkey shoot".[615]

§9.5 Possible remedies

§9.5.1 Legal

Subsidiarity
Again, the principle of subsidiarity might help. By assessing the possible viable alternatives and their probable outcome, one can better determine whether the goals of humanitarian and military interests are both sufficiently served. This would not have a one dimensional effect legally diminishing the possibility of waging casualty-transfer warfare. It would help determine the dividing lines between reasonable protection of one's own and the risk one has to shoulder in order to protect the innocent. Some cases that might seem highly risk-averse and cause much collateral damage might be exonerated if one could show that viable alternatives would not have yielded more humanitarily satisfying results.

Accountability
As we have seen, there is a phase crucial to the ultimate practical consequences of warfare not covered by the laws of war. By focusing solely on the conduct of the military carrying out specific actions of warfare, the laws of war perform well, but only at the tip of the iceberg. Extending the legality assessment of a fighting party's conduct to the crucial phase of doctrinal and political decision-making is a big step towards also considering the part of the Iceberg remaining under water.
Such an assessment should, contrary to that of the conduct in the battlespace itself, not be done on a case-by-case basis. A single doctrinal or policy decision should only be judged when it leads to effects negating humanitarian concern too much in favor of military or policy interests. When the warfighting effort on the whole shows such an imbalance, there is reason to assess the underlying decisions. If the warfighting effort is relatively 'clean', there is little reason to carry out such an assessment.

Maximum height
It is very common for Rules of Engagement to state a minimum altitude that the aircraft may not go under. This was the case in the Kosovo effort where aircraft were required to stay 15,000ft or higher above ground level.[616] This led to the accusation that it caused a higher rate of non-combatant death and destruction than would have occurred if the aircraft was permitted to fly at lower altitudes.[617] One could reason that in order to protect non-combatants, one could mirror the rule and demand a maximum allowed height as well. Despite the fact that every chosen altitude would be arbitrary and would lead to different results depending on the

[615] M. Ignatieff, 'Virtual War: Kosovo and Beyond', Vintage: London, 2001, p. 161.
[616] J.J. Klein, 'The Problematic Nexus: Where Unmanned Combat Air Vehicles and the Law of Armed Conflict Meet', in: *Air & Space Power Journal* 2003, p. 5.
[617] P. Meilinger, 'Precision Aerospace Power, Discrimination, and Future War', in: ibid.2001, pp. 12-20, p. 14.

aircraft and munitions chosen, it could serve to offer a minimum level of protection - a bandwidth for a commander to stay within when distributing risk (and casualties) between his own troops and non-combatants.
However, this presumes that a straightforward relation between an increase in height and a decrease in precision. Though this is definitely the case with unguided weaponry, it is not necessarily the case for precision-guided munitions. Some become more precise with increased distance, more time being available to adjust the course.[618] Setting a maximum distance of delivery may effectively decrease precision in such cases.

§10 Additional Factors

A number of factors change modern warfare in less direct ways. They contribute to the ongoing processes of change and have great impact on the context in which war is fought. Though technological innovation is essential in making these factors relevant, it is not necessarily through weapons technology directly that these factors are important.
Often, they do not have a large, direct impact on the humanitarian situation in war, but they can act as 'force multipliers' on the developments described above. It is not the purpose here to find a way for the laws of war to counter them. They should, however, be kept in mind as co-shaping the context in which the previously discussed developments take place, helping in turn to avoid an oversimplified image of reality.

§10.1 Media

Media-presence throughout society has increased and war is no exception. Whether it is through the reports of independent investigative journalists or news outlets broadcasting video material made available by the armed forces themselves, one can follow the course of war in greater detail than ever before. This in itself does not directly pose problems. However, media coverage can be seen to act as a 'force multiplier' to a number of already arising issues. According to Shaw, it is even one of the five key elements in the modern military process.[619]

The fact that most societies with modern military forces depend to a large degree on democratic popular support makes the media a powerful influence on war. This is both in terms of the enemy's attempts to erode public support and the political elite's attempts to foster it. Despite the term 'public relations' replacing 'propaganda', it still boils down to the same thing: presenting the facts in such a light that is beneficial to one's own efforts.
The power of this element in the warfighting effort is quickly evident in remembering the Vietnam War. The United States was not defeated militarily, but

[618] M.N. Schmitt, 'Precision Attack and International Humanitarian Law', in: *International Review of the Red Cross* 2005, (859), p. 4.
[619] M. Shaw, 'Risk-Transfer Militarism, Small Massacres and the Historic Legitimacy of War', in: *International Relations* 2002, 16 (3), pp. 343-359, p. 349.

faced eroding public support back home that lead to retreat before a victory could be attained.[620]

Media and Precision Weaponry

When looking at precision weaponry, the media is often used to display wonderful innovations and theoretically possible levels of accuracy. Supporting your country going to war is much easier when the military does all it can to prevent innocents from dying.[621] These media images tend to be exaggerated and create too optimistic an image. Laboratory conditions are not the same as a battlespace environment. Moreover, the highest end weaponry is not available in large numbers. An image of war based on 'the latest and greatest' makes a great show, but does not represent reality. These exaggerated expectations return with a vengeance when war is fought and the reality turns out to be worse than expected.[622]

Of course, although this might be a pressing issue for the military, it does not directly affect the laws of war. However, Schmitt argues that it does lead to a shift in the proportionality equation, one toward larger scrutiny and a more strict interpretation of the laws of war: "Technology not only actually heights the legal standards to which high-tech forces must conform, but it creates expectations which, albeit initially without legal valence, create de facto standards which States operating under the media microscope can ill-afford to ignore. Very subtly, these de facto standards will influence application and interpretation of de jure standards as to what is and is not lawful collateral damage and incidental injury".[623]

On the one hand, from a humanitarian perspective, one could view this as a purely positive development. If the media lead to larger scrutiny and a stricter, more humanitarian interpretation of the laws of war, mankind can only benefit. This is especially so when it is not only one's own casualties, but the enemy's -especially their civilians- that count. The goal of achieving reduced casualties and suffering, especially among non-combatants, is significantly furthered.[624] In a sense, the media coverage becomes a surrogate for the lack of a powerful, State-independent enforcement mechanism.

On the other hand, however beneficial its contribution to the humanitarian equation, it also contributes to an unevenness in the laws of war's application. Only those acts that are covered by the media seem to count. The media is mostly interested in the conduct of the military from the State where it broadcasts. The media-effect also only occurs in societies where the political-military leadership is dependent upon popular support.

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620 J. Record and W.A. Terrill, 'Iraq and Vietnam: Differences, Similarities and Insights', Strategic Studies Institute, U.S. Army War College: Carlisle Barracks, 2004, p. 47.

621 A.J. Bacevich, 'The New American Militarism: How Americans are Seduced by War', Oxford University Press: New York, 2005, p. 115.

622 M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 57.

623 ibid., p. 60.

624 K. Homan, 'Van Pepperspray tot Lasergun', Rathenau Instituut: Den Haag, 2005, p. 18.

Furthermore, the PR efforts might even be too successful, creating an image of clean warfare, when reality is different. In such case, the image rests on theoretical levels of accuracy while in practice false intelligence and error rates lead to much less precision. This image then offers a false sense of legitimacy, assessing the warfighting effort on the better half of the story.[625]

Media and the individual

The Second World War is rich in imagery. Tons of video and photo material is available and the source of countless documentaries. Large volumes of letters and memoires make it possible to get a good sense of how the war was experienced on all sides by the persons affected. In this, the individual stories are more compelling than lists of facts reflecting the large-scale horror and suffering. All this information is available to us now, but was not immediately during the war. Letters took weeks to reach home, the homefront then finding it difficult to truly understand what they meant.

Today, detailed, clear video images are available in real time. The family members of kidnapped civilians in the battlespace immediately see their beloved one being held hostage or, in the worst of worst cases, even being beheaded. No longer is the information on the war, during the war channeled through and controlled by governments. No longer is the information restricted to general numbers of casualties and progress reports on how well your side is doing. This has changed the 'experience' of war for those at home on which electoral support for the warfighting effort rests. Individual stories determine the way the war is viewed. Even when the overall warfighting effort produces fewer horrors than ever before, the ones it does produces have more impact than ever before. [626]

§11 Conclusions

> THE SINGLE MOST IMPORTANT FACTOR IN CREATING PROBLEMS REGARDING THE IMPLEMENTATION OF THE LAW IN THE TWENTIETH CENTURY WAS CLEARLY THE DRAMATIC CHANGES IN THE TECHNOLOGY OF WARFARE. ... THE SUDDEN AND MAJOR CHANGES OF THE TWENTIETH CENTURY PLUNGED THE WORLD INTO DISARRAY AND RESULTED IN THE NEED FOR EXTENSIVE CHANGES IN THE LAW BY TREATY.[627]

We have seen many changes in the way warfare is waged today. We have seen that the laws of war still formally succeed in regulating the changed ways of war, but do not always seem able to maintain the same levels of material protection as when they were drafted. Some suggestions have been given for ways to remedy that effect and strengthen the protection the laws of war offer. When looking at each

[625] J. Marshall Beier, 'Discriminating Tastes: 'Smart' Bombs, Non-Combatants, and Notions of Legitimacy in Warfare', in: *Security Dialogue* 2003, 34 (4), pp. 411-425, p. 422.

[626] M.N. Schmitt, 'War, Technology, and International Humanitarian Law', Harvard Program on Humanitarian Policy and Conflict Research: Cambridge, 2005, p. 60.

[627] L. Doswald-Beck, 'Implementation of International Humanitarian Law in Future Wars', in: *Naval War College Review* 1999, p. 42.

occurring change, two main areas of improvement stand out: subsidiarity and accountability.
A number of these suggestions are susceptible to an argument of fairness, possibly being seen to apply different standards to different parties. This is especially pressing when it seems to raise the bar for those parties already doing more to protect non-combatants (e.g. by spending money on precision guided munitions). This argument of unfairness might, at first, seem strong. The modern laws of war have always sought to balance the war effort with humanitarian concern in ways that apply equally to all parties. However, at the time the original principles of the laws of war were codified, warfare was waged radically differently than today.
States waging war among each other, relative equality of means and weaponry, a battlefield distinguishable from urban areas, mutual recognition among the military class and a deep-embedded notion of reciprocity are no longer the trademarks of warfare. The notion of the laws of war being fair in the sense of treating parties equally was not so much the result of a fundamental aim of the laws of war as of a pre-given similarity between the parties involved and the way they fought.[628] As Schmitt states, claiming that the laws of war should have unmitigated equal effects is to ignore the underlying purposes of the laws of war: "Humanitarian law is not intended to ensure a fair fight. Rather, it is designed to protect, to the extent possible, those who are not participating in hostilities, and their property, from the effects of those hostilities. It is also calculated to ensure that combatants do not suffer unnecessarily. Suggesting that a party with the technological ability to exercise great care in attack need not do so because its opponent is not similarly equipped runs counter to such purposes".[629]

Distilling shared potential solutions from analysis of specific issues in current warfare is however not enough to call for a change. We first have to determine whether the current laws of war in general produce substandard results.

