

Introduction

Protection of the Environment and *Jus Post Bellum*: Some Preliminary Reflections

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A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.¹

I.1 State-of-the-Art

Protection of the environment and natural resources is a key element in the transition from armed conflict to peace. Most academic studies have focused on classical peacetime or conflict situations.² The United Nations Environmental Programme ('UNEP') qualified the environment as a 'silent casualty' of armed conflict.³

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¹ Aldo Leopold, 'The Land Ethic' in *A Sand County Almanac* (New York: Oxford University Press, 1949), 262.

² See, for example, Karen Hulme, *War-Torn Environment: Interpreting the Legal Threshold* (Leiden: Brill, 2004); Carl Bruch and Jay Austin, *The Environmental Consequences of War: Legal, Scientific and Economic Perspectives* (Cambridge: Cambridge University Press, 2000); Rosemary Rayfuse (ed.), *War and the Environment – New Approaches to Protecting the Environment in Relation to Armed Conflict* (Leiden: Brill, 2014); Michael Bothe, Carl Bruch, Jordan Diamond, and David Jensen, 'International Law Protecting the Environment During Armed Conflict: Gaps and Opportunities' (2010) 92 *International Review of the Red Cross* 576; Cordula Droegge and Marie-Louise Togas, 'The Protection of the Natural Environment in Armed Conflict: Existing Rules and the Need for Further Legal Protection' (2013) 82 *Nordic Journal of International Law* 21; Erik Koppe, 'The Principle of Ambiguity and the Prohibition Against Excessive Collateral Damage to the Environment During Armed Conflict' (2013) 82 *Nordic Journal of International Law* 53–82; Daniella Dam, 'From Engines for Conflict into Engines for Sustainable Development: The Potential of International Law to Address Predatory Exploitation of Natural Resources in Situations of Internal Armed Conflict' (2013) 82 *Nordic Journal of International Law* 155.

³ UNEP, Press Release, 'Environment is the "silent casualty" of armed conflict', 6 November 2016, at <http://reliefweb.int/sites/reliefweb.int/files/resources/Environment%20is%20the%20%27silent%20casualty%27of%20armed%20conflict_EN.pdf> accessed 15 August 2017.

Exploring the protection of the environment in the aftermath of armed conflict⁴ and its relationship to sustainable peace is a relatively novel perspective.⁵

The environmental devastation caused by armed conflict has prompted an expansion in the international legal framework governing environmental protection. For instance, the damage caused by the Vietnam War encouraged the adoption of the Environmental Modification Convention ('ENMOD') and Additional Protocol I to the Geneva Conventions which strengthened the protection of the environment from widespread destruction during conflict.⁶ ENMOD restricted the modification of nature as a weapon of war.⁷ Additional Protocol I protected the environment itself (Art. 35(3)), as well as the human population (Art. 54), and banned attacks against the natural environment by way of reprisals (Art. 55(2)). The 1991 Iraq War led to unprecedented oil spills in the Persian Gulf. It prompted the adoption of Security Council Resolution 687 (1991),⁸ as well as the establishment of the United Nations Compensation Commission which dealt *inter alia* with environmental damage. Since the 1990s, the UNEP, other UN agencies, and numerous NGOs have taken a control role in assessing and documenting environmental damage caused by conflict.⁹ The International Committee of the Red Cross ('ICRC') has developed guidelines for the protection of the environment during armed conflict¹⁰ which were endorsed by the General Assembly.¹¹ Principle 24 of the Rio Declaration on Environment and Development specifies expressly that states shall provide 'protection for the environment in armed conflict' since '[w]arfare is inherently destructive of sustainable development'.¹² Several disarmament instruments contain duties to remove remnants of war or to destroy weapons after conflict in conditions that do not result in significant damage to the environment.¹³ Efforts have

⁴ In *Tadić*, the ICTY defined armed conflict as 'a situation in which there is resort to armed force between States or protracted resort to armed force between governmental authorities and organized armed groups'. ICTY, *Prosecutor v. Tadić*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, No. IT-94-I-AR72, 2 October 1995, para 70.

⁵ See Toxic Remnants of War Project, *Environmental Mechanics: Re-Imaging Post-Conflict Environmental Assistance* (Toxic Remnants of War Project, 2015), at <http://www.toxicremnantsofwar.info/wp-content/uploads/2015/11/TRWP_Environmental_Mechanics.pdf> accessed 15 August 2017.

⁶ Under Art. 1 of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Technique ('ENMOD'), parties undertake 'not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as a means of destruction, damage or injury to any other State party'. See Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 18 May 1977, 16 I.L.M. 90. On its limited scope of application, see Michael Schmitt, 'Humanitarian Law and the Environment' (2000) 28 *Denver Journal of International Law and Policy* 265.

⁷ See also Rule 45 of the ICRC Customary Law Study.

⁸ Resolution 687 specified that Iraq is 'liable under international law for any direct loss, damage, including environmental damage ... as a result of Iraq's unlawful invasion and occupation of Kuwait'.

⁹ UNEP has traced the effects of conflicts on the environment in more than twenty reports. See UNEP, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (2009), at <http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf> accessed 15 August 2017.

¹⁰ ICRC, Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict, at <<https://www.icrc.org/eng/resources/documents/article/other/57jn38.htm>> accessed 15 August 2017.

¹¹ See UN GA Res. 49/50 (1994).

¹² See also the reference by the ICJ in the Advisory Opinion, *Legality of the Threat or Use of Nuclear Weapons*, 8 July 1996, ICJ Reports 1996, para 30.

¹³ According to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, states parties hold responsibility for chemical weapons that they abandon on the territory of another state party. The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction does not contain

been made to inventory existing protections of the environment during armed conflict.¹⁴ But overall, responses remain fragmented and partial.

In humanitarian responses, protection of the natural environment is often at the periphery. Responsive action is at the core of humanitarian response—immediate action that aims to stop, prevent, or alleviate the worst and effects of abuse.¹⁵ Remedial action is less immediate, and is aimed at helping people recover and live with subsequent effects.¹⁶ Finally, environment-building action focuses on long-term efforts to rebuild societal structures and norms in order to prevent or limit current and future violations and abuses.¹⁷ Humanitarian action is predominantly focused on thematic issues, such as protection of civilians, sexual and gender-based violence, protection of children or cultural property. Environmental protection is generally not part of the immediate response (i.e. action to stop or alleviate violations), but at best part of long-term efforts to rebuild structures or prevent or limit future damage.

The role of non-state armed groups remains a bone of contention in legal discussions on conflict and environment.¹⁸ Incidents, such as the burning of oil wells by ISIS in Libya, Iraq, or Syria, highlight the risks that non-state actors may pose to the environment and health of civilians. But international law still lacks effective mechanisms and structures to deal with such types of destruction, due to ambiguity of environmental rules relating to non-international armed conflicts and lack of compliance systems.¹⁹ In addition, major powers have remained reluctant to accept environmental obligations or duties to prevent or remedy conflict-related harm.²⁰

Existing legal frameworks differ in their approach towards environmental challenges. International humanitarian law is often the starting point. The existing regime has been criticized for its high threshold for environmental damage under Articles 35 and 55 of Additional Protocol I, (i.e. the requirement of ‘widespread, long-term and severe damage’ to the environment under Additional Protocol I). As Karen Hulme has pointed out, these notions are considerably vague, and open to conflicting understandings by

an express environmental impact assessment, but requires states parties to clear all mines in areas under their jurisdiction or control. Article 10 of the 1996 Amended Protocol II on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or Have Indiscriminate Effects) obliges states to clear, remove, or destroy minefields under their control. The Protocol on Explosive Remnants of War obliges a party to a conflict to assume responsibility for remnants of war in territory under their control and to provide assistance in relation to clearance, removal, or destruction, even in the absence of control.

¹⁴ Elizabeth Mrema, Carl E. Bruch, and Jordan Diamond, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law* (UNEP/Earthprint, 2009).

¹⁵ Hugo Slim and Andrew Bonwick, *Protection: An ALNAP Guide for Humanitarian Agencies* (London: Overseas Development Institute, 2005), 42.

¹⁶ *ibid.* ¹⁷ *ibid.*

¹⁸ See generally Claudia Hofmann and Ulrich Schneckener, ‘Engaging Non-state Armed Actors in State and Peace-Building: Options and Strategies’ (2011) 93 *International Review of the Red Cross* 603.

¹⁹ Only a limited number of non-state armed groups have agreed to specific environmental protections in their doctrines. See Jonathan Somer, ‘Environmental Protection and Non-State Armed Groups: Setting a Place at the Table for the Elephant in the Room’, at <<http://www.toxicremnantsofwar.info/environmental-protection-and-non-state-armed-groups-setting-a-place-at-the-table-for-the-elephant-in-the-room/>> accessed 15 August 2017.

