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1

Introduction

1.1 The Emergence of Weapons Law

The earliest warriors, accustomed to conduct hostilities by using such items as fists, stones, pikes, and clubs, must have regarded the first appearance of more damaging implements of warfare, such as poisons, catapults, crossbows, and boiling oil, as a unilateral and alarming rewriting of the rules of the game. But that immediately begs the question whether in the very earliest times there was any recognition at all of rules applicable to the development of weaponry. While the history of weapons law will be summarized in Chapter 2 below, it is sufficient for present purposes to say that, while 'might' was 'right', there can be little doubt that the party to a conflict that was fortunate enough to have an effective weapon for which the opposition had no counter-measure was free to exploit the resulting advantage to the potentially grievous cost of his adversaries.¹

It may seem strange to talk of law and of weaponry in the same breath. The very idea that law should seek to control the tools of warfare, of killing, maiming, and destruction, instead of prohibiting them outright seems at first glance somewhat odd. Yet it is a mark of the practical realism of international law that the fact of war is accepted and the pragmatic focus of the law is directed at seeking to alleviate its worst consequences. This is the philosophy which underpins much of what is to follow in this book. There will be no claim that the resulting legal architecture is in any sense ideal. Rather, the law of weaponry tries to ensure that in the heat of battle when facing a dangerous enemy, the implements of war that are used to cause harm comply with certain internationally recognized norms.²

It would not be accurate to suggest that all weapons law treaties were negotiated on the basis of a commonly felt moral imperative to create the new law in question. Indeed, the linkage between morality and the early, and for that matter

¹ Note the comments of Terence Taylor, International Institute for Strategic Studies, that 'technology and arms can influence or even determine the course of an armed conflict, affect combatants and civilians, have an impact on the environment and even determine the outcome of the war. They therefore have a huge influence.' T Pfanner, 'Interview with Terence Taylor' (2005) 859 IRR 419.

² As Taylor points out, the purpose of codes, charters and, ultimately, of international law is to single out and make clear what constitutes unacceptable behaviour and illegal activity; Pfanner (n 1 above) 425.

some of the later, treaties is a difficult area that it is perhaps wise to circumvent. The safest point that can be made is that nations will have come to the negotiating table with their own national agendas and moral appreciations in mind and the result of their discussions may well, at least in part, have been influenced by the latter.

As the centuries passed, usages in war developed into customs, or unwritten, generally accepted rules that states felt legally obliged to follow and that prohibited certain practices or placed certain obligations on the warring nations. This evolution of usages and of customs did not just apply to weapons. It covered other aspects of the conduct of hostilities, including the prohibition of certain actions in combat that were regarded as improper, prohibitions on attacking certain people and objects, and so on.

1.2 Weapons Law in Context

While this book concerns itself with the law relating to weaponry,³ many of the rules form part of a wider body of law that regulates the use of military force in conflicts. That wider body of law is usually referred to these days as the law of armed conflict and has, during the last century and a half, grown into a substantial element of international law that addresses such disparate subjects as the attack of military targets, the protection of victims such as members of the armed forces who are *hors de combat*, the protection of cultural property in war, and the establishment of an international court for the prosecution of those who breach widely accepted rules in this field.

In the late nineteenth century and first half of the twentieth, the law applicable during an armed conflict was developing along parallel but different tracks. Law relating to weapons, methods, and means of warfare centred on treaties negotiated in The Hague and came to be known as Hague Law. The legal rules that protected victims of armed conflicts, on the other hand, were largely adopted in Geneva and correspondingly came to be known as Geneva Law. The negotiation of important protocols additional to the Geneva Conventions of 1949, however, did much to bring those two bodies of law together and the distinction is now more of historical and academic interest than of any practical significance, not least because some of the more recent weapons law treaties were actually negotiated in Geneva.

Another division in the law applicable during an armed conflict, that has been evident for some decades and that persists today, is the distinction between the

³ Much has been written about the potential for weapons, particularly weapons of mass destruction, to get into the hands of terrorists and of the likely consequences. See eg Pfanner (n 1 above) 2. Although occasionally mentioned below, this is a topic that is not considered in any depth in this book as it lies outside the scope of the intended discussion.

law applied in international armed conflicts and that which applies during non-international armed conflicts, ie armed conflicts that occur within the boundaries of a single state and that generally only involve its armed forces and rebel groups of some sort. In recent years, the differences in the law applicable to these respective classes of conflict have narrowed, but even in relation to the law of weaponry, the differences have not been entirely extinguished and as the matter is somewhat complex, the law applicable in non-international armed conflicts will be examined as a discrete subject in Chapter 18.