§11.1 Do the current laws of war succeed?

> IT HAD BEEN OBSERVED THAT PRIOR TO WORLD WAR I THE RULES OF LAND WARFARE WERE GUIDED BY TWO MAJOR PREMISES. I) THERE MUST BE A SHARP DISTINCTION BETWEEN COMBATANTS AND NON-COMBATANTS AND A CONSEQUENT CONCERN WITH LIMITATIONS OF WHAT WAS PERMITTED IN HOSTILITIES. II) A PROHIBITION EXISTED AGAINST THE DEVELOPMENT OF NEW WEAPONS WHICH WERE MORE DEADLY AND POWERFUL THAN ANY PREVIOUSLY KNOWN ONES. ... THE ACTUAL PRACTICES OF THE NATIONS INVOLVED IN WORLD WARS I AND II PAID LITTLE HEED TO THESE TENDENCIES AND THE 1956 MANUAL VIRTUALLY RECOGNIZES THAT THEY HAVE BOTH BEEN REVERSED. MUCH AS WE MAY REGRET IT, THE TENDENCY OF MODERN

[628] M.N. Schmitt, 'Bellum Americanum: The U.S. View of Twenty-first Century War and its Possible Implications for the Law of Armed Conflict', in: *Michigan Journal of International Law* 1998, 19 (Summer 1998), pp. 1051-1090, p. 1088.

[629] M.N. Schmitt, 'The Impact of High and Low-Tech Warfare on the Principle of Distinction', Program on Humanitarian Policy and Conflict Research at Harvard University: Cambridge, 2003, p. 11.

> WARFARE IS TO VISIT DESTRUCTION UPON THE WHOLE POPULATION WITH INCREASINGLY DEADLY WEAPONS.[630]

The impression might arise that the laws of war always arrive late at the party -that they cannot deal with the new and unknown. In the sense that they do not explicitly cover all new innovations in weapons technology, the impression is correct. As Hartmann puts it, there will always be an "inequality between the rapid advance of science and its capabilities and the comparative glacial development of legal constraints".[631] In the sense that the laws of war are not able to regulate new, unknown, and unforeseen weapons technology, such an impression is wrong for two reasons. The first is that many provisions of the laws of war have a general validity and focus on effects, rather than the weaponry itself.[632] Most new weaponry can, in its working or effects, be compared to what already exists and is regulated. The US Air Force Manual on International Law expressly confirms this when dealing with the determination of legality of new weaponry: "Analogy to weapons or methods previously determined to be lawful or unlawful, and upon the evaluation of the compliance of such new weapons or methods with established principles of law, such as the rules of necessity, discrimination and proportionality".[633]
The second is that, for new weaponry, there are some clauses offering a procedure for admittance and test of legality. Under Article 36 of the First Protocol additional to the Geneva Conventions, States are obliged to determine the legality of new weapons, means and methods of warfare before deploying them:

> In the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this Protocol or by any other rule of international law applicable to the High Contracting Party.[634]

> Before something is used or, in some cases, developed, a review of compatibility with the laws of war should be conducted. This is to prevent the discovering of illegality after heavy investments have been made or, much worse, practical proof of inevitable illegal effects of deployment has been obtained. Nevertheless, this obligation is not translated into a clear procedure or specific demands of what such a review should entail.[635]

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630 William F. Fratcher in 1957, as quoted in: D.A. Wells, 'The Laws of Land Warfare: a Guide to the U.S. Army Manuals', Greenwood Press: Westport, 1992, pp. 11-12.

631 McClelland, 'Conventional Weapons: A Cluster of Developments', in: *International and Comparative Law Quarterly* 2005, 54 (3), pp. 755-766, p. 755.

632 e.g. the provisions of the Air Force Manual on International law, as quoted in: N.C.L.A. (Organization), 'On the Unlawfulness of the Use and Threat of Use of Nuclear Weapons', New York, 2000.

633 as quoted in: ibid.

634 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Geneva, 1977, Art. 36.

635 K. Lawand, 'Reviewing the Legality of New Weapons, Means and Methods of Warfare', in: *International Review of the Red Cross* 2006, (88), pp. 925-930, p. 933.

§11.2 Are general principles enough?

> THERE IS NO DENYING THAT OVER THE YEARS MANKIND HAS WITNESSED STEADY PROGRESS IN THE SOPHISTICATION, THE DEVASTATING EFFECTS, AND CRUELTY OF WEAPONS AND METHODS OF COMBAT. ... INTERNATIONAL LEGAL CONTROL OF WARFARE HAS KEPT PACE WITH THE DEVELOPMENTS IN ORGANIZED ARMED VIOLENCE ONLY TO A LIMITED EXTENT. MAJOR MILITARY POWERS HAVE NOT ACCEPTED SWEEPING RESTRAINTS, WITH THE CONSEQUENCE THAT THIS BODY OF LAW IS BESET WITH DEFICIENCIES, LOOPHOLES, AND AMBIGUITY.[636]

The fact that new weapons technology is deployed, or that war-fighting shifts in nature from how it was conducted before, does not automatically cause problems for the laws of war. Even if they contain no specific provisions applicable to the new development, the laws of war remain deeply rooted in a handful of principles to which all conduct in war is subject[637] -the necessity of use, the principle of discrimination containing the demand of proportionality, and the obligations not to cause unnecessary suffering and take viable precautions.[638] These have been present from the start of the modern laws of war and have not changed ever since.[639]
In fact, throughout this Chapter, we have seen these principles return over and over again. Of course, it is not surprising that in dealing with new developments, the laws of war only cover them with regard to general principles and not (yet) specific regulations. We have also seen that the principles remain highly applicable. I have certainly suggested some additions to reinforce their strength, but in general, the principles function adequately. In addition, where new developments were covered by specific regulation, these *lex specialis* more often than not complicated the matter, being applicable but not suitable, or at least not drafted with the new developments in mind. Sometimes (e.g. the case of blinding laser weapons) there is very selective specific regulation covering only a small fraction of the general development. This raises questions as to the status of comparable yet differing developments. The rules regarding blinding laser weapons do away with a clear distinction between death and injury without offering a different demarcating rule in its place. This blurs the situation regarding other non-lethal weapons not having specific regulation dedicated to them.
In short, the principles are still crucial. More specific regulation, while offering some value, often has negative side-effects for the entire spectrum of the laws of war.

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[636] A. Cassese, 'International Law in a Divided World', Oxford University Press: Oxford, 1986, p. 285.
[637] I. Detter, 'The Law of War', Cambridge University Press: Cambridge, 2000, p.233.
[638] ibid., p. 241.
[639] J.M. Spaight, 'Air Power and War Rights', 3d ed., Longmans: London, 1947, p. 188.

Chapter VI
Conclusions

§1 Introduction

After all the preceding information has been analyzed, questioned and pondered upon, the reader will most probably have drawn some conclusions of her or his own. The matter at hand is complex, the relevant factors large in number and variety. This final Chapter draws conclusions from the analysis. More specifically, it offers my conclusions -substantiated by the discussion in the previous Chapters. I do not claim to have definite answers. Taking into regard the complexity of the matter and the perpetual motion involving war, technology and law, such a claim would be overly ambitious. It is more my hope that the previous Chapters contribute to the insight of anyone interested in the subject matter. With regard to the conclusions of this Chapter, I hope that they contribute further to the discussion and to the process of finding answers -whether through fostering agreement or by challenging those in disagreement to solidify their argumentation.

Before we look to the conclusions and tentative answers, it might be helpful to restate the original question underlying the research:

> *Do the changed ways war is fought -instigated by technological innovation- make reform of the current* ius in bello *desirable or necessary? If so, what are the main changes in warfare challenging the* ius in bello*, what challenges do they pose and, if possible, how can the* ius in bello *meet them?*

The first answer should be quite clear by now: changes in the practice of warfare challenge the laws of war in a variety of ways. Many lead to practical outcomes that are not in line with the aims of the laws of war. In order to serve these aims, the laws of war need adaptation to better fit the changed practices. If one wishes to maintain the level of humanitarian protection the laws of war once offered, reform is necessary. The research, however, has also shown that the laws of war are still relatively strong and by no means in dire straits. 'Reform' is therefore perhaps too strong a word; 'adaptation' is rather better. While Chapters II and III have given us insight in the fabric of the laws of war, Chapters IV and V have laid out the main challenges the laws of war currently face. Asymmetry between fighting parties on numerous levels, the laws of war being used as a weapon through lawfare, increasingly large distances between attacker and target, unmanned military systems, casualty transfer, non lethal weaponry and Cyber Warfare seem to pose the greatest challenges to the laws of war's effectiveness in regulating armed conflict. For each separate challenge, some tentative suggestions have already been made regarding how the legislation might counter the humanitarian concerns raised. In this Chapter, I will focus on the shared aspects and broader tendencies. The research in its totality has brought me to draw three general conclusions on the laws of war's current state.

§2 Stick to the principles

§2.1 War as context

This book is about law, but it is clearly about war as well -about the changes in its modern forms that stem from technological innovation. When reaching conclusions on the laws of war and possible improvements, it is good to keep in mind that we are talking about attempts to regulate human conduct during wartime. I can think of very few other circumstances where human beings are put under such phenomenal stress. While this offers no excuse for neglecting the human moral codes laid down by the law, it does offer an extra dimension for consideration. For the laws of war to be truly effective, a good legal system is not enough. The laws of war have to take into account the specific circumstances under which they function, balance humanitarian concerns with military necessity and be prepared to deal with the unknown.