²⁰ For instance, the US has called into question the customary nature of Rule 45 of the ICRC Customary Law Study which prohibits causing ‘serious damage to the natural environment’. See John B. Bellinger and

interpreters. Taken to its extreme, the term ‘widespread’ might be read to cover only damage that stretches over thousands of kilometres. The notion of ‘long term’ could imply a period of several decades, rather than months or years. The requirement of severity might require significant impact on human life.²¹

Protection of the environment *per se* remains an exception. While certain multilateral environment agreements (e.g. the Convention Concerning the Protection of the World Cultural and Natural Heritage) protect the environment *per se* (e.g. biodiversity), international humanitarian law and international criminal law continue to treat environmental protection largely from an anthropocentric perspective. They address environmental protection mostly through the lens of property protection (e.g. ownership of natural resources), and precautions in attack or pursuit of military objectives (principles of necessity and proportionality). Different approaches to the environment can be found within the same document. Article 35 of the 1977 Additional Protocol I²² is more ecocentric, while Article 55 is more anthropocentric—valuing the natural environment not necessarily for its own sake but because damage to the natural environment may ‘prejudice the health or survival of the population.’ This anthropocentric framework is the norm in the law of armed conflict. Like Aldo Leopold, contributors to this volume emphasize environmental integrity and stability as fundamental criteria to evaluate the effectiveness of efforts to preserve the environment and stabilize the peace.

The acceptance of specific ecological obligations and procedures in post-conflict environments continues to encounter resistance. It is only gradually recognized that a comprehensive understanding of the nexus between environment and conflict requires not only efforts to protect the environment as such, but a deeper engagement with the origins of conflicts and a better connection with peacebuilding strategies.²³

Traditional approaches face particular challenges in transitions. There is a high degree of norm diffusion. Protection of the environment and natural resources needs to be

William J. Haynes, ‘A US Government Response to the International Committee of the Red Cross Study Customary International Humanitarian Law’ (2007) 89 *International Review of the Red Cross* 443, 455–60.

²¹ See Hulme (n 2) 92–6.

²² 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. The relevant articles are:

Article 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.

Article 55. PROTECTION OF THE NATURAL ENVIRONMENT.

1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.
2. Attacks against the natural environment by way of reprisals are prohibited.

²³ See David Jensen and Stephen Lonergan (eds.), *Assessing and Restoring Natural Resources In Post-Conflict Peacebuilding* (New York: Routledge, 2012); Carl Bruch, Carroll Muffett, and Sandra Nichols, *Governance, Natural Resources and Post-Conflict Peacebuilding* (New York: Routledge, 2015).

considered in tandem with a broad range of simultaneously applicable frameworks, such as (i) human rights, (ii) transitional justice,²⁴ (iii) arms control/disarmament, (iv) UN law and practice (sanctions, protection of natural resources, law of peace operations), (v) development, and (vi) domestic law. These bodies provide different perspectives on environmental protection. Environmental concerns may be protected through different lenses: property protection, health, and environmental norms and principles.²⁵ These frameworks complement each other and require coordination.²⁶ The weight given to these rationales may shift according to the nature and intensity of the conflict and the progression towards the consolidation of peace, that is moves from the absence of violence to thicker versions of societal peace.²⁷

Existing frameworks contain gaps and ambiguities in key areas, such as non-international armed conflict, the allocation of responsibility (e.g. ‘shared responsibility’,²⁸ or the responsibility of non-state actors such as private military contractors), and enforcement. Many human rights instruments contain environmental protections.²⁹ But there are often conflicting priorities in post-conflict settings that may require deviation from classical peacetime standards. A balance needs to be struck between strict liability approaches, supportive compliance mechanisms, and punitive approaches. Addressing immediate and long-term consequences of environmental damage in and after conflict raises novel questions about reparations.

I.2 *Jus Post Bellum* and Environmental Protection

The role of *jus post bellum* in relation to environmental protection has thus far gained limited attention in scholarship.³⁰ The concept of *jus post bellum* has roots in just war

²⁴ Transitional justice is a contested term, but can be thought of as a ‘conception of justice associated with periods of political change, characterized by legal responses to confront the wrongdoings of repressive predecessor regimes’. See Ruti G. Teitel, ‘Transitional Justice Genealogy’ (2006) 16 *Harvard Human Rights Journal* 69, 69.

²⁵ See Karen Hulme, ‘The ILC’s Work Stream on Protection of the Environment in Relation to Armed Conflict’ (2016) 34 *Questions in International Law* 27, 33.

²⁶ Each of them offers prospects to strengthen specific aspects of environmental protection (e.g. a ‘rights’-based approach to protection, standard-setting, environmental clean-up, remedies, and reparations), but also contains its inherent limitations.

²⁷ On *jus post bellum* and peace, see Cécile Fabre, *Cosmopolitan Peace* (Oxford: Oxford University Press, 2016); Mark Evans, ‘Just Peace: An Elusive Ideal’ in Eric Patterson (ed.), *Ethics Beyond War’s End* (Washington, DC: Georgetown University Press, 2012), 197.

²⁸ On ‘shared responsibility’, see Andre Nollkaemper and Dov Jacobs, ‘Shared Responsibility in International Law: A Conceptual Framework’ (2013) 34 *Michigan Journal of International Law* 359.

²⁹ For instance, Art. 24 of the African Charter of Human and Peoples’ Rights states that ‘[a]ll peoples shall have the right to a general satisfactory environment favorable to their development’. See African Charter of Human and Peoples’ Rights, (1982) 21 I.L.M. 58. The 1988 Additional Protocol to the American Convention on Human Rights reaffirms the ‘right to live in a healthy environment and to have access to basic public services’. Organization of American States, Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, OASTS No. 69, 28 I.L.M. 161.

³⁰ For an exception, see Douglas Lackey, ‘Postwar Environmental Damage: A Study in Jus Post Bellum’ in Larry May and Zachary Hoskins (eds.), *International Criminal Law and Philosophy* (Cambridge: Cambridge University Press, 2010), 141. In her Third Report, ILC Special Rapporteur Marie Jacobsson ‘has decided not to address the ongoing academic discussions on the concept of *jus post bellum*’ since the ‘legal-political discussion on this concept is wider than positive law and has a clear connection to just war theories’. See Marie

theory.³¹ It was traditionally linked to the assessment of the morality of war and intervention in international society.³² But it is gaining increasing importance as a legal concept through practice and law-making in different areas, such as peace treaties, peace operations, (post-)occupation law, international criminal justice, or statebuilding practice.³³ *Jus post bellum* differs from *jus contra bellum* and the *jus in bello*.³⁴ It is not only restrictive, but also permissive in nature, that is geared at facilitating and guiding 'choices' in transitions. Like other fields, it has been primarily concerned with atrocity violence and human harm.³⁵ It has traditionally neglected the environment or treated it as a low priority. This limited focus is open to critical scrutiny.

Environmental exploitation and harm is often not just a result of armed conflict, but one of its major causes. Studies about the interactions of human and natural systems show that environmental impact can have serious consequences for peacebuilding.³⁶ For instance, environmental damage caused by weapons, oil spills and destroyed landscapes, or killing of wildlife may impede health, return of internally displaced persons, sustainable development, or social peace among societies affected conflict. Cymie Payne has thus convincingly argued in our first *jus post bellum* volume that environmental integrity is an essential part of breaking cycles of conflict, restoring societies, and re-establishing the rule of law.³⁷

G. Jacobsson, Special Rapporteur, Third Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A/CN.4/700, 3 June 2016, para 10.

³¹ See, for example, Michael Walzer, *Arguing About War* (New Haven, CT: Yale University Press, 2004); Brian Orend, *War and International Justice: A Kantian Perspective* (Waterloo, ON: Wilfrid Laurier Press, 2000), 57; Brian Orend, *The Morality of War* (Buffalo, New York: Broadview Press, 2006), 160–90; Alex Bellamy, 'The Responsibilities of Victory: *Jus Post Bellum* and the Just War' (2008) 34 *Review of International Studies* 601; Mark Allman and Tobias Winright, *After the Smoke Clears: The Just War Tradition and Post War Justice* (Maryknoll: Orbis Books, 2010); Michael Walzer, 'The Aftermath of War. Reflections on *Jus Post Bellum*' in Eric Patterson (ed.), *Ethics Beyond War's End* (Washington, DC: Georgetown University Press, 2012), 35.

³² On *jus post bellum* and judgment, see Jeremy Waldron, 'Post Bellum Aspects of the Laws of Armed Conflict' (2009) 31 *Loyola of Los Angeles International and Comparative Law Review* 31, 45–55.

³³ See Inger Österdahl and Esther van Zadel, 'What Will *Jus Post Bellum* Mean: Of New Wine and Old Bottles' (2009) 14 *Journal of Conflict and Security Law* 175; Adam Roberts, 'Transformative Military Occupation: Applying the Laws of War and Human Rights' (2006) 100 *American Journal of International Law* 580; Kristen Boon, 'Obligations of the New Occupier: The Contours of *Jus Post Bellum*' (2009) 31 *Loyola of Los Angeles International and Comparative Law Review* 57; Christine Bell, 'Post-conflict Accountability and the Reshaping of Human Rights and Humanitarian Law' in Orna Ben-Naftali (ed.), *International Humanitarian Law and International Human Rights* (Oxford: Oxford University Press 2011), 328, 369. See also the contributions in Carsten Stahn, Jennifer S. Easterday, and Jens Iverson, *Jus Post Bellum: Mapping the Normative Foundations* (Oxford: Oxford University Press, 2014).

³⁴ On critiques of *jus post bellum*, see Hilary Charlesworth, 'Law After War' (2007) 8 *Melbourne Journal of International Law* 233; Eric De Brabandere, 'The Responsibility for Post-Conflict Reforms: A Critical Assessment of *Jus Post Bellum* as a Legal Concept' (2010) 43 *Vanderbilt Journal of Transnational Law* 119; Ruti Teitel, 'Rethinking *Jus Post Bellum* in an Age of Global Transitional Justice' (2013) 24 *European Journal of International Law* 335.