While, as noted earlier, much of the law of weaponry forms part of the law of armed conflict, some elements of weapons law can more accurately be categorized as arms control treaties.⁴ 'Arms control and disarmament agreements do not expressly address the actual conduct of armed conflict; rather, they establish some controls over the production, testing, stockpiling, transfer, or deployment of the weapons by which armed conflict might be conducted.'⁵ Certain arms control treaties, such as the 1993 Chemical Weapons Convention, the 1972 Biological Weapons Convention, and the 1997 Ottawa Convention on anti-personnel mines, are discussed in this book, not least because the use of the relevant weapons in armed conflicts is prohibited by the treaty which then goes on to prohibit production, stockpiling, transfer, and so on. In the case of the Biological Weapons Convention, the states party agreed later that the prohibitions in the Convention effectively prohibit use. These are really hybrid treaties and it is clear that no proper consideration of the law relating to weaponry would be complete without them, so discussion of them has been included in the relevant chapters of this book. Drawing the line between these documents and disarmament agreements and similar undertakings whose connection with the law relating to armed conflict is rather more tenuous and which have therefore not generally been included in the book is not always easy. Thus, for example, certain policy undertakings by states, made in the context of the Conventional Weapons Convention 1980, have been included because of their particular relevance to one of the themes of the book, namely the evolution of the law of weaponry. The status and significance of these declarations and of non-binding elements in certain treaties are discussed in the chapters dealing with the classes of weapon to which they apply and in Chapter 21.

⁴ 'Arms control refers to unilateral measures, bilateral and multilateral agreements as well as informal regimes ("politically binding" documents, "soft" law) between states to limit or reduce certain categories of weapons or military operations in order to achieve stable military balances and thus diminish tensions and the possibility of large-scale armed conflict'; G den Dekker, 'The Effectiveness of International Supervision in Arms Control Law' (2004) 9(3) JCSL 315, 316.

⁵ A Roberts and R Guelff, *Documents on the Laws of War* (3rd edn, 2000) 37; also discussed in EPJ Myjer, 'Means and methods of warfare and the coincidence of norms between the humanitarian law of armed conflict and the law of arms control' in WP Heere (ed), *International Law and the Hague's 750th Anniversary* (1999) 371, 373. Arms control treaty texts can, eg, be found in J Goldblat, *Arms Control: A Guide to Negotiations and Agreements* (Sage, London, for International Peace Research Institute, Oslo, 1994).

1.3 *Jus ad Bellum* and *Jus in Bello*

We must be careful to differentiate between the law which applies once an armed conflict is taking place, which is sometimes referred to as *jus in bello*, and the different body of law that determines the lawfulness of resorting to the use of force in the first place, often called *jus ad bellum*. These two elements of international law should be kept separate. The law on resorting to the use of force is, these days, largely based on the Charter of the United Nations and addresses whether a particular use of military force is, in the relevant circumstances, lawful. However, it is a fundamental principle of *jus in bello* that once an armed conflict has commenced, all parties to that conflict rank equally under the law of armed conflict. Specifically the fact that one party to an armed conflict is regarded as having resorted to the use of force wrongfully does not diminish its rights, or the rights of its citizens, including the members of its armed forces, to the protections afforded by the law of armed conflict. Similarly, the victim of aggression does not, because he is such a victim, gain a right to act in a manner that breaches the same law of armed conflict rules. That is, therefore, all that will be said about *jus ad bellum* as, for the reasons given, it is irrelevant to the topic to be covered in this book.

1.4 Meaning of Weapon, Means, and Methods of Warfare

The reader will see frequent references throughout the book to weapons, methods and means of warfare. Taking the first of these terms, a decision as to whether a particular piece of equipment constitutes a weapon is, as Justin McClelland observed,⁶ ‘a relatively straightforward process. The term connotes an offensive capability that can be applied to a military object or enemy combatant.’ The means whereby this is achieved will involve a device, munition, implement, substance, object, or piece of equipment, and it is that device, etc that is generally referred to as a weapon. The phrase ‘means of warfare’ means, for the purposes of this book, all weapons, weapons platforms, and associated equipment used directly to deliver force during hostilities. Methods of warfare, on the other hand, are taken to mean the way in which weapons are used in hostilities.

1.5 Outline of the Text

In the following chapters, the elements of the law relating to weapons will be brought together. The next three chapters will be devoted to the evolution of the

⁶ J McClelland, ‘The Review of Weapons in Accordance with Article 36 of Additional Protocol 1 (2003) 850 IRR 397.

law of weaponry, to its components, and to the use of weapons and the law of targeting. This is not because these subjects lie at the core of the purpose of this book. Rather, these three chapters are included because any consideration of the law of weaponry must start with an understanding of how the law emerged, what its components consist of, and the legal context in which weapons are used.