§2.2 Strength and Weakness

As we have seen in the first Chapter, the laws of war were not perfect to begin with. Without yet considering current changes in the way war is fought, we can already identify a number of weak areas. This is important to remember. It is important to avoid seeking fault with current changes in warfare and their impact on the laws of war when a difficulty lies with the laws of war themselves. The good news is that, from the point of origin onward, most of the people involved in codifying and adapting the laws of war have understood this situation. An initial conclusion might be that the laws of war perform reasonably well. Although we have seen many challenges posed to the laws throughout this book, we have also seen many ways in which they already face them. In addition, much of the dissatisfaction with the current state of affairs stems not from a fault within the laws of war, but from inevitable dilemmas, paradoxes and, in some cases, even an intentional disregard for human morality.

With regard to the inevitable paradoxes and dilemmas, I hope the book contributes to a better understanding and ultimately their acceptance. Too much time, talent, and energy seem to be wasted running back and forth between the extreme ends of dilemmas, paradoxes, and catch 22 situations. Realizing the inevitability of certain suboptimal aspects of the laws of war might encourage more effective use of that time, talent and energy in improving the level of humanity displayed in warfare.

In my view, the strength of the laws of war lies in their solid foundation. The handful of general principles stated in the preamble to the 1868 St. Petersburg Convention has stood the test of time. Most of the weaknesses present themselves when those principles are translated into more specific regulation, usually in an attempt to clarify what the general principles 'mean' in greater detail.

§2.3 Principles v. specific regulation

The general principles underlying the entire body of the laws of war are few in number and have remained largely the same over time. They lay down the basic moral notions mankind has seen fit to uphold even under the extreme circumstances of war. One should keep the fighting as 'efficient' as possible: being militarily effective whilst causing as little (civilian) death and destruction as possible. In other words: maximizing military benefit and minimizing humanitarian cost. These hallmarks within the modern laws of war are in themselves not modern. Regulating warfare and restricting the fighting parties has always appealed to our sense of humanity. Violence is inevitable but should be proportional. No more harm and damage should be done than is necessary to achieve military goals. These notions are as old as warfare itself and have been weaved into legal constructions long before the modern laws of war were codified. The general principles stand in a tradition built from the 17th century onwards by, among others, Grotius, Wolff, and Vattel.
The notions that the use of means and methods of warfare is limited; that one must discriminate between combatants and non-combatants and refrain from targeting the latter; that the use of force should be proportional to the military aim achieved; that one must at all times display humanity and not cause unnecessary suffering - despite all that has changed in warfare, these basic principles have lost nothing of their meaning or force.

These principles serve a double function. On the one hand, they have validity of their own in regulating conduct in warfare. All actions during times of war should comply with these general principles. On the other, they act as a source for virtually all other laws of war, serving as the reason why specific regulation was called for and agreed upon.[640] This phenomenon itself raises several issues as discussed in §3.1 of Chapter III under the paradox of double prohibition header. As noted there, this paradox brings about several issues.

First, when specifying general principles in specific cases, one runs the risk of suffering from *a contrario* reasoning -if case A is specifically regulated, other, non-regulated cases are either not prohibited at all or prohibited less strictly. If they were, they would have been specifically regulated as well. This is an inescapable issue, since one cannot regulate all theoretically possible cases specifically.
Second, the fast pace of (technological) change in warfare makes it impossible to keep specific regulation up to date. Although one can fall back to the general principles in such cases, having specifically regulated some aspects of warfare raises expectations, casting a shadow over other relevant factors that have not been regulated specifically (yet).

[640] See e.g. §9.4 of Chapter II where the CCW Convention is discussed: the Convention deals with means and methods of war whose use is prohibited for the sole reason that they breach one or two of the general principles.

Next, when one decides that general principles alone are unsatisfactory and one wants to make specific rules for certain occurrences in armed conflict, one faces the dilemma as discussed in §3.2 of Chapter III: ending up either with technology-specific regulation or broad and vague notions.
Thirdly, the more specific the rules become, the more it seems the room for debate and varying interpretation grows. It has proven very difficult to draft specific rules that do without broad, vague, multi-interpretable terms. As an example, in specifying when damage is disproportional to a certain military gain, the laws of war can give no 'number of dead non-combatants to number of disabled combatant units' ratio. Instead, proportionality is explained by using even broader notions like 'widespread', 'long-term', 'significant' etc. etc. This fails to make the matter much clearer, instead creating the potential for more ways in which to diffuse the debate.
Fourthly (and closely connected to the third point), the (interpretational) debates on the specific rules can encourage a diffusing of the laws of war's core values. One runs the risk of focusing our thoughts, debates, arguments, and attention on the legal technicalities of the body of the laws of war and not on the moral imperatives that they pose. This is more pressing with regard to the laws of war than with other legislation. The laws of war are closely connected to the morality of human conduct in warfare. Complying or not complying often directly translates into behaving morally or immorally and from there into practical consequences. The laws of war offer few rules for organizing human interaction for the sake of practicality alone. Not targeting discriminately is morally different from driving a few miles an hour too fast.

Specific rules offer room for maneuver, this room mostly used for maneuvering out of one's obligations under the laws of war. Under the pressing circumstances in which a nation at war finds itself, doors slightly ajar will soon be kicked wide open - particularly if it suits the military purposes of the war-fighting party.
Of course, the general principles might appear to be uncomfortable to work with on their own. However, specification does not equal clarification. Rather it risks creating a false pretense of clarity. Lack of clarity need not be a cardinal issue, but if it is present, it is best that it is recognized. Debates on how to assess specific cases will always be present. The laws of war are, in my view, better served by debates focusing on whether a general principle was breached rather than on whether a specific rule was violated.[641] This is especially so since the general principles, although they may be broad, vague, and multi-interpretable, do appeal to essentially moral values understandable to the public.

§2.4 Exception to the rule

The reinforcement of the role of the general principles should not be mistaken for a claim that all later efforts in specifying and elaborating the laws of wars have brought little benefit. There are good examples of clarification and rules that have helped guide conduct in warfare toward more humane practices.

[641] See also: §3.2.4, §4.2.2, §6, §9.1, §9.4, and §11 of Chapter II, §3.2 of Chapter III, and §11.2 of Chapter V.

It is good to keep in mind the type of specific rules that have proven to offer a larger chance of success than others. Next to reaffirming the general principles and only making additional rules when they can genuinely be expected to improve the practical consequences, one's focus should be the more effective ways of adding to the body of the modern laws of war.

One of the most effective additions has turned out to be clear and simple prohibitions on the possession of certain types of weaponry. In line with what has been argued in this book, they enable the laws of war to become involved much earlier in the process. Their influence is not merely at the moment a certain weapon is about to be used. Their impact is independent of time, regulating what weaponry may and may not be developed or acquired, whether during war or in times of peace. With the caveats discussed in §2.1 of Chapter III, this type of regulation can serve well in creating a category of rules regarding means of war agreed to be beyond discussion -means that are deemed (almost) never allowable for deployment in accordance with the general principles of the laws of war. Such means being developed and used would obviously be suspicious, their acquisition and stockpiling thus also a logical subject for prohibition. In my view, this type of regulation should be reserved for weapons technology whose deployment has proven practically impossible without violating the laws of war. When this type of regulation is used to nip new and uncertain developments in the bud, its strength is eroded.

Next, specific laws of war serve a useful purpose in enforcing a principle rather than focusing on restating a rule in itself. In creating a mechanism for verification, inspection and sanctions, the laws of war become proactive in their approach. The frustrating need to wait for an atrocity to have happened is mitigated by an ongoing process of supervision. It is, however, quite difficult to reach agreement to such a system when parties have to undergo scrutiny without having done anything wrong. When such a system is in place though, it does make the laws of war more powerful. Next to being able to monitor developments, it serves to continually stress the underlying reasons for the mechanism being in place. It keeps the general principles of humanity at the centre of attention.

Finally, a legal system has demands of its own. When the ultimate weakness of the laws of war -a lack of enforcement and independent arbitrage- is resolved, new demands come to thefore. If individuals are held accountable by e.g. the ICC, sentencing human beings based on broad notions might be morally sound, but is legally complicated. The logic of *nulla poena sine lege* dictates that no punishment can be given without a sufficiently specific basis in the law. Of course, the general principles can serve as such a legal basis. However, the legal world tends to prefer rules to be phrased as closely as possible to the act to be condemned. More specific rules can serve to make the prosecution's job easier. However, the *a contrario* risk presents itself here again. When numerous cases are covered by specific regulation and a defendant is accused of something else, only the general principles are left to be called upon. This call is less resonant when seen as a 'last result' than when it is standard practice in all cases.

§2.5 Realistic expectations

While these examples of effective specific regulation give reason to be optimistic about the laws of war, not all types of regulation offer the same hope. Although this book focuses on the laws of war, and more specifically the part dealing with regulating weapons technology, I have attempted to put that focus into a realistic perspective. When focusing on a subject, one runs the risk of making it bigger than it is, loosing sight of crucial factors in its context. When focusing on the laws one might forget other important influences, overestimating the law's practical power as a result. While the legal language covers volumes on paper, the practical reality of warfare is harder to capture within these pages. In §3.3 of Chapter III, dealing with the dilemma of regulating new technology, and §4 of Chapter III, analyzing the interplay between law, doctrine and technology, I have specifically paid attention to the relative position of the laws of war. That analysis has revealed the laws of war's modest position in determining what actually happens in practice. As made clear a few times before, my concern is not with the beauty of the legal system on paper. My concern is with the creation of a body of laws that improves humanitarian warfare conditions in practice as effectively as is possible.

§2.6 Conclusion

All in all, the general principles have stood the test of time and lost none of their force. More specific rules bring with them the risk of derogation of that force. However, this is not to say that the laws of war should revert to the handful of basic principles and dispose of all specific regulation. Many of the specifications have served well in clarifying what they regulate. It is the inherent incompleteness of a collection of specific rules that offers most of the difficulties described. The specific rules have served to make the laws of war more powerful in earlier stages. They foster legitimacy of the laws of war as a legal system. Despite this though, in our efforts to strengthen the laws of war as much as is possible, it is important to recognize that the general principles remain forceful on their own. They do not *need* specification or elaboration. It *might* serve them to do so, but before setting out to draft more specific regulation, one should consider caution and the potential for negative consequences. The added value of specific regulation must be substantial and clear. If not, the laws of war might be better served by staying closer to the moral imperatives demanded in the general principles. In addition, practice should continuously reflect the idea that the general principles form the starting point - other rules being clarifications of or auxiliaries to them. The principles should be explicitly leading in interpretational debates surrounding specific regulations. It should be clear that specific regulations serve the principles and cannot diminish their legitimacy or value. The legal case should be focused on the morality of the conduct as demarcated by the general principles, not by legal technicalities. Such a debate should be conducted in language fitting to what is really at stake. When dealing with war, destruction, fog of war, high stress levels and a struggle for life and death, it should not be in the language of legal technicalities alone. There should be room to allow the language of principles and morality to be heard as well.