³⁵ For a critique of the crisis narrative of international law, see Hilary Charlesworth, 'International Law: A Discipline of Crisis' (2002) 65 *Modern Law Review* 377.

³⁶ UNEP, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (United Nations Environment Programme, 2009), at <http://postconflict.unep.ch/publications/pcdmb_policy_01.pdf> accessed 15 August 2017.

³⁷ See Cymie Payne, 'The Norm of Environmental Integrity in Post-Conflict-Legal Regimes' in Stahn, Easterday, and Iverson (n 33) 502.

I.2.1 Notions of *jus post bellum*

This volume seeks to make the case that *jus post bellum* can have a useful role in relation to environmental protection. A fundamental premise is that environmental damage needs to be considered independently from respect of *jus ad bellum* and *jus in bello*.³⁸ As we have set out in our previous research, the concept is inherently linked to the idea of sustainable peace.³⁹ Some view it in a narrow sense, namely as a concept relating to the transition phase out of armed conflict, that is a phase that is separate from a complete end to hostilities.⁴⁰ We have understood it in a wider sense, namely not only as exit from conflict, but as a concept inherently connected to the establishment of peace. It pursues different macro purposes:

- (i) it may have a certain preventive function, by requiring actors to look into the consequences of action before, rather than ‘in’ and ‘after’ armed conflict;
- (ii) it may serve as a constraint on violence in armed conflict; and
- (iii) it may facilitate a succession to peace, rather than ‘exit’ from conflict.

In legal terms, the concept may be understood in at least three different ways. *Jus post bellum* may be said to form a system of norms and principles applicable to transitions from conflict to peace.⁴¹ This view is the most ambitious conception. Many *jus post bellum* norms are adaptations from existing bodies of law, or are derived from them. Process-related norms, flexible principles, and ‘soft law’ have particular importance, in light of the particular tensions raised in post-conflict settings.

A second and more ‘modest’ understanding of *jus post bellum* is its qualification as a ‘framework’.⁴² This conception emphasizes the functionality of *jus post bellum*. *Jus post bellum* might be understood as an ‘ordering framework’, namely as an instrument to identify what rules and principles apply in post-conflict situations, to coordinate the application of laws, or to solve conflicts of norms or balance conflicting interests.

Thirdly, *jus post bellum* may constitute an interpretative device.⁴³ The concept might inform a context-specific interpretation of certain normative concepts, such as ‘military necessity’ or the principle of proportionality. For instance, the nexus between

³⁸ See also chapter 16 in this volume. On the independence of *jus post bellum* from *jus ad bellum* and *jus in bello*, see Carsten Stahn, ‘Jus ad bellum’, ‘jus in bello’ ... ‘jus post bellum?’ – Rethinking the Conception of the Law of Armed Force’ (2007) 17 *European Journal of International Law* 921, 936; Carsten Stahn, ‘Das Ringen um den Frieden: Jus Ad Bellum, Jus Contra Bellum, Jus Post Bellum?’ in Andreas von Arnould (ed.), *Völkerrechtsgeschichte(n): Historische Narrative und Konzepte im Wandel* (Berlin: Duncker & Humblot, 2017), 147, 156–7.

³⁹ Jennifer S. Easterday, Jens Iverson, and Carsten Stahn, ‘Exploring the Normative Foundations of *Jus Post Bellum*: An Introduction’ in Stahn, Easterday, and Iverson (n 33) 1, 11.

⁴⁰ On *jus ex bello*, see Darrel Mollendorf, ‘Jus ex Bello’ (2008) 16 *Political Philosophy* 123; Darrel Mollendorf, ‘Two Doctrines of Jus ex Bello’ (2015) 125 *Ethics* 653; David Rodin, ‘Two Emerging Issues of Jus Post Bellum: War Termination and the Liability of Soldiers for Crimes of Aggression’ in Carsten Stahn and Jann Kleffner (eds.), *Jus Post Bellum: Towards a Law of Transition from Conflict to Peace* (The Hague: TMC Asser Press, 2008), 53.

⁴¹ On this understanding see Carsten Stahn, ‘The Future of Jus Post Bellum’ in Stahn and Kleffner (n 40), 231, 236–7.

⁴² See Easterday, Iverson, and Stahn (n 39) 1, 2–4.

⁴³ See James Gallen, ‘Jus Post Bellum: An Interpretive Framework’ in Stahn, Easterday, and Iverson (n 33) 58.

environmental protection and peace might support a ‘green’ interpretation of concepts, such as proportionality, necessity, or distinction.

I.2.2 Implications in relation to environmental protection

As Larry May and others have shown, *jus post bellum* demands moderation, which derives from the need to end conflict in a sustainable way.⁴⁴ This may require concessions, compromises, and a certain degree of renouncement, that is an openness by parties to conflict to accept not only what is ‘owed’, but what can be reasonably demanded. This conception has a certain grounding in the principle of equity,⁴⁵ which plays a prominent role in general international law and international environmental law.

These tensions, and in particular the need for moderation, communitarian approaches, and balancing of conflicting interests, are evident in the field of environmental protection. The ‘optimal goal’ is, as the International Law Commission (‘ILC’) put it, to leave ‘no environmental footprints at all.’⁴⁶ While optimal, this goal is normally not only impossible—even assessment of the extent of environmental harm can be difficult. During and after armed conflict, it is often hard to obtain reliable information on the condition of the environment. Assessment of environmental harm is mostly only one among competing priorities. Contributions to the harm are often shared or clouded by scientific uncertainty. Certain forms of damage may unfold in slow motion and materialize only long after cessation of hostilities. Other forms of damage may be irreversible. It will often be impossible to restore the *status quo ante*.

The only remedy may be forward-looking, that is to strengthen system resilience.⁴⁷ Repair of harm may require a broader distribution of burden-sharing. For instance, environmental harm is often caused by cumulative effects. The principle ‘if you break it, you own it’⁴⁸ is not necessarily most conducive to effective environmental protection. International environmental law is governed by the ‘polluter pays’ principle.⁴⁹ This approach causes particular difficulty in civil wars or fragile states. Countries affected by armed violence or parties involved in non-international armed conflict may lack

⁴⁴ See Larry May, ‘Jus Post Bellum, Grotius and Meionexia’ in Stahn, Easterday, and Iverson (n 33), 15, 21–2. Steven J. Barela and Alexis Keller, ‘Justice, Peace and Jus Post Bellum’ (2015) 7 *Amsterdam Law Forum* 98, 107, arguing that peacemaking requires recognition and certain degree of concession and compromise from parties involved (principle of renouncement).

⁴⁵ On equity in international environmental law, see Dinah Shelton, ‘Equity’ in Daniel Bodansky, Jutta Brunnée, and Ellen Hey (eds.), *The Oxford Handbook of International Environmental Law* 639; Philippe Cullet, ‘Common but Differentiated Responsibilities’ in Malgosia Fitzmaurice, David. M. Ong, and Panos Merkouris (eds.), *Research Handbook on International Environmental Law* (Cheltenham: Elgar, 2010), 161. On equity and *jus post bellum* in international investment law, see Jure Zrilič, ‘International Investment Law in the Context of Jus Post Bellum: Are Investment Treaties Likely to Facilitate or Hinder the Transition to Peace?’ (2015) 16 *Journal of World Investment & Trade* 604.

⁴⁶ Jacobsson, Third Report (n 30) para 170.

⁴⁷ See Payne, chapter 2 in this volume.

⁴⁸ See Dinah Shelton, ‘If You Break It, Do You Own It? Legal Consequences of Environmental Harm from Military Activities’ (2015) 6 *Journal of International Humanitarian Legal Studies* 201; George Clifford, ‘*Jus Post Bellum*: Foundational Principles and a Proposed Model’ (2012) 11 *Journal of Military Ethics* 42, 44; James Pattison, ‘Jus Post Bellum and the Responsibility to Rebuild’ (2015) 45 *British Journal of Political Science* 635, 638–41.

⁴⁹ The ‘polluter pays’ principle may be traced back to the jurisprudence of the Permanent Court of International Justice. See PCIJ, *Case Concerning the Factory at Chorzow*, PCIJ Series A, No. 9, 26 July

capacity to remedy harm caused, even if they are formally responsible for its causation. There is a risk that no one is effectively held liable for cumulative action.

Jus post bellum provides a potential framework to accommodate these tensions. It is in many ways an instrument to understand the functioning of norms, principles, and policies in a new way. It has essentially four different functions.

It offers, first of all, a lens to view environmental protection as continuum throughout cycles of conflict or conflict transformations. Environmental concerns are relevant through all phases of conflict, ranging from pre-conflict stages to different phases of armed conflict, post-conflict transitions, and their aftermath. The perspective through which they are approached in these periods differ, depending on the underlying bodies of law. *Jus post bellum* provides a means to understand better how principles operate in these distinct phases. It allows a better distinction between different categories of principles, and their interplay, such as (i) environment-related principles (e.g. sustainable development,⁵⁰ intergenerational equity⁵¹), (ii) conflict or transition-related practices, (iii) organizing principles (e.g. rules of conflict, prioritization), and (iv) process-related principles (e.g. cooperation, sequencing).

