William Boothby. *Weapons and the Law of Armed Conflict.* Oxford: Oxford University Press, 2009. Pp. 464. £70. ISBN: 9780199569946.

The law concerning the means of warfare (i.e. weapons or weapons systems in armed conflict) is arguably one of the most important areas of *ius in bello*. In the last 50 years, the issue of controlling the production and prohibiting the use of certain weapons has taken on an increasing urgency since technological and industrial progress has made possible the development of new types of weapons which are far more devastating than any means of warfare which existed in former times. However, there are not as many publications dedicated to this important topic as one might think. William Boothby's monograph, Weapons and the Law of Armed Conflict takes on the difficult task of giving an overview of all relevant aspects in not much more than 400 pages. The study primarily focuses on the humanitarian law aspects of the use of weapons, but to some extent also touches on aspects concerning disarmament. The dividing line between humanitarian and disarmament rules is increasingly blurred anyway, as is evidenced for example by Article 36 of Additional Protocol I to the Geneva Conventions (AP I), which advocates a preventive approach by requiring contracting parties to determine whether the study, development, or acquisition of a new weapon would be contrary to the provisions of Additional Protocol I.

The book begins with a historical introduction on the evolution of the law of weaponry. Boothby gives a brief review (at 8–21) starting with the first international documents aimed at regulating weapons, including the famous St. Petersburg Declaration of 1868 and the Brussels Declaration of 1874. Clearly history shows that the negotiation of generally accepted limitations on the development, production, and especially use of certain weapons is in the interest of all states.

The following chapters deal with rules on the means and methods of warfare, such as targeting rules under Additional Protocol I (Chapter 4) and the basic principles of weapons law: (a) the prohibition on causing superfluous injuries and unnecessary suffering (Chapter 5); (b) the principle of discrimination (Chapter 6); and (c) the prohibition on employing methods which cause severe damage to the environment (Chapter 7). Article 35 I of AP I is the basic norm on the means of warfare, stating that '[i]n any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited'.

The study remains rather cursory regarding targeting rules, which is understandable as targeting rules deal with the way a weapon is lawfully used. In this context, Boothby makes the point that 'consideration of the law of weaponry must . . . be set against the background of the law that regulates how those weapons may be used' (at 41). Consistently the methods of warfare are not dealt with in full detail. The study scratches at the surface of these issues (for example the protection of the civilian population in armed conflict and the issue of indiscriminate attacks, at 43-44), just deep enough for what is needed in the context of the subsequent discussion in respect of the specific law on weapons. Focal to Boothby's work are the considerable problems in determining the standard of 'superfluous injury' and 'unnecessary suffering'. The International Court of Justice in the Nuclear Weapons Advisory Opinion stated that the standard is 'a harm greater than the unavoidable to achieve legitimate military objectives'.¹ However, clear medical parameters which objectively define suffering do not exist. Suffering is an inherent feature of any armed conflict and has to be tolerated to a certain extent. Boothby thus correctly states that 'the legitimacy of a weapon, by reference to the superfluous injury and unnecessary suffering principle, must be determined by comparing the nature and scale of the generic military advantage to be anticipated from the weapon in the applications for which it is designed to be used with

the pattern of injury and suffering associated with the normal, intended use of the weapon' (at 63).

Similar challenges exist with regard to the 'indiscriminateness' of a weapon. One of the main difficulties is the question whether the concept is limited to weapons which are by their nature indiscriminate (i.e. a weapon that is not capable of control as to either the place of its impact or the nature and extent of its effects). Normally it will be the actual use of a weapon in a particular set of circumstances, and not the nature of the weapon itself, which determines the lawfulness of its use. Ergo. Boothby convincingly reasons that almost all weapons are capable of having indiscriminate effects, but that such an occurrence will not necessarily reflect on the legality of the weapon per se (at 83). The problem becomes especially apparent in the context of nuclear weapons, because even nuclear weapons arguably can be operated in such a way that no civilians would be affected.² Boothby rightfully identifies as a rule that 'to operate lawfully in complex urban settings will, in practice, require the use of weapons that are capable of being used in a discriminating way' (at 72).

The book scrutinizes the customary law status of the aforementioned principles at great length and the relevant provisions are meticulously examined (with particular focus on Additional Protocol I and the ICRC's Study on Customary Law³). Although Boothby wisely hesitates to give definite answers as to the content and status of these principles in customary law, his conclusions are well reasoned. It becomes clear that the regulation of the use of weapons in armed conflict cannot really be expected to rest on the general prohibition of causing superfluous injury or unnecessary suffering. The only reliable way

² The example of an arguably permissible use would be a 'clean' nuclear bomb without longrange radiation which is dropped on an enemy division in the middle of a desert.

¹ ICJ, Legality of the Thread or Use of Nuclear Weapons [1996] ICJ Rep 226, at para. 78.

³ J.-M. Henckaerts and L. Doswald-Beck, Customary International Humanitarian Law (3 vols, 2005).

to outlaw the use of certain weapons is their ban by obtaining the consent of states to stigmatize a specific weapon by way of a multilateral convention.⁴

This reasoning leads right into the second main part of the book which focuses on the various treaty regimes covering all sorts of (banned) conventional weapons as well as weapons of mass destruction, including: chemical and biological weapons (Chapter 9); firearms, bullets, and analogous projectiles (Chapter 10); mines and booby-traps (Chapter 11); incendiary weapons and laser weapons (Chapter 12); nuclear weapons (Chapter 13); and cluster munitions (Chapter 15).