§3 Reciprocity

When the modern laws of war were originally codified, there was a general principle that went without saying: the principle of reciprocity. However, unlike the other general principles, this one has not stood the test of time. After the Second World War the letting go of reciprocity as a basic tenet of the laws of war truly came to bear. No longer were the rules only valid among States party to the agreements, applicable for only as long as both warring sides complied. Unfortunately, however solid the logic for leaving reciprocity as a basis for the laws of war to switch to universal validity based on human morality, the changes brought complications.

§3.1 Shift in actors

An added complication lay in the sphere of connection between the ones drafting the rules and the ones expected to abide by them. The identity of the main actors drafting laws of war and guarding compliance with them also shifted. There was a movement away from the fighting parties themselves to the general public through special interest groups. Although these groups have done great work in raising awareness and scrutinizing immoral conduct, their rising prominence has also brought several downsides. With the fighting parties no longer being the sole authors of the laws of war, the rules are less 'their own'. The question 'who made this darn rule anyway?' posed under pressure in the stress of war is no longer answered simply by 'we did'.[642] The rise of (non-State, unConventional) actors fighting (asymmetric) wars who have never contributed to the development of the legislation has also become an issue. They are often tempted to discard them, seeing them as rules forced upon them by their adversary to put them at a disadvantage.

§3.2 Reprisal and enforcement

Perhaps the most drastic practical change resulting from these developments was that reprisals were no longer a legally acceptable enforcement measure. The right of reprisal in response to a suffered breach was no longer deemed compliant with the new sense of universalism and humanitarianism embedded in the laws of war after WWII. No longer was the threat of reprisal an enforcement mechanism, no longer a background force offering incentive not to breach the laws of war yourself.

While not offering a loophole justifying a breach within the laws of war themselves sounds like a humanitarily beneficial development, the wane of reciprocity has to be said to be a mixed blessing.

Complying with the laws of war yourself is no longer a condition for them being respected by your opponent. A breach of the laws of war goes without any remedy beyond moral condemnation and (individual) criminal responsibility -the latter not being accompanied by an independent enforcement mechanism or powerful judicial system. Although the developments in this field proceed in the right (in the sense of

[642] See §8.2 Chapter II.

a more powerful) direction, with more and more cases coming before the ICC and national courts taking up their role, being prosecuted for violation is still not apparent.

§3.3 The dilemma

This brings us to a true dilemma. When thinking theoretically, it seems ridiculous to argue for the return of reciprocity and reprisals. This has much to do with a major development in warfare since the modern laws of war's birth in 1868. The ones suffering the most from modern day violations of the laws of war are non-combatants. The percentage of civilian death in conflict has risen ever since 1868. It seems sound reasoning to leave as little room as possible for violations of the laws of war. In accordance with this, it seems inappropriate to maintain a system in which one breach lawfully provokes another -particularly when the probable victims of either are innocent non-combatants.

The reciprocity as a basis has been replaced by a combination of public scrutiny on the morality of conduct, and an enforcement mechanism with independent international legal tribunals still in its infant stage. There is nothing wrong with such a system *per se*, it is certainly significantly more appealing from a humanitarian idealistic point of view. However, it does require fighting parties to share these moral values, consider the tribunals apolitical, and be happy that its subjects' conduct should be assessed and, if necessary, condemned by them. If a fighting party does not share these moral values or deems the cause of the fight to override them, the laws of war are left with little to bargain with. There is no pragmatic incentive left within the laws to 'tempt' fighting parties to comply.

Given the significant rise of non-State actors in modern warfare and the often highly ideological drive behind their fighting efforts, shared moral values cannot be expected in many cases. In addition, while reciprocity might no longer serve as the basis for the laws of war, the notion has not left the minds of the fighting parties. As we have seen in §4.8 of Chapter IV, the idea of fairness and the need for an adversary to comply with the same rules is as strong as ever. Violations of the laws of war are still called upon to justify one's own violations. Although the right of reprisal and the 'tu quoque' defense were clearly nullified after the Second World War, the arguments have lost little of their common sense appeal. Whether part of the world's most technologically advanced military or of a ragtag group of insurgents, having to comply with standards your adversary disregards provokes a sense of unfairness and frustration -especially when those rules appear to make it more difficult to defeat them.

§3.4 Toning down

When focusing on the juxtaposition between reciprocity and universal validity as a basis for the laws of war, we will not be able to solve the dilemma described above. Reaching a compromise between them is also unrealistic. A combination of both seems inevitable and reflects a classic tension in international law -a tension

between idealism and realism. Respectively, this translates directly into universal validity based on human morality versus reciprocity based on the creation of a situation where compliance is in one's own best interest.

When researching matters of international law, one inevitably gets asked the question 'are you more of a realist or an idealist?'. Throughout this book, I have tried carefully not to answer that question or have the analysis pointing too far in either direction. In my view, when one does not share the ideals underlying the laws of war -reducing human suffering as much as possible while accepting the inevitable occurrences of armed conflict-, one's compass of morality is off. Equally, when one fails to accept that sometimes reality hinders the materialization of those ideals, one's compass of reason is off. Mistaking goals for means might lead to a perfect world on paper, but does little to actually improve conditions for humans afflicted by the application of force. War is fought in the woods, in the mountains, in the mud, in the air, at sea and on the ground, but not on paper.

The closer the laws of war are to reflecting realistic practice, the stronger their regulating power. The closer the parties bound to the laws of war are involved in the process of creating those rules, the larger the chance of them seeing the rules as fair and the smaller the chance of violation. In this regard, I think it would be a smart move to make some positional shifts. Reinforcing the link between the parties regulated by the laws of war and the parties shaping the laws would be a start. As a consequence, the interest groups, with all their best intentions, will have to tone down their efforts a little. Reinforcing the parties' position also prevents fighting parties from being stuck in a corner having to defend their ability to fight wars, forcing them to focus solely on the military necessity side to counter hindering humanitarian arguments. As we have clearly seen in the 1907 debate surrounding sea mines,[643] parties themselves are quite capable of extensively discussing all relevant aspects of the situation. Not having pressure groups at the table does not mean that the humanitarian arguments will fail to be brought to the fore passionately.
In addition, when States argue heavily for regulation, it fosters their willingness and ambition to comply. In looking at the ban on the possession of biological weapons, the effectiveness with which parties destroyed their own valuable stockpiles of weaponry is striking.

Having analyzed the developments within the laws of war, we have seen change from a situation merely concerning the fighting parties themselves to a broader process with many more actors involved. The loudest voices now are not those ruled by the laws of war or those protected by it, but those of the interest groups from all over the world claiming to represent humanity and its universal values. To be sure, these groups have great merit in strengthening the laws of war through ensuring public scrutiny of violations. In more open societies, particularly where governments depend on public support, the force of PR can hardly be overestimated.

[643] See §4.2.2 of Chapter II.

In my view, these groups have their heart in the right place -their intentions being highly laudable. However, in their eagerness and determination they can run too fast for reality to keep up with. In the worst case, legislative successes become paper tigers not taken seriously by the fighting parties. They lose respect for them when they believe them to be overly restrictive and/or take too little account of military necessity and the realities of armed conflict. Worse still, acting solely from humanitarian sentiment could encourage bans on weaponry that might actually improve the humanitarian condition in the battlespace. The much-applauded ban on blinding laser weapons is an example of such a case. I will not argue that those weapons are the poster child for humanity. However, the ban seems a bit premature, negating the possibilities for more humane warfare that the weaponry could have offered. That being said, it is not hard to imagine the emotions stirred by the idea of blinding people permanently, it being understandable how they fuel enthusiastic humanitarian activists to seek a ban through their NGO.

In the field of NGOs, there is one forming a category of its own: the ICRC. The ICRC has always sought more of a background role, adapting its tone of voice and claims for change to what is practically feasible and reasonable at the time. They have consistently chosen to care for victims rather than voice accusations of immoral conduct. A better example of being realistic and true to one's ideals can hardly be found.

What the ICRC displays through its attitude is an understanding of the nature of the laws of war: they have to cater to some degree to the parties they seek to regulate. Lacking an independent enforcer, compliance is highly dependent on the willingness to do so among fighting parties. Although the establishment of the ICC is a great boost in that direction, it cannot be seen as the completion of an entire enforcement mechanism. Too many factors still rely on the willingness of parties to subject themselves to legal scrutiny. A return to the age of pure reciprocity and the reintroduction of reprisals is not called for. An attempt to create a situation in which fighting parties have more of a vested interest in compliance with the laws of war is.

Although I greatly appreciate the ICRC, its work and its attitude, I cannot state that it is necessary for the laws of war that all NGOs imitate it. In my view, more activist NGOs also serve a purpose and can play a useful part. In the process of rule-making, they can raise awareness and inform the public. When it comes to determining the contents of the rules, however, in my view the situation will be better served when they tone down their efforts a little and leave more room to the parties directly involved. In addition, as they already do, NGOs can have a crucial role as a watchdog scrutinizing parties' practical conduct. As long as the laws of war lack their own independent investigative squad, NGOs can act as a surrogate to ensure no horrible act goes unnoticed.

All in all, the laws of war are best served when cheered on by ideals but remain set out to achieve realistic goals. The goals should lie in the practical outcome, not in the idealistic 'on-paper' situation. It is better to have a body of laws of war that seems

imperfect on paper but has a good chance of encouraging compliance. Whereas noncompliance with paper perfection seriously risks the creation of a dangerous chain of events. Further violations become the response to prior violations, the readiness to comply with the laws of war spiraling downward as a result.