Second, *jus post bellum* provides a fresh look at the operation of the principles of prevention⁵² and precaution.⁵³ In traditional discourse, prevention and precaution are mostly related to classical peacetime or armed conflict. These two scenarios are often seen in isolation of each other. *Jus post bellum* provides an incentive to regard prevention and precaution in more holistic way, namely as a prerogative in pre-conflict planning, ongoing conflict, periods of transition, and peacetime. These different phases are inherently connected. *Jus post bellum* strengthens, in particular, the argument that concerns of environmental protection are not set aside by armed conflict⁵⁴ but relevant throughout conflict and its aftermath—a finding supported by the jurisprudence of the International Court of Justice (‘ICJ’) in the *Nuclear Weapons* Opinion⁵⁵ and the practice of the ILC.⁵⁶

Third, *jus post bellum* strengthens the case for due diligence of actors beyond armed conflict. Due diligence duties are inherent in international environmental law and

1927. See generally Priscilla Schwartz, ‘The Polluter-Pays Principle’ in Fitzmaurice, Ong, and Merkouris (n 44) 243.

⁵⁰ See Duncan French, ‘Sustainable Development’, in Fitzmaurice, Ong, and Merkouris (n 45) 51.

⁵¹ See Edith Brown Weiss, ‘Implementing intergenerational equity’, in Fitzmaurice, Ong, and Merkouris (n 45) 100.

⁵² The principle of prevention is related to the avoidance of harm that is known or foreseeable. See Arie Trouwurst, *Evolution and Status of the Precautionary Principle in International Law* (The Hague: Kluwer Law International, 2002), 36–7.

⁵³ The precautionary principle includes risks arising from scientific uncertainty. *ibid.*

⁵⁴ On the relationship between *jus post bellum* and *jus in bello*, see Inger Österdahl, ‘The Gentle Modernizer of Armed Conflict?’ in Stahn, Easterday, and Iverson (n 33) 207.

⁵⁵ ICJ, *Legality of the Threat or Use of Nuclear Weapons* (n 12) para 33 (‘The Court thus finds that while the existing international law relating to the protection and safeguarding of the environment does not specifically prohibit the use of nuclear weapons, it indicates important environmental factors that are properly to be taken into account in the context of the implementation of the principles and rules of the law applicable in armed conflict’).

⁵⁶ See ILC, Preliminary Report on the Protection of the Environment in Relation to Armed Conflicts, ILC Doc. A.CN.4/674, 30 May 2014, para 2 (‘This work takes, at its starting point, the presumption that the existence of an armed conflict does not ipso facto terminate or suspend the operation of treaties’).

international humanitarian law. *Jus post bellum* broadens the spectrum. It might involve a mandate to minimize harm that makes a peaceful post-conflict settlement impossible. Scholars have derived this imperative from the need to facilitate peace between warring factions.⁵⁷ This argument applies with equal force to environmental considerations, which constitute an impediment to sustainable peace. The mandate to protect the environment during and after conflict is inherently linked to the needs of future generations ('intergenerational approach'). Legally, this due diligence under *jus post bellum* is best understood as an 'obligation of conduct', that is a duty to take reasonable steps towards this outcome, rather than an obligation of result.

Fourth, *jus post bellum* allows a differentiated look at the treatment of harm and remedies. In existing discourse on the morality of war, *jus post bellum* has been associated with a principle of rebuilding.⁵⁸ The imperative to rebuild after conflict is mostly understood as a moral principle.⁵⁹ It is clear that environmental damage must 'be assessed against whomever caused it, regardless of who won or lost'.⁶⁰ But the legal regime governing post-conflict liability and responsibility is more complex. States may bear responsibility for lawful and unlawful acts. Non-state actors may be held accountable under customary international law or domestic laws. Several conventions limit damage caused by armed conflict.⁶¹ It remains contested to what extent violations trigger strict liability.⁶² Contributions to the harm may originate from a wide of actors. One of the most difficult questions is to provide effective remedies. Parties to a conflict, including non-state actors, may lack the means and know-how to restore environmental damage. Remedial action may have to be spread more widely than parties to a conflict. It relies on collective action, solidarity, and cooperation, involving affected states, international organizations, NGOs, and local actors.⁶³ Reparation or compensation claims for harm may need to be organized through specialized procedures.

This special approach towards responsibility is sometimes referred to as 'remedial responsibility'.⁶⁴ It distinguishes the responsibility of the agent for a specific outcome from the responsibility to remedy harm through remedial action ('remedial

⁵⁷ Larry May relates this to the principle of reconciliation, namely the 'obligation to initiate and conduct war in such a way that one does not unduly antagonize the people with whom one will eventually have to reach a peaceful accord'. See Larry May, *After War Ends* (Cambridge: Cambridge University Press, 2012), 21.

⁵⁸ Alexandra Gheciu and Jennifer Welsh, 'The Imperative to Rebuild: Assessing the Normative Case for Postconflict Reconstruction' (2009) 23 *Ethics & International Affairs* 121; Lonnie Peperkamp, 'On the Duty to Reconstruct After War: Who is Responsible for *Jus Post Bellum*?' (2016) XXIX *Canadian Journal of Law & Jurisprudence* 403.

⁵⁹ See generally Larry May and Andrew Forcehimes (eds.), *Morality, Jus Post Bellum, and International Law* (Cambridge: Cambridge University Press, 2012).

⁶⁰ Lackey (n 30) 141, 148.

⁶¹ See Jacobsson, Third Report (n 30) para 110 *et seq.*

⁶² See Toxic Remnants of War Project (n 5) 41 ('It could be argued that as conflict and military activities are inherently risky for the environment, parties to a conflict should also bear some responsibility for damage, whether intentional or not'). Strict liability approaches have been applied in relation to oil transportation and nuclear industries.

⁶³ See also Peperkamp (n 58) 429 ('The "belligerents rebuilt thesis" must therefore be understood in a more nuanced way than it initially appeared: belligerents are not solely responsible. If they cannot bear the duty to reconstruct themselves, other actors are remedially responsible instead').

⁶⁴ David Miller, *National Responsibility and Global Justice* (Oxford: Oxford University Press, 2007), 15–16; David Miller, 'Distributing Responsibilities' (2001) 9 *Journal of Political Philosophy* 453.

responsibility'). It is reflected in certain recent disarmament instruments. Both, the Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions decouple clearance obligations from user responsibility. For instance, Article 4(4) of the Convention on Cluster Munitions 'strongly encourage[s]' states parties that used weapons to support host states in the destruction and clearance of cluster munitions.⁶⁵ But ultimately, the host state is bound to ensure clearance, irrespective of who used the weapons on its territory.⁶⁶ Responsibility is thus tied to jurisdiction and control. This approach is deemed to strengthen the protection of civilians after the cessation of hostilities.

1.3 The ILC Draft Principles on the Protection of the Environment in Relation to Armed Conflicts

Some fundamental aspects of the regime governing environmental protection in transitions from conflict to peace have been addressed by the ILC in its study on the 'protection of the environment in relation to armed conflicts', guided by Special Rapporteur Marie Jacobsson.⁶⁷

The 2016 ILC draft principles break new ground since they extend the scope of consideration of environmental protection beyond armed conflict. The ILC decided early on to adopt a holistic approach which includes not only protection during peacetime and armed conflict, but also the aftermath of conflict, and certain general principles covering all phases. The third report examines principles applying in the post-conflict phase.⁶⁸ The ILC draft principles thus venture in *post bellum* terrain which differs partly from classical peacetime. This is an achievement in itself, because it signals that environmental damage should not simply be accepted as a 'silent casualty' of conflict in the aftermath of hostilities.⁶⁹

The draft principles suggested by the ILC are in many ways marked by compromise, and in no way complete in coverage. But they reflect important trends and new insights. The ILC takes a dynamic approach towards the understanding of the environment and its ecosystems. It acknowledges that 'environmental considerations cannot remain static over time, they should develop as human understanding of the environment develops'.⁷⁰

The notion of principles as such triggered a rich debate.⁷¹ Some members expressed a preference for draft articles, which would lend themselves to codification. But

⁶⁵ Art. 4(4) of the Convention on Cluster Munitions.

⁶⁶ Art. 4(1) of the Convention on Cluster Munitions.

⁶⁷ See Michael Bothe, 'The ILC's Special Rapporteur's Preliminary Report on the Protection of the Environment in Relation to Armed Conflict: An Important Step in the Right Direction' in Pia Acconci *et al.*, (eds), *International Law and the Protection of Humanity. Essays in Honor of Flavia Latanzi* (Leiden/Boston: Brill, 2017), 213–24.

⁶⁸ Jacobsson, Third Report (n 30) para 17.

⁶⁹ See in this sense, Guilio Bartolini and Marco Pertile, 'The Work of the ILC on the Environment and Armed Conflicts: Enhancing Protection for the "Silent Victims of Warfare"?' (2016) 34 *Question of International Law* 1, 4.

⁷⁰ See Report of the ILC, Sixty-eighth session (2 May–10 June and 4 July–12 August 2016), A/71/10, 336.

⁷¹ See Report of the ILC, Sixty-seventh session (4 May–5 June and 6 July–7 August 2015), A/70/10, 108, para 146.

ultimately, the more flexible concept of principles was retained. The principles are important from a *jus post bellum* perspective in several ways.