Especially interesting is the chapter dealing with biological and chemical weapons. Biological weapons are the prime example of weapons which are inherently indiscriminate, and it follows logically that the use of biological weapons is prohibited in all circumstances.⁵ But Boothby does not stop here; he takes the matter a step further and states that a customary rule has emerged (based on the evidence summarized in the ICRC Study Report on Customary Law) to the extent that the possession of biological and bacteriological weapons is also prohibited (at 129). This is a well-founded, but nevertheless progressive statement. The ban on chemical weapons on the other hand is not as absolute as that on biological weapons. Boothby concludes after a brief discussion of the features of the Chemical Weapons Convention that, even if it is not entirely clear whether the absolute prohibition on the use of chemical weapons has yet reached customary status, the prohibition is at least very close to this status (at 137).6 Unfortunately, Boothby only very briefly touches

- ⁴ See also Dinstein, 'Means and Methods of Warfare', in *Max-Planck Encyclopedia of Public International Law*, available at: www.mpepil.com, at para. 5.
- ⁵ International Committee of the Red Cross, Customary Law Study Report, Rule 73.
- ⁶ See also *ibid.*, Rule 74, according to which the rule has attained the status of customary law in the context of international armed conflicts as well as in non-international armed conflicts.

upon the issue of compliance (at 138–139). Arguably the advanced verification mechanisms of the Chemical Weapons Convention are key to the success of this treaty regime compared to the less comprehensive mechanisms of the Biological Weapons Convention.

The chapter on nuclear weapons is surprisingly brief and only restates the absolutely necessary, such as the ICJ's *Nuclear Weapons Advisory Opinion* (at 220–222). Boothby refuses to discuss any disarmament issues as they are outside the scope of his study, and he ends the chapter with the rather laconic comment that 'it remains to be seen whether such weapons will be used in the future and in what circumstances' (at 223).

By contrast, the book covers cluster munitions extensively, and the text of the Dublin Convention on Cluster Munitions is reprinted in its entirety (at 262–278). This, of course, is due to the topicality of the issue. Boothby remains somewhat sceptical of the future success of the Convention on Cluster Munitions and points out that the current negotiations under the auspices of the Conventional Weapons Convention might eventually be the more effective forum to discuss concerns with cluster munitions (at 386).7 However, it must be pointed out that the Convention on Cluster Munitions (and also the Ottawa Convention on Anti-Personnel Mines) stands for a progressive trend in the codification of the means of warfare: recent international agreements link the prohibition on the use of a weapon with their development, production, acquisition, and the destruction of existing stocks. The two conventions include detailed provisions on implementation. This, unfortunately, comes with the price that not every state is willing to accept the ban on these weapons.8

⁸ See, e.g., Russian Federation, 'Position Paper on Cluster Munitions' (19 June 2007), UN Doc CCW/GGE/2007/WP.6.

⁷ For a more optimistic assessment of the future of the CCM see Blum, 'Cluster Munitions', in Max-Planck Encyclopedia of Public International Law, supra note 4.

Boothby alludes to the problem when stating that although the Ottawa Convention has 156 states party to it, it will nevertheless not constitute a truly global ban on antipersonnel mines until India, China, Russia, and the United States participate in the treaty (at 193).⁹

The last chapters of the study focus on some issues in a broader context, such as: the clearance and destruction of explosive remnants of war (Chapter 17); legal review and compliance mechanisms (Chapter 19); and the challenges that the law faces in keeping up with rapid technological advance (Chapter 20).

All things considered, Boothby succeeds in giving a complete overview of the law of weapons in armed conflict. One point of critique could be directed at the fact that Boothby's position on most issues closely follows the official UK line of argument (to some extent he also takes the writings of leading American and Continental European scholars into account). Admittedly, it might have been a difficult, but nevertheless worthwhile, endeavour to analyse whether (and to what extent) the interpretation of the principles discussed in the doctrine of other important military powers such as Russia or China differs from Boothby's conclusions. After all, to identify norms and principles as reflecting customary law, the opinio iuris of not only a few, but all relevant states must be analysed.¹⁰ However, this does not take too much away from this generally convincing study. How Boothby manages the task of covering the different weapons without a lack of clarity regarding presentation is impressive. Boothby demonstrates impeccable knowledge of the relevant treaty regimes. The study is especially important because, ever since the first attempts to

outlaw certain weapons, the definition and application of the principles of 'unnecessary injuries', 'superfluous suffering', and 'indiscriminate effects' have been fiercely disputed. Therefore, the primary merit of Boothby's monograph on the law of weapons in armed conflict is that the contemporary state of affairs is comprehensively summarized and that the standards applicable are presented in a convincing manner. One can only agree with Yoram Dinstein's appraisal in the foreword that the volume is 'likely to become the leading oeuvre on the legality of recourse to weapons in wartime'.

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⁹ The same obviously holds true for the Dublin Convention on Cluster Munitions.

¹⁰ The fact that Boothby thoroughly analyses and references the ICRC Customary Law Study Report, *supra* note 4, might diminish this criticism somewhat, but not completely.