§4 Recommendations

Within the laws of war, some adaptations offering improvement can also be made. By now, it should not come as a surprise that my conclusions do not call for elaboration of the body of the modern laws of war. More specific rules are not called for. They might seem to clarify matters, but often do not truly add to the level of protection for those the laws of war seek to care for. As already concluded, the general principles remain the strongest force in this respect, despite the tremendous changes in the ways war are fought. Although we now see a drastically different technological image of the battlespace in comparison to its form when the general principles were tailored, the laws have retained much of their influence. In line with this conclusion, my recommendations to adapt the laws of war to better serve the current reality fall within the realm of those general principles.

§4.1 Subsidiarity

The previous paragraph focused mainly on the formal aspects of the wane of reciprocity. This formal side can be remedied by making the ones having to comply with the rules more important in creating them again. However, there is a material aspect in play as well -a sense of unfairness between different parties. As we have seen in Chapter IV dealing with Asymmetric Warfare, Conventional fighting parties complain that their unConventional adversary disregards the laws of war while they make a serious effort to comply. On the other side, the unConventional parties complain that the rules themselves are biased and favor the Conventional adversary. In its most extreme form the complaint is that compliance would equal defeat for the unConventional fighters, as we have seen in §4.4 of Chapter IV.
Strengthening the principle of subsidiarity might help to bring more balance. The idea of subsidiarity is a classic legal notion and often connected to that of proportionality. It entails that one must achieve an intended effect by using the least harmful means possible. It poses no absolute norm, but obliges the drawing of comparison and weighing of options, then steering the choice to be made. When more attention is paid to the alternatives available to fighting parties and the choices made at earlier stages, the assessment of conduct's legality takes into account the parties' chances of strategic success. Furthermore, this is not the only issue that can be (partially) remedied by a more prominent role for the notion of subsidiarity in the proportionality equation.

§4.1.1 Multiple problem solver

As repeatedly stated in Chapter V, a strengthening of the principle of subsidiarity is called for. I do not call for it to be seen as an independent principle for application in an absolute sense. The balance with military necessity still has to be found. As such,

the principle of subsidiarity is better suited to form a major part of the proportionality equation. Taking into account the alternatives to a specific action is not a hampering impediment on the military war-fighting effort. Nor is it a punishment for States having acquired high end weaponry. It is merely a long overdue adaptation, bringing the laws of war more in line with reality. Innovation has brought those fighting wars many more options than were available to their predecessors at the time the modern laws were born. The increased number and variety of options available is not necessarily a negative factor. Many new options have made it possible to fight more humanely than before, even if many others have enabled the opposite.
Strengthening the aspect of subsidiarity is nothing more than factoring in this larger range of options. With the choices made long before the actual deployment of force having at least as large an influence on the eventual outcome, these choices should be taken into account in assessing whether a war is fought in a sufficiently humane fashion. If, for some reason, less discriminate weapons are used than are available, it should add weight to the responsibility to attack discriminately rather than prohibiting such a choice altogether. If one chooses a blunt knife over a razor-sharp one but still manages to make a clean cut, it should be fine. However, if one makes that choice and it results in a nasty cut, one should not get away with it by blaming the bluntness of the knife.

Chapter V has shown that the reinforcement of the subsidiarity principle helps counter the challenges posed by several new technological innovations. These include the increased distance between the one applying the force and the target; the complex phenomenon of Cyber Warfare; the dilemma posed by non lethal weaponry; the not always as accurate as promised arsenal of precision weaponry; and finally, the large influence of risk aversion and its potential to stimulate casualty transfer. The reason for this lies in the fact that the principle of subsidiarity does not offer a hard rule. It instead offers a principle suited to the ambiguity of many new innovations changing the way wars are fought. These new means and methods can both improve and worsen the humanitarian outcome of war fighting. The principle of subsidiarity offers room for a wide range of options to wage war to be considered without discriminating beforehand. Furthermore, the principle also secures that the means and methods offering the best humanitarian solution in a specific case are also the ones preferred legally.

§4.2 Broaden the scope

The second recommendation is broadening the scope of the laws of war. Since more options are available today to the military and political leadership, more explicit choices are made that together determine the practical humanitarian result of war. Most of these choices are made long before the military engage in a specific situation. The laws of war, however, focus almost exclusively on that final stage. They regulate conduct in war and determine whether the actors in specific isolated instances have acted in accordance with the law. As mentioned in Chapter V, the laws of war tend to assess specific conduct 'all things considered'. In my view, it is high time that the laws of war truly start considering the relevant aspects of a

situation decided long before that last stage. They need to determine the bandwidth of options available to the individuals scrutinized by the laws of war, assessing their merits in the process.

In essence, this broadening of the scope of the laws of war would come down to casting a wider net of accountability. Assessing a larger variety of conduct also means holding a larger number of people involved in the war-fighting effort accountable for the part they play. Chapter V has shown that many of the current challenges to the laws of war do not stem from immoral choices made by the military personnel applying force. More than ever, the choices made for them, setting the stage for their actions, determine the level of humanity in warfare. The soldier remote controlling a drone has not chosen the distance between him and the target. The autonomously operating unmanned guard unit does not make any decisions at all.

The fact that broadening the scope also means a more total assessment of a war-fighting effort in addition to the isolated acts of force also contributes to a broader accountability. When the total sum effect of legally isolated incidents leads to accountability for violations, the individual actors in those isolated cases are not the ones to be held accountable. If the overall image is not fit to be seen as compliant with the principles of the laws of war, the people responsible for the choices of doctrine and policy are the ones to be held responsible. Their large influence on the level of humanity in the practical outcome should not be outside the law's view simply because they never actually touched a weapon.

Looking back to Chapter V, we see that broadening the laws of war's scope of application serves to remedy some of the issues posed by developments of increased distance, unmanned weapons systems, precision weaponry and casualty transfer warfare. It is also an essential companion to the strengthening of the principle of subsidiarity. When looking over longer periods of time and assessing an armed conflict campaign in its entirety, patterns can be discerned. The principle of subsidiarity can be applied to the entire pattern, applying pressure on parties not doing the best they can. It makes it difficult to argue that specific circumstances in isolated cases necessitated humanitarily suboptimal choices when the incidents reoccur frequently.

§5 Law and morality

War is a human phenomenon, as are law, technology, and morality. If there is one short general conclusion to be derived from the analysis offered in this book, it is the following: in order to be effective in guiding practical conduct, the laws of war should focus more on its moral content than on its procedural legal status. The laws of war are in essence a moral appeal to preserve humanity even in the most violent, stressful and dangerous of times. This is not a problem in itself, as long as one recognizes it and takes it into account. One should not try to turn the laws of war into something they are not. One should not treat the laws of war as if they are

merely some form of procedural law -as if they represent a set of rules guiding a process for the sake of it. It is not as if the rules might just as well have had entirely different content. It is not like debating whether one should set 60 or 70 mph as a speed limit. There is no clear legislator, no powerful enforcement apparatus (yet), no independent judiciary with complete jurisdiction recognized by all, and no clear separation between law and politics.

The laws of war are tied extremely closely to morality. One should not hide that fact, but embrace it. A fighting party has a much easier time arguing about flight altitudes than about the moral implications of its actions. The largest jury is global public opinion. The laws of war are best served with a return to the moral elements of what is at stake, with a reinforcement of the moral component of the debate. There should be trust for the laws of war to rest more on their fundamental, very strong general principles. The most striking cases in which the laws of war were successful in holding persons accountable for breaches were often the most morally outrageous as well. My Lai, Abu Graib -such atrocities did not call for close legal analysis to determine any wrong doing. If it looks immoral, sounds immoral and screams immoral, it is immoral- no matter what clever technical legal reasoning one comes up with.

Summary

War, Law, and technology

A world without war is easy to imagine, hard to realize and impossible to remember. Mankind wages war. Human fascination with warfare and weaponry remains relentless. The creativity, effort, time and resources spent on improving weaponry are impressive and constant. Luckily, man is not a cruel, immoral, and sadistic animal only putting its efforts into increasingly clever ways of applying force. Soon after the first wars came the first rules. From 1868 onwards,[644] the process of codifying rules of warfare and making them written laws of war started. This thesis evolves around the question whether the changed ways in which war is fought, as far as technological innovation spurs them, require a reform of those laws of war.

The following research question is to be answered by this book:

> *Do the changed ways in which war is fought -instigated by technological innovation- make reform of the current* ius in bello *desirable or necessary? If so, what are the main changes in warfare challenging the* ius in bello*, what challenges do they pose and, if possible, how can the* ius in bello *meet them?*

The laws of war are a peculiar area of law. They seek to regulate actions for situations in which the human beings involved are under immense pressure. Their principles apply to all fighting parties, regardless of their own consent. They have to be enforced by the same actors the law seeks to regulate. While prosecution of individuals *post facto* can be done, remedying an ongoing wrong often means more of the violence they seek to minimize. Their basis has shifted from reciprocity to universal validity; the main actors in warfare have changed from States alone to a broader number of State and non-State actors; and the margin of diversity in strength, opinion, number and technological advancement between fighting parties has increased tremendously, while the laws of war themselves have remained fundamentally the same.

The way war is fought has changed over time. From 1868 onward, two main trends have driven the fighting parties away from the classical model of open confrontation. Technologically sophisticated parties choose to fight from a distance. Leaving technologically less sophisticated opponents little option but to fight covertly.
Part of the reason warfare constantly changes is the constant innovation taking place in weapons technology. Law changes because changed circumstances demand different rules to safeguard the same principles. Law also changes because, over time, norms change and/or geopolitical power shifts to parties with different standards from those set before. Warfare and technology in turn are adapted to comply with the laws of war. In sum, the main elements analyzed in this book constantly dance around each other in a complex choreography.

[644] In 1868, codification started with the St. Petersburg Declaration.

Asymmetry between fighting parties on numerous levels, the laws of war being used as a weapon through lawfare, increasingly large distances between attacker and target, unmanned military systems, casualty transfer, non-lethal weaponry and Cyber Warfare seem to pose the greatest challenges to the laws of war's effectiveness in regulating armed conflict.

Changes in the practice of warfare challenge the laws of war in a variety of ways. Many lead to practical outcomes that are not in line with the aims of the laws of war. In order to serve these aims, the laws of war need adaptation to better fit the changed practices. If one wishes to maintain the level of humanitarian protection the laws of war once offered, some reform is necessary.