If we are to talk sensibly of a law relating to weaponry, we have to set the confines of that law, and must be assiduous in holding the discourse within those confines. The determination whether a weapon is lawful *per se* or whether an intended use of a particular weapon complies with the *ad hoc* law applicable to that weapon are both weapons law questions that lie firmly within the scope of this book. Decisions as to attacks in general, the general law of targeting, and related matters are outside the boundaries of weapons law. The distinction referred to here may sometimes seem rather artificial, even arbitrary, but it is nonetheless there on the face of the law and, for reasons that will emerge from the following discussion, important.⁷

Chapters will be dedicated to explaining the fundamental customary principles on which the law is based. Thereafter, the legal issues surrounding the environmental impact of weapons will be related and an important enabling treaty in the law of weaponry will be examined. The treaty and customary law relating to particular weapon systems will be set out in a series of chapters devoted to particular types of weapon. A chapter will be devoted to the law applicable to explosive remnants of war, after which the measures designed to promote weapons law compliance, including the requirement legally to review new weapons, will be explained. In a further chapter weapons or technologies that require particular consideration during such reviews will be discussed. In the last two chapters, the relationship between law, military need, technology, and humanitarian concern will be explored and we will look to the future and consider what changes and challenges will face the law of weaponry.

⁷ 'In determining legality [of a weapon], a state is not required to foresee or anticipate all possible uses or misuses of a weapon, for almost any weapon can be misused in ways that might be prohibited. A soldier armed with a handgun may murder an innocent civilian or a prisoner of war in his or her custody. The soldier has committed a violation of the law of war for which he or she should be brought to trial and, if convicted, punished. The fact that a pistol was used to perpetrate the crime does not transform an otherwise lawful weapon into an illegal weapon. The same may be said of an aircraft attack on a civilian object, or indiscriminate attacks by ground or air forces. A lawful weapon used to commit a crime makes the act criminal but does not make the weapon system or the weapon illegal. Law of war issues related to lawful targeting are addressed at the time of employment, to be determined by the on-scene commander under the circumstances ruling at the time. These issues are not determinative of the lawfulness of a weapon or munition. The commander authorising a weapon's use should consider its characteristics where innocent civilians are present in order to ensure consistency with mission rules of engagement and law of war proscriptions on the directing of attacks at civilians not taking an active part in hostilities, or who otherwise do not pose a threat to friendly forces.' This text is reproduced in W Hays Parks, 'Means and Methods of Warfare,' Symposium in honour of Edward R Cummings (2006) 38 GW ILR511, note 25.

This book concerns itself with the law relating to land- and air- and sea-based weapons systems.

1.6 Purpose of this Book

This book is intended to express the law in clear, open, but accurate terms in the hope that it will be a useful point of reference accessible alike to academics, students of the subject, policy-makers, strategic thinkers, and those involved in the manufacture, marketing, procurement, or regulation of weapons. While the intention is to cover the subject as comprehensively as possible, some material, for example that concerning the administrative procedures associated with certain treaties and information only of apparent interest to specialists in particular types of weapon, has been omitted as being of less general concern. Thus, in the section of Chapter 9 that addresses chemical weapons, for example, only the provisions that appear most relevant to the wider law of weaponry are considered. So, for example, the remaining, very numerous, provisions of the Chemical Weapons Convention can be consulted at <<http://www/icrc.org>>.

The law is stated as at 20 October 2008. As far as possible, the chapters of the book have been prepared as self-contained units in which, for example, the law relating to a particular weapon type is fully addressed within the relevant chapter. While this may involve limited repetition between chapters of certain material, such as treaty extracts, that has been kept to a minimum. It is, however, felt that the convenience for the user of referring to the whole story in one place outweighs the disadvantage of any repetitiveness.

Certain publications and treaties are the subject of frequent reference throughout the text. Where the treaties are concerned, references in this book to 'CCW' are references to the 1980 United Nations 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. References to 'API' are references to the 1977 Geneva Protocol 1 Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts. 'CWC' refers to the Chemical Weapons Convention 1993 and 'BWC' refers to the Biological Weapons Convention 1972. In 2005, the International Committee of the Red Cross, referred to hereafter as the ICRC, published its monumental study of customary international law. That text is variously referred to as the ICRC Customary Law Study Report, the ICRC Study or the ICRC Customary Law Study.

By looking separately at the evolution of custom and of treaty law in relation to each major type of weapon, a picture emerges of what the contemporary law is and of how these two distinct elements of weapons law have developed over time. Using this picture as a baseline, the book then analyses the factors that are

at work in motivating and facilitating changes in the law, including technology and humanitarian concern. An attempt is then made to determine what this tells us about the most appropriate approach to future rule change, followed by reflection on the merit of flexibility of approach. The critical importance of careful articulation, and implementation, of both treaty and customary legal rules and the centrality of states in the development of both sources of law will be recurring themes.

In this field, as in others, the experience of the past can inform the future. The 'acid test', however, will continue to be whether the law, including new rules, makes a practical difference by limiting suffering 'in the battle-space'.

This book has been written at a pivotal moment in the evolution of weapons law when it is unclear whether consensus, or groupings of the like-minded, will be the more usual medium for consideration of rule change. The purpose in analysing their competing merits is to determine where the best hope for appropriate future regulation lies. That a law of weaponry will continue to be needed in future years cannot be doubted. The challenge is to make it, and the systems that are employed to change or update it, relevant to the rapid process of technological change that future decades are likely to witness and to the expectations of current and future generations.