A first important contribution is the desire to strengthen environmental protection in the planning and legal framework of military and peace operations. *Jus post bellum* contains a nucleus of norms and principles in UN law and the law of military operations.⁷² Many contemporary operations, such as Iraq, Afghanistan, or Libya have been criticized for a lack of appropriate mandating or planning. *Jus post bellum* scholars have argued that existing frameworks should contain a clearer pre-commitment to assess consequences of the use of force on post-conflict situations.⁷³ Some have called for a *jus ante bellum*.⁷⁴ The 2016 ILC draft principles strengthen prevention in military and peace operations before the operation. For instance, draft principle 7 encourages states and international organizations to include provisions concerning environmental protection, including 'preventive measures, impact assessments, restoration and clean-up measures' in agreements concerning the presence of military forces.⁷⁵ Draft principle 8 mandates ('shall') states and international organizations involved in peace operations to 'consider the impact of such operations on the environment and take appropriate measures to prevent, mitigate and remediate the negative environmental consequences thereof'. These principles are complemented by a general clause which highlights the aim to enhance the protection of the environment not only in pre-conflict phase, but also during armed conflict and after armed conflict.⁷⁶ Although the ILC draft principles are framed in 'soft language' ('should, as appropriate'; 'shall consider'), they serve as an important check for practices.

Second, the ILC draft principles clarify duties in armed conflict. The work of ILC is guided by the objective to strengthen the protection of the environment during armed conflict, rather than merely re-stating existing rules under international humanitarian law. This is reflected in draft principle 2.⁷⁷ One of the most important developments lies in the approach towards the protection of the environment during armed conflict. The draft principles do not expressly differentiate between the legal regime governing

⁷² See Dieter Fleck, 'Jus Post Bellum as a Partly Independent Legal Framework' in Stahn, Easterday, and Iverson (n 33) 43, 48, 50.

⁷³ See Brian Orend, *Michael Walzer on War and Justice* (Cardiff: University of Wales Press, 2000), 137–9, 190; Analisa Koeman, 'A Realistic and Effective Constraint on the Resort to Force? Pre-commitment to *Jus in Bello* and *Jus Post Bellum* as Part of the Criterion of Right Intention' (2007) 6 *Journal of Military Ethics* 198.

⁷⁴ Garrett Wallace Brown and Alexandra Bohm, 'Introducing *Jus ante Bellum* as a Cosmopolitan Approach to Humanitarian Intervention' (2016) 22 *European Journal of International Relations* 897–919.

⁷⁵ It reads: 'States and international organizations should, as appropriate, include provisions on environmental protection in agreements concerning the presence of military forces in relation to armed conflict. Such provisions may include preventive measures, impact assessments, restoration and clean-up measures.'

⁷⁶ Principle 4 (Measures to enhance the protection of the environment) reads: '1. States shall, pursuant to their obligations under international law, take effective legislative, administrative, judicial and other measures to enhance the protection of the environment in relation to armed conflict. 2. In addition, States should take further measures, as appropriate, to enhance the protection of the environment in relation to armed conflict.'

⁷⁷ It reads: 'The present draft principles are aimed at enhancing the protection of the environment in relation to armed conflict, including through preventive measures for minimizing damage to the environment during armed conflict and through remedial measures.'

international and non-international armed conflict.⁷⁸ They follow thus, to some extent, the famous critique of the distinction, formulated in *Tadić*: ‘What is inhumane, and consequently proscribed, in international wars, cannot but be inhumane and inadmissible in civil strife.’⁷⁹ As highlighted in several contributions in this volume, they treat the environment largely as a civilian object on warfare⁸⁰ and expand protection, by categorically excluding reprisals against the natural environment under all circumstances, including non-international armed conflict.⁸¹

As argued by UNEP, distinction, necessity, and proportionality under international humanitarian law ‘may not be sufficient to limit damage to the environment.’⁸² The ILC draft principles reflect this consideration. Draft principle 9 contains a general duty to respect and protect the natural environment in accordance with both, ‘applicable international law’, and ‘in particular the law of armed conflict.’⁸³ Draft principle 10 specifies that the rules and principles governing ‘distinction, proportionality, military necessity and precautions in attack’ shall be ‘applied to the natural environment, *with a view to its protection*.’⁸⁴ The ILC also recognized a general duty of care to ‘protect the natural environment against widespread, long-term and severe damage’⁸⁵ and a duty not to attack any part of it, ‘unless it has become a military objective.’⁸⁶ The duty of care is derived from Article 55 of Additional Protocol I. It clarifies that the environment is protected *per se*, even in the absence of human harm. According to the explanation of the ILC, it involves a ‘duty on the parties to an armed conflict to be vigilant of the potential impact that military activities can have on the natural environment.’⁸⁷ The draft principles also enhance protection, by requiring states to ‘designate, by agreement or otherwise, areas of major environmental and cultural importance as protected zones.’⁸⁸ The term ‘major environmental importance’ was discussed at previous occasions, but it is novel in the context of the law of armed conflict. The wording closes an important gap left in the negotiation of Additional Protocol I to the Geneva Conventions.⁸⁹

Third, the ILC draft principles reinforce post-conflict protection. They acknowledge that post-conflict construction requires a communitarian effort that goes beyond the parties to a conflict. Draft principle 14 goes to the heart of *jus post bellum*.⁹⁰ It states that ‘[p]arties to an armed conflict should, as part of the peace process, including where appropriate in peace agreements, address matters relating to the restoration and protection of the environment damaged by the conflict.’ This principle recognizes the cardinal importance of the link between peacebuilding and environmental protection. It bears some synergies with Immanuel Kant’s famous dictum in *Perpetual Peace* according to which peace agreements should avoid clauses that carry the seeds for the outbreak of further wars.⁹¹

⁷⁸ See also Stavros-Evdokimos Pantazopoulos, ‘Protection of the Environment During Armed Conflicts: An Appraisal of the ILC’s Work’ (2016) 43 *Questions in International Law* 7, 9.

⁷⁹ *Prosecutor v. Tadić* (n 3) para 119. ⁸⁰ See chapters 10 and 17 in this volume.

⁸¹ See ILC draft principle 12. ⁸² See UNEP (n 9) 52. ⁸³ ILC draft principle 9(1).

⁸⁴ Emphasis added. ⁸⁵ ILC draft principle 9(2). ⁸⁶ ILC draft principle 9(3).

⁸⁷ Jacobsson (n 30) 329. ⁸⁸ ILC draft principle 5, as well as draft principle 13.

⁸⁹ Jacobsson (n 30) 324.

⁹⁰ On *jus post bellum* and law of peace, see Christine Bell, ‘Of Jus Post Bellum and Lex Pacificatoria: What’s in a Name?’ in Stahn, Easterday, and Iverson (n 33) 181.

⁹¹ Immanuel Kant, *Traktat zum Ewigen Frieden: Ein philosophischer Entwurf*, 1795, Erster Präliminarartikel.

The principle reflects a trend to address environmental protection in peace agreements. The language encompasses both international armed conflicts and non-international armed conflicts. Moreover, the generic use of the term ‘parties’ suggests that the principle applies not only to states but also to non-state actors.⁹² This formulation marks an important acknowledgment of the obligations of non-state actors under international law. But it triggered considerable debate. Some members felt the scope of the provision should be limited to international armed conflicts, since the recognition the obligations of non-state actors ‘similar to those of States’ might legitimize their status.⁹³ Others stated that such a limitation would be at odds with the realities of armed conflicts which are predominantly non-international in nature.⁹⁴

Draft principle 14 specifies that ‘[r]elevant international organizations should, where appropriate, play a facilitating role in this regard’. Such a role is key in light of the realities of conflict which may impede cooperation between former belligerents. Some scholars have even gone a step further and argued that the ‘collective, international duty to rebuild’ should be assigned primarily according to ‘the agent’s ability to rebuild’, rather than the legal duties of parties involved in conflict.⁹⁵ This vision would require significant investment in institutions and protection mechanisms, in cases where parties are unwilling or unable to take action. Draft principle 15 seeks to strengthen restoration, remediation, and recovery. It encourages international cooperation in order to carry out environmental damage assessments and remedy harm.⁹⁶

Fourth, the ILC principles promote ‘sustainable exit’ from conflict. They contain a range of provisions to deal with the removal of harm. The most prominent one is the treatment of toxic and hazardous remnants of war. Draft principle 16 provides that ‘[a]fter an armed conflict, parties to the conflict shall seek to remove or render harmless toxic and hazardous remnants of war under their jurisdiction or control that are causing or risk causing damage to the environment’. The wording (‘shall seek to’) makes it clear that it is an obligation of conduct. It complements existing ‘obligations under international law to clear, remove, destroy or maintain minefields, mined areas, mines, booby-traps, explosive ordnance and other devices.’⁹⁷ The terms ‘party to a conflict’ includes non-state actors. The draft principle goes thus further than traditional approaches, which would rely primarily on state obligations under human rights or international environmental law.⁹⁸ The Commentary of the ILC suggests that this covers areas within *de jure* and *de facto* control.⁹⁹ This approach was partly criticized as being overambitious in its endeavour to include non-state actors in removal activities.¹⁰⁰ The principle is phrased in a progressive way since it links the obligation expressly to environmental harm as such, rather than harm to humans and property alone.

⁹² See Hulme (n 25) 37–8.

⁹³ Jacobsson (n 30) 313, para 167.

⁹⁴ *ibid.*

⁹⁵ See Pattison (n 48) 635.

⁹⁶ It reads: ‘Cooperation among relevant actors, including international organizations, is encouraged with respect to post-armed conflict environmental assessments and remedial measures’. ON UNEP’s role, see ILC, Third Report (n 30) paras. 174–84.