Next, the laws of war have changed as well. From an open balance between two fairly comparable fighting parties to a focus on itself as a legal system. Traditionally, the modern laws of war are based on reciprocity. The Second World War led to a significant shift in the approach taken towards responsibility in the laws of war. The underlying notion of reciprocity was replaced by universal validity of the laws themselves.

The laws of war were not perfect to begin with. It is important to avoid seeking fault with current changes in warfare and their impact on the laws of war, when a difficulty lies within the laws of war themselves. The good news is that, from the point of origin onward, most of the people involved in codifying and adapting the laws of war have understood this situation. An initial conclusion might be that the laws of war perform reasonably well. This book deals with many challenges posed to the laws of war. Many of those challenges stem from inevitable dilemmas, paradoxes and, in some cases, even an intentional disregard for human morality.

In the end, when stating that some reform is needed in the laws of war, the question arises what that reform should entail.
First of all, a strengthening of the focus on the principles of the laws of war rather than the specific rules and regulations that are derived from them. The general principles underlying the entire body of the laws of war are few in number and have remained largely the same over time. They lay down the basic moral notions mankind has seen fit to uphold even under the extreme circumstances of war. One should keep the fighting as 'efficient' as possible: being militarily effective whilst causing as little (civilian) death and destruction as possible. The notions that the use of means and methods of warfare is limited; that one must discriminate between combatants and non-combatants and refrain from targeting the latter; that the use of force should be proportional to the military aim achieved; that one must at all times display humanity and not cause unnecessary suffering -despite all that has changed in warfare, these basic principles have lost nothing of their meaning or force.

The second recommendation stems from the shift from reciprocity to universal validity as basis of the laws of war. The closer the laws of war are to reflecting

realistic practice, the stronger their regulating power. The closer the parties bound to the laws of war are involved in the process of creating those rules, the larger the chance of them seeing the rules as fair and the smaller the chance of violation. The link between the parties regulated by the laws of war and the parties shaping the laws should be reinforced. As a consequence, the interest groups, with all their best intentions, will have to tone down their efforts a little. Not having pressure groups at the table does not mean that the humanitarian arguments will fail to be brought to the fore passionately. In addition, when States argue heavily for regulation, it fosters their willingness and ambition to comply.

In my view, the interest groups have their heart in the right place -their intentions being highly laudable. However, in their eagerness and determination they can run too fast for reality to keep up with. In the worst case, legislative successes become paper tigers not taken seriously by the fighting parties. They lose respect for them when they believe them to be overly restrictive and/or take too little account of military necessity and the realities of armed conflict. Worse still, acting solely from humanitarian sentiment could encourage bans on weaponry that might actually improve the humanitarian condition in the battlespace.

Third, a strengthening of the principle of subsidiarity is called for. I do not call for it to be seen as an independent principle for application in an absolute sense. The balance with military necessity still has to be found. As such, the principle of subsidiarity is better suited to form a major part of the proportionality equation.
With the choices made long before the actual deployment of force having at least as large an influence on the eventual outcome, these choices should be taken into account in assessing whether a war is fought in a sufficiently humane fashion. If, for some reason, less discriminate weapons are used than are available, it should add weight to the responsibility to attack discriminately rather than prohibiting such a choice altogether.
The reinforcement of the subsidiarity principle helps counter the challenges posed by several new technological innovations. These include the increased distance between the one applying the force and the target; the complex phenomenon of Cyber Warfare; the dilemma posed by non lethal weaponry; the not always as accurate as promised arsenal of precision weaponry; and finally, the large influence of risk aversion and its potential to stimulate casualty transfer. The reason for this lies in the fact that the principle of subsidiarity does not offer a hard rule, instead, it offers a principle suited to the ambiguity of many new innovations changing the way wars are fought. These new means and methods can both improve and worsen the humanitarian outcome of war fighting. The principle of subsidiarity offers room for a wide range of options to wage war to be considered without discriminating beforehand. Furthermore, the principle also secures that the means and methods offering the best humanitarian solution in a specific case are also the ones preferred legally.

The fourth recommendation is broadening the scope of the laws of war. Since more options are available today to the military and political leadership, more explicit

choices are made that together determine the practical humanitarian result of war. Most of these choices are made long before the military engage in a specific situation. The laws of war, however, focus almost exclusively on that final stage. They regulate conduct in war and determine whether the actors in specific isolated instances have acted in accordance with the law. The laws of war tend to assess specific conduct 'all things considered'. In my view, it is high time that the laws of war truly start considering the relevant aspects of a situation decided long before that last stage. They need to determine the bandwidth of options available to the individuals scrutinized by the laws of war, assessing their merits in the process.

In essence, this broadening of the scope of the laws of war would come down to casting a wider net of accountability. Assessing a larger variety of conduct also means holding a larger number of people involved in the war-fighting effort accountable for the part they play. Many of the current challenges to the laws of war do not stem from immoral choices made by the military personnel applying force. More than ever, the choices made for them, setting the stage for their actions, determine the level of humanity in warfare. The soldier remote controlling a drone has not chosen the distance between him and the target. The autonomously operating unmanned guard unit does not make any decisions at all.

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Broadening the laws of war's scope of application serves to remedy some of the issues posed by developments of increased distance, unmanned weapons systems, precision weaponry and casualty transfer warfare. It is also an essential companion to the strengthening of the principle of subsidiarity. When looking over longer periods of time and assessing an armed conflict campaign in its entirety, patterns can be discerned. The principle of subsidiarity can be applied to the entire pattern, applying pressure on parties not doing the best they can. It makes it difficult to argue that specific circumstances in isolated cases necessitated humanitarily suboptimal choices when the incidents reoccur frequently.

Fifth and final, if there is one short general conclusion to be derived from the analysis offered in this book, it is the following: in order to be effective in guiding practical conduct, the laws of war should focus more on its moral content than on its procedural legal status. The laws of war are in essence a moral appeal to preserve humanity even in the most violent, stressful and dangerous of times. One should not try to turn the laws of war into something they are not. One should not treat the laws

of war as if they are merely some form of procedural law -as if they represent a set of rules guiding a process for the sake of it. It is not as if the rules might just as well have had entirely different content. There is no clear legislator, no powerful enforcement apparatus (yet), no independent judiciary with complete jurisdiction recognized by all, and no clear separation between law and politics.

The laws of war are tied extremely closely to morality. One should not hide that fact, but embrace it. A fighting party has a much easier time arguing about flight altitudes than about the moral implications of its actions. The largest jury is global public opinion. The laws of war are best served with a return to the moral elements of what is at stake, with a reinforcement of the moral component of the debate. There should be trust for the laws of war to rest more on their fundamental, very strong general principles. The most striking cases in which the laws of war were successful in holding persons accountable for breaches were often the most morally outrageous as well. If it looks immoral, sounds immoral and screams immoral, it is immoral- no matter what clever technical legal reasoning one comes up with.

All in all, the general principles have stood the test of time and lost none of their force. More specific rules bring with them the risk of derogation of that force. However, this is not to say that the laws of war should revert to the handful of basic principles and dispose of all specific regulation. Many of the specifications have served well in clarifying what they regulate. It is the inherent incompleteness of a collection of specific rules that offers most of the difficulties described. However, it is important to recognize that the general principles remain forceful on their own. They do not *need* specification or elaboration. It *might* serve them to do so, but before setting out to draft more specific regulation, one should consider caution and the potential for negative consequences. The added value of specific regulation must be substantial and clear. If not, the laws of war might be better served by staying closer to the moral imperatives demanded in the general principles. In addition, practice should continuously reflect the idea that the general principles form the starting point -other rules being clarifications of or auxiliaries to them. The principles should be explicitly leading in interpretational debates surrounding specific regulations. It should be clear that specific regulations serve the principles and cannot diminish their legitimacy or value. The legal case should be focused on the morality of the conduct as demarcated by the general principles, not by legal technicalities. Such a debate should be conducted in a language suitable to what is really at stake. When dealing with war, destruction, fog of war, high stress levels and a struggle for life and death, it should not be in the language of legal technicalities alone. There should be room to allow the language of principles and morality to be heard as well.

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Appendix

Relevant legal documents

This Appendix contains the most relevant articles of the Laws of War as discussed in this book. It is by no means intended as a complete list of documents of the Laws of War. They are presented in chronological order of the date at which they entered into force.

Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight, Saint Petersburg, 11 December 1868

Considering:

That the progress of civilization should have the effect of alleviating as much as possible the calamities of war;

That the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy;

That for this purpose it is sufficient to disable the greatest possible number of men;

That this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;

That the employment of such arms would, therefore, be contrary to the laws of humanity;

The Contracting Parties engage mutually to renounce, in case of war among themselves, the employment by their military or naval troops of any projectile of a weight below 400 grammes, which is either explosive or charged with fulminating or inflammable substances.

Article 22 Convention with Respect to the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land, the Hague, 29 July 1899

Art. 22. The right of belligerents to adopt means of injuring the enemy is not unlimited.

Declaration (IV,1), to Prohibit, for the Term of Five Years, the Launching of Projectiles and Explosives from Balloons, and Other Methods of Similar Nature. The Hague, 29 July 1899

Declare that:
The Contracting Powers agree to prohibit, for a term of five years, the launching of projectiles and explosives from balloons, or by other new methods of a similar nature.

Declaration concerning Asphyxiating Gases, The Hague, 29 July 1899

Declare as follows:
The Contracting Powers agree to abstain from the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases.
The present Declaration is only binding on the Contracting Powers in the case of a war between two or more of them.
It shall cease to be binding from the time when, in a war between the Contracting Powers, one of the belligerents shall be joined by a non-Contracting Power.

Declaration concerning Expanding Bullets, the Hague, 29 July 1899

Declare as follows:
The Contracting Parties agree to abstain from the use of bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions.
The present Declaration is only binding for the Contracting Powers in the case of a war between two or more of them.
It shall cease to be binding from the time when, in a war between the Contracting Powers, one of the belligerents is joined by a non-Contracting Power.

Article 23 Convention respecting the Laws and Customs of War on Land and its annex: Regulations concerning the Laws and Customs of War on Land, the Hague, 18 October 1907

Art. 23. Besides the prohibitions provided by special Conventions, it is especially prohibited
(a) To employ poison or poisoned arms;
(b) To kill or wound treacherously individuals belonging to the hostile nation or army;
(c) To kill or wound an enemy who, having laid down arms, or having no longer means of defence, has surrendered at discretion;
(d) To declare that no quarter will be given;
(e) To employ arms, projectiles, or material of a nature to cause superfluous injury;
(f) To make improper use of a flag of truce, the national flag or military ensigns and uniform of the enemy, as well as the distinctive badges of the Geneva Convention;
(g) To destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war.

Article 1 Convention relative to the Laying of Automatic Submarine Contact Mines, The Hague, 18 October 1907

Article 1.
It is forbidden - 1. To lay unanchored automatic contact mines, except when they are so constructed as to become harmless one hour at most after the person who laid them ceases to control them; 2. To lay anchored automatic contact mines which do not become harmless as soon as they have broken loose from their moorings; 3. To use torpedoes which do not become harmless when they have missed their mark.

Article 1 Convention concerning Bombardment by Naval Forces in Time of War, The Hague, 18 October 1907

Article 1.
The bombardment by naval forces of undefended ports, towns, villages, dwellings, or buildings is forbidden.
A place cannot be bombarded solely because automatic submarine contact mines are anchored off the harbour.

Preamble to the Convention respecting the Laws and Customs of War on Land, 18 October 1907

Seeing that while seeking means to preserve peace and prevent armed conflicts between nations, it is likewise necessary to bear in mind the case where the appeal to arms has been brought about by events which their care was unable to avert;
Animated by the desire to serve, even in this extreme case, the interests of humanity and the ever progressive needs of civilization;
Thinking it important, with this object, to revise the general laws and customs of war, either with a view to defining them with greater precision or to confining them within such limits as would mitigate their severity as far as possible;
Have deemed it necessary to complete and explain in certain particulars the work of the First Peace Conference, which, following on the Brussels Conference of 1874, and inspired by the ideas dictated by a wise and generous forethought, adopted provisions intended to define and govern the usages of war on land.
According to the views of the High Contracting Parties, these provisions, the wording of which has been inspired by the desire to diminish the evils of war, as far as military requirements permit, are intended to serve as a general rule of conduct for the belligerents in their mutual relations and in their relations with the inhabitants.
It has not, however, been found possible at present to concert regulations covering all the circumstances which arise in practice;
On the other hand, the High Contracting Parties clearly do not intend that unforeseen cases should, in the absence of a written undertaking, be left to the arbitrary judgment of military commanders.
Until a more complete code of the laws of war has been issued, the High Contracting Parties deem it expedient to declare that, in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity, and the dictates of the public conscience.
They declare that it is in this sense especially that Articles I and 2 of the Regulations adopted must be understood.
The High Contracting Parties, wishing to conclude a fresh Convention to this effect, have appointed the following as their Plenipotentiaries:

Article 18 Rules concerning the Control of Wireless Telegraphy in Time of War and Air Warfare. Drafted by a Commission of Jurists at the Hague, December 1922 - February 1923

Part II: Rules of Air Warfare

Chapter IV: Hostilities.

Art. 18. The use of tracer projectiles, whether incendiary or explosive, by or against an aircraft is not forbidden.

This rule applies as well to the States which are parties to the Declaration of St.Petersburg of 1866, as to those which are not.

Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, Geneva, 17 June 1925

That the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.

Article 6-8 Charter of the International Military Tribunal, 8 August 1945

Article 6

The Tribunal established by the Agreement referred to m Article 1 hereof for the trial and punishment of the major war criminals of the European Axis countries shall have the power to try and punish persons who, acting in the interests of the European Axis countries, whether as individuals or as members of organizations, committed any of the following crimes.

The following acts, or any of them, are crimes coming within the jurisdiction of the Tribunal for which there shall be individual responsibility:

(a) CRIMES AGAINST PEACE: namely, planning, preparation, initiation or waging of a war of aggression, or a war in violation of international treaties, agreements or assurances, or participation in a common plan or conspiracy for the accomplishment of any of the foregoing;

(b) WAR CRIMES: namely, violations of the laws or customs of war. Such violations shall include, but not be limited to, murder, ill-treatment or deportation to slave labor or for any other purpose of civilian population of or in occupied territory, murder or ill-treatment of prisoners of war or persons on the seas, killing of hostages, plunder of public or private property, wanton destruction of cities, towns or villages, or devastation not justified by military necessity;

(c)CRIMES AGAINST HUMANITY: namely, murder, extermination, enslavement, deportation, and other inhumane acts committed against any civilian population, before or during the war; or persecutions on political, racial or religious grounds in execution of or in connection with any crime within the jurisdiction of the Tribunal, whether or not in violation of the domestic law of the country where perpetrated.

Leaders, organizers, instigators and accomplices participating in the formulation or execution of a common plan or conspiracy to commit any of the foregoing crimes are responsible for all acts performed by any persons in execution of such plan.

Article 7
The official position of defendants, whether as Heads of State or responsible officials in Government Departments, shall not be considered as freeing them from responsibility or mitigating punishment.

Article 8
The fact that the Defendant acted pursuant to order of his Government or of a superior shall not free him from responsibility, but may be considered in mitigation of punishment if the Tribunal determines that justice so requires.

UN General Assembly resolution 95(1), 11 December 1946

Affirmation of the Principles of International Law recognized by the Charter of the Nurnberg Tribunal.

The General assembly,
Recognizes the obligation laid upon it by Article 13, paragraph 1, sub-paragraph a, of the Charter, to initiate studies and make recommendations for the purpose of encouraging the progressive development of international law and its codification;
Takes note of the Agreement for the establishment of and International Military Tribunal for the prosecution and punishment of the major war criminals of the European Axis signed in London on 8 August 1945, and of the Charter annexed thereto, and of the fact that similar principles have been adopted in the Charter of the International Military Tribunal of the trial of the major war criminals on the Far East, proclaimed at Tokyo on 19 January 1946;

Therefore,
Affirms the principles of international law recognized by the Charter of the Nurnberg Tribunal and the judgement of the Tribunal.;
Directs the Committee on the codification of international law established by the resolution of the General Assembly of 11 December 1946, to treat as a matter of primary importance plans for the formulation, in the context of a general codification of offences against the peace and security of mankind, or of an International Criminal Code, of the principles recognized in the Charter of the Nurnberg Tribunal and in the judgement of the Tribunal.

Article 2 Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 14 May 1954

Article 2. Protection of cultural property

For the purposes of the present Convention, the protection of cultural property shall comprise the safeguarding of and respect for such property.

Preamble to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, 10 April 1972

Determine to act with a view to achieving effective progress toward general and complete disarmament, including the prohibition and elimination of all types of weapons of mass destruction, and convinced
that the prohibition of the development, production and stockpiling of chemical and bacteriological (biological) weapons and their elimination, through effective measures, will facilitate the achievement of general and
complete disarmament under strict and effective control,

Recognizing the important significance of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on June 17, 1925,
and conscious also of the contribution which the said Protocol has already made and continues to make, to mitigating the horrors of war,

Reaffirming their adherence to the principles and objectives of that Protocol and calling upon all States to comply strictly with them,

Recalling that the General Assembly of the United Nations has repeatedly condemned all actions contrary to the principles and objectives of the Geneva Protocol of June 17, 1925,

Desiring to contribute to the strengthening of confidence between peoples and the general improvement of the international atmosphere,

Desiring also to contribute to the realization of the purposes and principles of the Charter of the United Nations,

Convinced of the importance and urgency of eliminating from the arsenals of States, through effective measures, such dangerous weapons of mass destruction as those using chemical or bacteriological (biological) agents,

Recognizing that an agreement on the prohibition of bacteriological (biological) and toxin weapons represents a first possible step towards the achievement of agreement on effective measures also for the prohibition of the development, production and stockpiling of chemical weapons, and determined to continue negotiations to that end,

Determined, for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons,

Convinced that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimize this risk.

Article 1 Convention on the prohibition of military or any hostile use of environmental modification techniques, 10 December 1976

Article 1

1. Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.
2. Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provisions of paragraph 1 of this article.

Article 35 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977

Art 35. Basic rules

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.
3. It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

Preamble to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Geneva, 10 October 1980

'Recalling' that every State has the duty, in conformity with the Charter of the United Nations, to refrain in its international relations from the threat or use of force against the sovereignty, territorial integrity or political independence of any State, or in any other manner inconsistent with the purposes of the United Nations.

'Further recalling' the general principle of the protection of the civilian population against the effects of hostilities,

'Basing themselves' on the principle of international law that the right of the parties to an armed conflict to choose methods or means of warfare is not unlimited, and on the principle that prohibits the employment in armed conflicts of weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering,

'Also recalling' that it is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment,

'Confirming their determination' that in cases not covered by this Convention and its

annexed Protocols or by other international agreements, the civilian population and the combatants shall at all times remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience,

'Desiring' to contribute to international détente, the ending of the arms race and the building of confidence among States, and hence to the realization of the aspiration of all peoples to live in peace,

'Recognizing' the importance of pursuing every effort which may contribute to progress towards general and complete disarmament under strict and effective international control,

'Reaffirming' the need to continue the codification and progressive development of the rules of international law applicable in armed conflict,

'Wishing' to prohibit or restrict further the use of certain conventional weapons and believing that the positive results achieved in this area may facilitate the main talks on disarmament with a view to putting an end to the production, stockpiling and proliferation of such weapons,

'Emphasizing' the desirability that all States become parties to this Convention and its annexed Protocols, especially the militarily significant States,

'Bearing in mind' that the General Assembly of the United Nations and the United Nations Disarmament Commission may decide to examine the question of a possible broadening of the scope of the prohibitions and restrictions contained in this Convention and its annexed Protocols,

'Further bearing in mind' that the Committee on Disarmament may decide to consider the question of adopting further measures to prohibit or restrict the use of certain conventional weapons.

Protocol on Non-Detectable Fragments (Protocol I), Geneva, 10 October 1980

It is prohibited to use any weapon the primary effect of which is to injure by fragments which in the human body escape detection by X-rays.

Article 1 Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), Geneva, 10 October 1980

Article 1

For the purpose of this Protocol:

1. "Incendiary weapon" means any weapon or munition which is primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat, or combination thereof, produced by a chemical reaction of a substance delivered on the target. (a) Incendiary weapons can take the form of,

for example, flame throwers, fougasses, shells, rockets, grenades, mines, bombs and other containers of incendiary substances.