⁹⁷ See Jacobsson draft principle 16(3).

⁹⁸ Hulme (n 25) 37.

⁹⁹ See Protection of the environment in relation to armed conflicts Statement of the Chairman of the Drafting Committee, Mr. Pavel Šturma, 9 August 2016, 14.

¹⁰⁰ See Jacobsson (n 30) 315, para 171 (‘some members expressed the view that such responsibility should remain with the State having effective jurisdiction and relevant international organizations; it would be

The ILC's notes of cautious optimism are worth reiterating:

[T]here exists a substantive collection of legal rules that enhances environmental protection in relation to armed conflict. However, if taken as a whole, this collection of laws is a blunt tool, since its various parts sometimes seem to work in parallel streams. . . .

[T]he law that is relevant for the protection of the environment in relation to armed conflict has continued to grow and mature through practice, *opinio juris*, case law and treaties. The role of international organizations such as the United Nations, UNEP and UNESCO in this context is considerable. Environmental considerations have become part of the mainstream, and this is particularly notable when one looks at how different the situation was a decade or more ago.¹⁰¹

This cautious optimism regarding the development of the law in this area is well founded. Traditional legal approaches to protection face particular challenges during and after conflict. The overall aim of this volume is to help move environmental considerations from the periphery of to the core of the effort to respond to armed conflict and build a just and sustainable peace.

I.4 Content of the Book

This book is partly more narrow, and partly broader than the ILC study. It investigates how a *jus post bellum* approach to environmental protection can improve peacebuilding practices. It draws on multiple bodies of law to examine environmental protection in transitions from conflict to peace, including UN law, human rights, the law of occupation, and disarmament. It approaches environmental damage through the lens of multiple perspectives: property considerations (e.g. ownership over natural resources), health, and environmental concerns. Each of these lenses raises distinct dilemmas in relation to the sustainability and justice of peace.

I.4.1 Context

The opening chapter by Carl Bruch places developments challenges into context. Bruch shows that existing law is characterized by a patchwork of provisions and mechanisms.¹⁰² He argues that *jus post bellum* can and should put protection of the natural environment at its core in instances where such protection is critical to the creation of a just and sustainable transition to peace. The ILC draft principles largely avoided dealing with the environment as a cause of conflict. Bruch illustrates that natural resources can be critical for positive contributions to the economy and food security, or for financing further conflict. He therefore supports a broader *jus post bellum* approach which includes considerations of the root causes of conflict. Bruch argues that practice is an

unrealistic to expect non-State actors involved in the armed conflict to carry out the measures envisaged in the draft principle').

¹⁰¹ Jacobsson (n 30) paras. 266, 268.

¹⁰² See also generally Carl Bruch, Marion Boulicault, Shuchi Talati, and David Jensen, 'International Law, Natural Resources and Post-conflict Peacebuilding: From Rio to Rio+20 and Beyond' (2012) 21 *Review of European Community and International Environmental Law* 44.

essential touchstone for any analysis of *jus post bellum* and the environment. Ultimately, the law governing the transition to peace may often be more facilitative than restrictive, leaving a space for a politics of environmental peacebuilding.

Cymie Payne addresses the fundamental question of the definition of ‘the environment’. In the *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion, the ICJ stated that ‘the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.’¹⁰³ None of the major *in bello* regulations of the natural environment, such as ENMOD, Protocol I Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (AP I), Articles 35(3), 55, or the Rome Statute of the International Criminal Court (Article 8(2)(b)(iv)) define the environment as such. Provisions in the law of armed conflict are mostly anthropocentric¹⁰⁴ or refer to the ‘natural environment’, in distinction to the ‘human environment’. The ILC offered a broader approach in its principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities. It formulated a ‘working definition’ of the environment which ‘includes natural resources, both abiotic and biotic, such as air, water, soil, fauna and flora and the interaction between the same factors, and the characteristic of their landscape.’¹⁰⁵ In her contribution, Payne suggests to adopt an ‘integrity’ driven approach, which takes into account the collective interest, the context, the role of change, and interactivity of the environment during and after varied armed conflicts. She claims that *jus post bellum* should be aimed at improving system resilience, biodiversity, and evolutionary potential in situations where historical condition may not be recoverable.

I.4.2 Normative frameworks

The second part of the book analyses the legal and normative frameworks that govern the protection of the environment and natural resources in the transition from armed conflict to peace. They include international environmental law (‘IEL’) and multilateral environmental treaties, specific areas of public international law such as UN law, state responsibility, international humanitarian law and human rights law, as well as domestic law. Contributions discuss not only positive law and *lex lata*, but also policies and practices.

A healthy environment is a pre-condition for sustainable peacebuilding. Chapters 3 and 4 explore how international treaty law and environmental law come into play in situations from conflict to peace. Britta Sjöstedt argues that environmental treaties have the ability to fill an institutional and a normative gap in a post-conflict context, which

¹⁰³ ICJ (n 12) para 29. ¹⁰⁴ See above (n 22).

¹⁰⁵ ILC, Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, with Commentaries, 2006, draft principle 2(b), at <http://legal.un.org/ilc/texts/instruments/english/commentaries/9_10_2006.pdf> accessed 15 August 2017. The ILC notes: ‘Environment could be defined in a restricted way, limiting it exclusively to natural resources, such as air, soil, water, fauna and flora, and their interaction. A broader definition could embrace environmental values also. The Commission has opted to include in the definition the latter encompassing non-service values such as aesthetic aspects of the landscape also. This includes the enjoyment of nature because of its natural beauty and its recreational attributes and opportunities associated with it.’ *ibid.* 133.

is often characterized by institutional collapse and low priority of environmental protection work. Many environmental treaties have treaty bodies that can ensure that the treaties apply to protect the environment. Sjöstedt claims that such bodies fill important functions in post-conflict settings. She illustrates this argument by the application of the World Heritage Convention in relation to the armed conflicts taking place in the Democratic Republic of the Congo ('DRC').¹⁰⁶ She shows that the treaty bodies established under the World Heritage Convention have provided various means to protect the natural World Heritage Sites in the case of the DRC.

Kirsten Stefanik examines the role of general principles in conflict and post-conflict settings, and in particular the function of environmental principles,¹⁰⁷ such as intergenerational equity and the precautionary principle. She argues that principles of international environmental law provide necessary nuance to military decision-makers in the application of existing *jus in bello* protections for civilians and the environment. Stefanik shows that environmental destruction and degradation during conflict can and must be minimized, but that there must be equal recognition of the significant adverse impacts of environmental insecurity and the need for the ongoing application of principles of international environmental law in the transition to peace. She claims that peace arrangements and truth and reconciliation processes can provide a mechanism for continuing attention to environmental remediation and protection.

Chapter 6 addresses the role of human rights and transitional justice in the post-war environmental context.¹⁰⁸ Karen Hulme explores to what extent the human right to a healthy environment and other economic, social, and cultural rights might require the remedying and management of environmental resources, water resources, and agricultural areas. It clearly recognized that human rights law includes obligations relating to the environment.¹⁰⁹ But states often sideline human rights during peacebuilding, emphasizing instead 'rule of law' as a less contentious approach.¹¹⁰ Hulme argues that the potential of human rights mechanisms to improve environmental protections in post-conflict settings remains partly unexplored. She draws upon practice of transitional justice, which has had a mixed history of upholding such survival rights. She claims that a combined human rights and environmental approach to peacebuilding could strengthen obligations to undertake environmental clean-up and restoration, provide mechanisms to review state actions and ensure environmental remediation,

¹⁰⁶ See also Britta Sjöstedt, 'The Role of Multilateral Environmental Agreements in Armed Conflict: "Green-keeping" in Virunga National Park: Applying the UNESCO World Heritage Convention in the Armed Conflict of the Democratic Republic of the Congo' (2013) 82 *Nordic Journal of International Law* 129.

¹⁰⁷ On general principles, see Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge: Cambridge University Press, 3rd edn, 2012).

¹⁰⁸ On the environment and human rights, see Linda Hajjar Leib, *Human Rights and the Environment: Philosophical, Theoretical and Legal Perspectives* (Leiden: Brill/Martinus Nijhoff, 2010).

¹⁰⁹ Human rights law fosters public availability of environmental information, public participation in environmental decision-making, and access to legal remedies. See Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, A/HRC/31/53, 28 December 2015.

¹¹⁰ Balakrishnan Rajagopal, 'Invoking The Rule Of Law In Post-Conflict Rebuilding: A Critical Examination' (2007–2008) 49 *William & Mary Law Review* 1345, 1357.

and highlight broader 'structural violence' issues of environmental justice in the allocation and use of natural resources. She cautions at the same time against some of the tensions inherent in a predominantly human-rights-oriented approach, such as its inevitably anthropocentric nature and its risks of politicizing discourse.

Olivia Radics and Carl Bruch focus on two of the most direct impacts of armed conflict on the environment: pillage and conflict resources.¹¹¹ They argue that 'predatory natural resource exploitation' can destroy the chances for a successful transition to peace, both in conflict and its immediate aftermath, and also make a peace unjust, as unbalanced resource contracts creating 'booty futures' can lead to the continuation of exploitative practices in the post-conflict period. Drawing on international criminal law and occupation law, they show that the law of pillage presents an as-yet underutilized tool for addressing conflict resources. They claim that classical trials need to be combined with alternative avenues for accountability and prevention, including sanctions, in order to enhance just and responsible resource management.