(b) Incendiary weapons do not include:

(i) Munitions which may have incidental incendiary effects, such as illuminants, tracers, smoke or signalling systems;

(ii) Munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect, such as armour-piercing projectiles, fragmentation shells, explosive bombs and similar combined-effects munitions in which the incendiary effect is not specifically designed to cause burn injury to persons, but to be used against military objectives, such as armoured vehicles, aircraft and installations or facilities.

2. "Concentration of civilians" means any concentration of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or groups of nomads.
3. "Military objective" means, so far as objects are concerned, any object which by its nature, location, purpose or use makes an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.
4. "Civilian objects" are all objects which are not military objectives as defined in paragraph 3.
5. "Feasible precautions" are those precautions which are practicable or practically possible taking into account all circumstances ruling at the time, including humanitarian and military considerations.

Article 6 Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II), Geneva, 10 October 1980

Article 6
Prohibition on the use of certain booby-traps

1. Without prejudice to the rules of international law applicable in armed conflict relating to treachery and perfidy, it is prohibited in all circumstances to use: (a) any booby-trap in the form of an apparently harmless portable object which is specifically designed and constructed to contain explosive material and to detonate when it is disturbed or approached, or (b) booby-traps which are in any way attached to or associated with:
(i) internationally recognized protective emblems, signs or signals;
(ii) sick, wounded or dead persons;
(iii) burial or cremation sites or graves;
(iv) medical facilities, medical equipment, medical supplies or medical transportation;
(v) children's toys or other portable objects or products specially designed for the feeding, health, hygiene, clothing or education of children;
(vi) food or drink;
(vii) kitchen utensils or appliances except in military establishments, military locations or military supply depots;

(viii) objects clearly of a religious nature;
(ix) historic monuments, works of art or places or worship which constitute the cultural or spiritual heritage of peoples;
(x) animals or their carcasses.

2. It is prohibited in all circumstances to use any booby-trap which is designed to cause superfluous injury or unnecessary suffering.

Protocol on Non-Detectable Fragments (Protocol I), Geneva, 10 October 1980

It is prohibited to use any weapon the primary effect of which is to injure by fragments which in the human body escape detection by X-rays.

Article 1 Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, Paris, 13 January 1993

ARTICLE I

1. Each State Party to this Convention undertakes never under any circumstances:
   (a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;
   (b) To use chemical weapons;
   (c) To engage in any military preparations to use chemical weapons;
   (d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention.
2. Each State Party undertakes to destroy chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention.
3. Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention.
4. Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention.
5. Each State Party undertakes not to use riot control agents as a method of warfare.

Article 1 Protocol on Blinding Laser Weapons (Protocol IV to the 1980 Convention), 13 October 1995

Article 1

It is prohibited to employ laser weapons specifically designed, as their sole combat function or as one of their combat functions, to cause permanent blindness to unenhanced vision, that is to the naked eye or to the eye with corrective eyesight devices. The High Contracting Parties shall not transfer such weapons to any State or non-State entity.

Article 3 Protocol on the Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices as amended on 3 May 1996 (Protocol II to the 1980 Convention as amended on 3 May 1996)

Article 3 - General restrictions on the use, of mines, **booby**-traps and other devices

1. This Article applies to:
   (a) mines;
   (b) booby-traps; and
   (c) other devices.
2. Each High Contracting Party or party to a conflict is, in accordance with the provisions of this Protocol, responsible for all mines, booby-traps, and other devices employed by it and undertakes to clear, remove, destroy or maintain them as specified in Article 10 of this Protocol.
3. It is prohibited in all circumstances to use any mine, booby-trap or other device which is designed or of a nature to cause superfluous injury or unnecessary suffering.
4. Weapons to which this Article applies shall strictly comply with the standards and limitations specified in the Technical Annex with respect to each particular category.
5. It is prohibited to use mines, booby-traps or other devices which employ a mechanism or device specifically designed to detonate the munition by the presence of commonly available mine detectors as a result of their magnetic or other non-contact influence during normal use in detection operations.
6. It is prohibited to use a self-deactivating mine equipped with an anti-handling device that is designed in such a manner that the anti-handling device is capable of functioning after the mine has ceased to be capable of functioning.
7. It is prohibited in all circumstances to direct weapons to which this Article applies, either in offence, defence or by way of reprisals, against the civilian population as such or against individual civilians or civilian objects.
8. The indiscriminate use of weapons to which this Article applies is prohibited. Indiscriminate use is any placement of such weapons:
   (a) which is not on, or directed against, a military objective. In case of doubt as to whether an object which is normally dedicated to civilian purposes, such as a place of worship, a house or other dwelling or a school, is being used to make an effective contribution to military action, it shall be presumed not to be so used; or
   (b) which employs a method or means of delivery which cannot be directed at a specific military objective; or
   (c) which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.
9. Several clearly separated and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians or civilian objects are not to be treated as a single military objective.
10. All feasible precautions shall be taken to protect civilians from the effects of weapons to which this Article applies. Feasible precautions are those precautions which are practicable or practically possible taking into account all circumstances

ruling at the time, including humanitarian and military considerations. These circumstances include, but are not limited to:
(a) the short- and long-term effect of mines upon the local civilian population for the duration of the minefield;
(b) possible measures to protect civilians (for example, fencing, signs, warning and monitoring);
(c) the availability and feasibility of using alternatives; and
(d) the short- and long-term military requirements for a minefield.

11. Effective advance warning shall be given of any emplacement of mines, booby-traps and other devices which may affect the civilian population, unless circumstances do not permit.

Preamble to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, Ottawa, 18 September 1997

The States Parties,
Determined to put an end to the suffering and casualties caused by anti-personnel mines, that kill or maim hundreds of people every week, mostly innocent and defenceless civilians and especially children, obstruct economic development and reconstruction, inhibit the repatriation of refugees and internally displaced persons, and have other severe consequences for years after emplacement,

Believing it necessary to do their utmost to contribute in an efficient and coordinated manner to face the challenge of removing anti-personnel mines placed throughout the world, and to assure their destruction,

Wishing to do their utmost in providing assistance for the care and rehabilitation, including the social and economic reintegration of mine victims,

Recognizing that a total ban of anti-personnel mines would also be an important confidence-building measure,

Welcoming the adoption of the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, as amended on 3 May 1996, annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, and calling for the early ratification of this Protocol by all States which have not yet done so,

Welcoming also United Nations General Assembly Resolution 51/45 S of 10 December 1996 urging all States to pursue vigorously an effective, legally-binding international agreement to ban the use, stockpiling, production and transfer of anti-personnel landmines,

Welcoming furthermore the measures taken over the past years, both unilaterally and multilaterally, aiming at prohibiting, restricting or suspending the use, stockpiling, production and transfer of anti-personnel mines,

Stressing the role of public conscience in furthering the principles of humanity as evidenced by the call for a total ban of anti-personnel mines and recognizing the efforts to that end undertaken by the International Red Cross and Red Crescent

Movement, the International Campaign to Ban Landmines and numerous other non-governmental organizations around the world,

Recalling the Ottawa Declaration of 5 October 1996 and the Brussels Declaration of 27 June 1997 urging the international community to negotiate an international and legally binding agreement prohibiting the use, stockpiling, production and transfer of anti-personnel mines,

Emphasizing the desirability of attracting the adherence of all States to this Convention, and determined to work strenuously towards the promotion of its universalization in all relevant fora including, inter alia, the United Nations, the Conference on Disarmament, regional organizations, and groupings, and review conferences of the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects,

Basing themselves on the principle of international humanitarian law that the right of the parties to an armed conflict to choose methods or means of warfare is not unlimited, on the principle that prohibits the employment in armed conflicts of weapons, projectiles and materials and methods of warfare of a nature to cause superfluous injury or unnecessary suffering and on the principle that a distinction must be made between civilians and combatants.

Article 3 Protocol on Explosive Remnants of War (Protocol V to the 1980 Convention), 28 November 2003

Article 3

1. Each High Contracting Party and party to an armed conflict shall bear the responsibilities set out in this Article with respect to all explosive remnants of war in territory under its control. In cases where a user of explosive ordnance which has become explosive remnants of war, does not exercise control of the territory, the user shall, after the cessation of active hostilities, provide where feasible, inter alia technical, financial, material or human resources assistance, bilaterally or through a mutually agreed third party, including inter alia through the United Nations system or other relevant organisations, to facilitate the marking and clearance, removal or destruction of such explosive remnants of war.
2. After the cessation of active hostilities and as soon as feasible, each High Contracting Party and party to an armed conflict shall mark and clear, remove or destroy explosive remnants of war in affected territories under its control. Areas affected by explosive remnants of war which are assessed pursuant to paragraph 3 of this Article as posing a serious humanitarian risk shall be accorded priority status for clearance, removal or destruction.
3. After the cessation of active hostilities and as soon as feasible, each High Contracting Party and party to an armed conflict shall take the following measures in affected territories under its control, to reduce the risks posed by explosive remnants of war:
   (a) survey and assess the threat posed by explosive remnants of war;

(b) assess and prioritise needs and practicability in terms of marking and clearance, removal or destruction;
(c) mark and clear, remove or destroy explosive remnants of war;
(d) take steps to mobilise resources to carry out these activities.

4. In conducting the above activities High Contracting Parties and parties to an armed conflict shall take into account international standards, including the International Mine Action Standards.
5. High Contracting Parties shall co-operate, where appropriate, both among themselves and with other states, relevant regional and international organisations and non-governmental organisations on the provision of inter alia technical, financial, material and human resources assistance including, in appropriate circumstances, the undertaking of joint operations necessary to fulfil the provisions of this Article.

Article 1 Convention on Cluster Munitions, 30 May 2008

Article 1
General obligations and scope of application

1. Each State Party undertakes never under any circumstances to:
(a) Use cluster munitions;
(b) Develop, produce, otherwise acquire, stockpile, retain or transfer to anyone, directly or indirectly, cluster munitions;
(c) Assist, encourage or induce anyone to engage in any activity prohibited to a State Party under this Convention.
2. Paragraph 1 of this Article applies, mutatis mutandis, to explosive bomblets that are specifically designed to be dispersed or released from dispensers affixed to aircraft.
3. This Convention does not apply to mines.