Daniëlla Dam-de Jong builds on Radics' and Bruch's focus on pillage to develop a broader analysis of the standards developed by the United Nations Security Council for the management of natural resources and the application of those standards to the transition to peace.¹¹² She examines whether such standards are mandatory or merely hortatory, drawing out where the standards are voluntary and the particular instances where they are tied to sanctions and are thus mandatory. She also addresses key issues such as the preference for particular systems set up not by states but by third parties such as the Kimberley Process for the Certification of Rough Diamonds. More fundamentally, Dam-de Jong questions whether the United Nations Security Council is the appropriate body to bind states in this area, particularly given the Principle of Permanent Sovereignty over Natural Resources, which provides that states have the right to freely dispose of their natural resources.

Ayşe-Martina Böhringer and Thilo Marauhn investigate the underexplored relationship between arms control law and environmental law in post-conflict environments. They argue that the regime of the Chemical Weapons Convention¹¹³ and bilateral agreements need to be complemented by general principles of international environmental law, in order to deal with the environmental implications of chemical disarmament, such as transport of weapons and war material for the purpose of destruction, elimination, and conversion. One example is the prohibition to cause significant transboundary environmental harm ('no harm' principle).¹¹⁴ It includes

¹¹¹ On pillaging, see also Larissa van den Herik and Daniëlla Dam-de Jong, 'Revitalizing the Antique War Crime of Pillage: The Potential and Pitfalls of Using International Criminal Law to Address Illegal Resource Exploitation During Armed Conflict' (2011) 22 *Criminal Law Forum* 237.

¹¹² See generally Daniëlla Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (Cambridge: Cambridge University Press, 2015).

¹¹³ See generally Thilo Marauhn, 'The Prohibition to Use Chemical Weapons' (2014) 17 *Yearbook of International Humanitarian Law* 25.

¹¹⁴ The principle of 'no harm' goes back to the *Trail Smelter* case and is widely recognized as customary international law. Principle 21 of the Stockholm Declaration states: 'States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities

procedural aspects,¹¹⁵ such as the duty of consultation, exchange of information, early warning, and the assessment of potential transboundary impacts of projects at the domestic level. Drawing on insights from the situation in Syria, the authors claim that environmentally sound destruction of chemical weapons becomes complex in conflict and post-conflict situations, since it is often compromised by ongoing violence or resurgence of civil war.

Dieter Fleck examines the particular challenge of protecting the environment in the aftermath of a non-international armed conflict. He starts with an admission of the limitations in the law to limit environmental damage in relation to armed conflict. In Rule 44 of its Study on Customary International Humanitarian Law, the ICRC stated that '[m]ethods and means of warfare must be employed with due regard to the protection and preservation of the natural environment.'¹¹⁶ The ICRC study found that Rule 44 'arguably' applies also during non-international armed conflicts, 'if there are effects in another State.'¹¹⁷ Fleck argues that this 'due regard' standard should be understood as an obligation of conduct, namely an obligation to show concern for environmental effects of their military operations, and to minimize such effects not only in view of transboundary damage, but also within the territory of operations. This requires responsible planning and precautions in attack, taking in account the technical, economic, and financial capacities available at the time. Fleck also shows that reparation issues deserve more attention. The obligation to repair losses and damage caused by breaches of the *jus in bello* includes damage caused by breaches of environmental obligations. But liability may be limited or excluded during armed conflicts for injurious consequences of acts not prohibited by international law. Measures towards a sustainable recovery of the natural environment may thus depend on approaches under *jus post bellum*, including cooperation and assistance by third parties.

Matthew Gillett examines to what extent norms under international criminal law protect the environment during and after conflict.¹¹⁸ He identifies discrepancies between protections in international armed conflict and non-international armed conflict. For example, the Rome Statute prohibits '[i]ntentionally launching an attack in the knowledge that such attack will cause . . . widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete

within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'

¹¹⁵ See generally Phoebe N. Okowa, 'Procedural Obligations in International Environmental Agreements' (1996) 67 *British Yearbook of International Law* 275.

¹¹⁶ See ICRC, Rule 44, at <https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule44> accessed 15 August 2017.

¹¹⁷ In its explanation, the ICRC notes: 'This argument is based on the recognition by the International Court of Justice that safeguarding a State's ecological balance was an "essential interest" and its finding that States' obligation to ensure that activities within their jurisdiction and control respect the environment of other States or areas beyond national control were part of customary international law.' *ibid*.

¹¹⁸ See generally Frédéric Mégret, 'The Problem of an International Criminal Law of the Environment' (2011) *Columbia Journal of Environmental Law* 195; Mark A. Drumbl, 'Waging War against the World: The Need to Move from War Crimes to Environmental Crimes' in Austin and Bruch (n 2) 620–46; Tara Weinstein, 'Prosecuting Attacks That Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?' (2004–2005) 17 *Georgetown International Environmental Law Review* 697–722. On ecocide, see Lynn Berat, 'Defending the Right to a Healthy Environment: Toward a Crime of Geocide in International Law' (1993) 11 *Boston University International Law Journal* 327.

and direct overall military advantage anticipated'¹¹⁹ during an international armed conflict, but not during a non-international armed conflict.¹²⁰ Gillett argues that this gap calls for redress. He questions whether customary international law already contains a full-fledged criminal prohibition of disproportionate environmental harm in non-international armed conflict. He claims existing norms provide a space to prosecute environmental damage indirectly under anthropocentric provisions. But such convictions may be of limited expressive effect in relation to environmental values. He argues that the adoption of a prohibition against environmental harm in the context of non-international armed conflict would provide a valuable provision of *jus post bellum*.

I.4.3 Particular dilemmas and sites of contestation

The third part of the book addresses specific dilemmas that require further attention. Environmental harm is typically caused by a diversity of different actors, ranging from foreign interveners, to government forces, armed groups, or private actors. This raises complex issues in relation to responsibility and liability. For example, environmental damage in armed conflict poses complex problems in relation to the determination of shared responsibility. Corporate activities are under-regulated and can contribute to severe environmental degradation, even while promoted for the sake of development. Contributions assembled in the third part of the book identify gaps and blind spots in contemporary laws and policies, and potential practices to address them.

As Dieter Fleck has argued earlier, *jus post bellum* requires pragmatic limitation, conciliation, and participation.¹²¹ This poses challenges for reparation of environmental damage. Ilias Plakokefalos discusses legal problems arising in the sharing of responsibility for violations with a nexus to armed conflict.¹²² He identifies numerous limitations in this area connected with the nature of multilateral environmental agreements. Multilateral environmental agreements occasionally explicitly exclude the possibility of being applied in times of armed conflict, although most are silent on the subject. More fundamentally, such agreements do not pose obligations to non-state actors. In the case where environmental damage is caused by multiple states during armed conflict, the basic approach (as observed by the ILC) is independent responsibility for the entire damage when the injury is not causally divisible. Only when an injury caused by multiple states is causally divisible may compensation be proportionally reduced. Given the interconnected nature of environmental damage, complex or long-lasting armed conflict involving multiple states may carry with it broad and weighty claims of reparation. Plakokefalos shows that in its practice, the United Nations Compensation Commission ('UNCC') took a 'middle ground' between the principle of full reparation supported by the ILC and the exception according to which reparation may be adjusted.

¹¹⁹ Article 8(2)(b)(iv) of the Rome Statute.

¹²⁰ See on this also Carl Bruch, 'All's Not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict' (2001) 25 Vermont Law Review 695.

¹²¹ Dieter Fleck, '*Jus Post Bellum* as a Partly Independent Legal Framework' in Stahn, Easterday, and Iverson (n 33) 43, 56–7.

¹²² See generally André Nollkaemper and Ilias Plakokefalos (eds.), *The Principles of Shared Responsibility in International Law: An Appraisal of the State of the Art* (Cambridge: Cambridge University Press, 2014).

Jennifer S. Easterday and Hana Ivanhoe focus on the threat environmental degradation poses to a sustainable peace in the aftermath of armed conflict. They argue that environmental safeguards need to be a core part of an economic recovery plan, especially when related to the use of natural resources. They propose an expansion of the Ruggie Framework on Business and Human Rights¹²³ to explicitly refer to peacebuilding environments. Key tenets of corporate social responsibility, as articulated in the Ruggie Framework and elsewhere, such as human rights due diligence and non-judicial grievance mechanisms, are important in reducing the threat environmental degradation poses to a fragile peace. Easterday and Ivanhoe emphasize that peacebuilders need to take the opportunity to work with private corporations to ensure environmental and social safeguards in development projects that could otherwise lead to a resurgence of the conflict. This may be done through domestic government regulation as well as external pathways, such as soft law norms and corporate social responsibility standards in loan and financing agreements.

Private security companies, private military security contractors, and private security service providers ('PSCs')¹²⁴ have played an increasing role in conflict situations, not only during armed conflict, but also in the withdrawal phase of troops and the disposal of military waste and conflict debris. Aneaka Kellay and Onita Das argue that the use of PSCs particularly during the peacebuilding stage poses significant challenges to transparency, oversight, and accountability. They focus on the examples of Iraq (2003–2011) and Afghanistan (2001–2014) to highlight the inadequate regulation of these entities. Of particular note is the issue of toxic pollution, increasingly identified as the toxic remnants of war, sometimes created during operations.¹²⁵ Kellay and Das claim that there is a lack of clear regulations relating to obligations and misconduct of PSCs, including the responsibility of states and other hiring non-state parties. They propose the establishment of a 'PSC compensation fund' that is used for reparation of damage to the environment and compensation for victims harmed by PSC actions.

I.4.4 Remediating and preventing harm

The final part of the book focuses specifically on preventing and remediating environmental damage and harm to victims. It analyses how liability, responsibility, damage, and harm can be measured, allocated, and enforced in specific areas, such as de-mining and removal of toxic and hazardous remnants of war, and how preventive measures can be improved (e.g. in relation to review of new weapons).

¹²³ UN Human Rights Council (HRC), Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development: Protect, Respect and Remedy: A Framework for Business and Human Rights, UN Doc. A/HRC/8/5, 7 April 2008 (prepared by John Ruggie). For more on the Ruggie Framework, see Larissa van den Herik and Jernej Letnar Čerňič, 'Regulating Corporations under International Law From Human Rights to International Criminal Law and Back Again' (2010) 8 *Journal of International Criminal Justice* 725.

¹²⁴ See generally Francesco Francioni and Natalino Ronzitti (eds.), *War by Contract: Human Rights, Humanitarian Law, and Private Contractors* (Oxford: Oxford University Press, 2011).

¹²⁵ See also chapter 18 in this volume.

Cymie Payne examines lessons from the practice of the environmental programme of the UNCC.¹²⁶ The UNCC provided a unique liability regime for compensation of environmental damage. The Government of the Republic of Iraq faced claims regarding the breach of its responsibility to other states. Individuals could make claims for their direct losses, but only through a government or an international organization. Payne claims that the UNCC's reparations programme 'was an example of *jus post bellum* in the most literal sense.' She argues that the UNCC showed moderation in its determination of claims and valuation of remediation techniques. Iraq was, in sum, required to pay less than the total cost of environmental damage that it caused. Environmental integrity was prioritized. The Commission acknowledged the precautionary need to identify potential risks in order to plan future action. Its work triggered a willingness of affected states in the region to cooperate for the improvement of environmental conditions. It might thus have implicitly applied *jus post bellum* principles (moderation, conciliation, participation), without saying so expressly.¹²⁷ Payne goes further to suggest that generally, environmental reparations provide unique opportunities for cooperation at the end of conflict. *Jus post bellum* can bring legal disciplines together under a common rubric, and allows a more constructive approach to their application to preserving environmental integrity in the transition to peace. Ultimately, she asserts that waiting until conflict ends to provide for environmental protection is short-sighted.

Merryl Lawry-White provides a broader perspective on reparative practices, drawing on multiple fields (e.g. environmental law, human rights, humanitarian law, transitional justice). She claims that is unfeasible to establish a 'general model' to deal with environmental harm in post-conflict settings (e.g. civil, administrative, or criminal). Rather, the strategy must be tailored to the context.¹²⁸ Lawry-White shows that there is limited empirical evidence indicating how reparative mechanisms respond to the needs and desires of environmental victims. She argues that reparations should not only serve the retrospective purpose of (to the degree possible) redressing the damage done, but also the prospective goal of reinforcing the rule of law and creating the foundations for a sustainable and just peace.¹²⁹ She cautions that normal judicial mechanisms may be both overwhelmed and poorly constructed for providing reparation for the type of massive, widespread environmental harm that frequently results from armed conflict.

Ursign Hofmann and Pascal Rapillard address a deadly and enduring threat to and within the environment after certain armed conflicts: mines. Mine action, particularly

¹²⁶ See generally Christopher S. Gibson, Trevor M. Rajah, and Timothy J. Feighery (eds.), *War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2015); Cymie Payne and Peter Sand (eds.), *Gulf War Reparations and the UN Compensation Commission* (Oxford: Oxford University Press, 2011).

¹²⁷ On *jus post bellum* considerations in the work of the Eritrea-Ethiopia Claims Commission, see Markus Krajewski, 'Schadensersatz wegen Verletzungen des Gewaltverbots als ius post bellum am Beispiel der Eritrea-Ethiopia Claims Commission' (2012) 72 ZaöRV 147.

¹²⁸ See in this sense Report of the Secretary General, *The Rule of Law and Transitional Justice in Conflict and Post-conflict Societies*, UN Doc. S/2004/616, 23 August 2004, Summary ('We must learn as well to eschew one-size-fits-all formulas and the importation of foreign models, and, instead, base our support on national assessments, national participation and national needs and aspirations').

¹²⁹ On environmental reparation, see Michael Bowman and Alan Boyle, *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* (Oxford: Oxford University Press, 2002).

clearance, fosters peacebuilding not only through the restoration of a safe environment but through employing former combatants as deminers and allowing the repatriation of refugees and internally displaced persons.¹³⁰ But clearance of remnants of conflict can affect ecosystems and have a negative impact on vegetation or the composition and fertility of soil. The Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions¹³¹ are silent in relation to the environmental impact of contamination and do not expressly regulate liability for such types of damage. Hoffmann and Rapillard argue that mine action organizations, like all humanitarian actors, need to consider the possible negative impacts of their operations to ensure they ‘do no harm’ and do not lead to further degradation of the environment, longer-term vulnerability, and threats to livelihoods. They discuss ways to address liability for environmental degradation from remnants of conflict and in particular for their removal. They provide particular attention to the responsibility of armed non-state actors. They argue that obligations of such non-state actors should be approached through the lens of duties of care.

Anne Dienelt focuses on preventative measures under international humanitarian law and their role in protecting the natural environment. Procedures, such as the marking of protected sites and zones¹³² as well as the duty to review new weapons, means, or method of warfare under Article 36(1) of Additional Protocol I¹³³ can contribute to protect the environment in relation to armed conflict. Dienelt shows that review procedures under Article 36 were mainly meant to guide peacetime conduct, rather than post-conflict peacebuilding. But she argues that post-conflict assessments are useful and states are required to learn lessons from past conflicts when it comes to environmental protection, since ‘after the war’ is often ‘before the war’.

The last contribution by Doug Weir deals with the removal of toxic and hazardous remnants of war.¹³⁴ Weir traces major steps taken over past decades to address remnants of war. He shows that treatment of conflict pollution involves environmental and humanitarian considerations. Weir discusses in particular, the new draft principles of the ILC regarding remnants of war, which relate clearance duties specifically to environmental damage. He criticizes that draft principle 16 merely obliges states to ‘seek to remove’ remnants.¹³⁵ But he concludes that the principles seem to be moving in a positive direction.

¹³⁰ Kristian Berg Harpviken and Rebecca Roberts, ‘Conclusions’ in Kristian Berg Harpviken, and Rebecca Roberts (eds.), *Preparing the Ground for Peace. Mine Action in Support of Peacebuilding* (Oslo: PRIO, 2004), 55.

¹³¹ See generally Karen Hulme, ‘The 2008 Cluster Munitions Convention: Stepping Outside the CCW Framework (Again)’ (2009) 58 *International and Comparative Law Quarterly* 23.

¹³² See Arts. 59 and 60 of Additional Protocol I, and Art. 15 of the Fourth Geneva Convention.

¹³³ See Justin McClelland, ‘The Review of Weapons in Accordance with Article 36 of Additional Protocol I’ (2003) 85 *International Review of the Red Cross* 397.

¹³⁴ On the Toxic Remnants of War Project, see <<http://www.toxicremnantsofwar.info/>> accessed 15 August 2015.

¹³⁵ See also Hulme (n 25) 38.

I.5 Not a Conclusion

The chapters in the book clearly indicate the path towards greater protection of the environment before, during, and after conflict is still at its beginning. It remains a challenge to align protection with the political interest of states, and the increasing involvement of non-state actors in armed conflict.

There is growing consensus that it is prohibited to use the environment as a weapon in warfare. This is reflected in international humanitarian law, and to some extent international criminal law. Works such as the ILC principles make it clear that the environment is not only protected indirectly, namely as civilian object or resource, but directly as a system. It is increasingly recognized that environmental protection must be analysed through the interplay of different law or legal regimes, such as human rights law, humanitarian law, environmental law, or disarmament. Institutions such as UNEP, the ICRC, or the ILC, and NGOs have a pioneering role in this regard. The Office of the Prosecutor of the International Criminal Court has encouraged the prosecution of ‘crimes that are committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land’.¹³⁶ This has a strong expressive and signalling effect as to the gravity of environmental crimes.

The realities of contemporary warfare show that pre-conflict, conflict, post-conflict, and peacetime cannot be neatly separated, or put into clearly defined ‘boxes’. They must rather be seen as a continuum. Duties of prevention, precaution, due diligence, or repair of harm run through all of these phases, although they might differ in scope and content. Concepts, such as the progressive realization of rights, play a useful role in steering transitions as a process.

Specific rules and principles governing transitions from conflict to peace are still in development. These are often more fluid than conventional ‘hard law’, derived from other bodies of law, or framed as principles, guidelines, or practices. Some of them, such as the principle of moderation, have been applied implicitly by post-war institutions. Others become clear or explicit through general practice, such as peace treaties, UN resolutions, manuals, or the work of expert bodies, such as the ILC. In light of the specificities of post-conflict environments, *opinio juris* might have greater value in the formation of customary rules or principles than state practice.¹³⁷

The volume indicates that there are strong links between the peace-orientation of *jus post bellum* and environmental principles, such as intergenerational equity and precaution. Many of the draft principles of the ILC may not be formally labelled as *post bellum* principles, but reflect arguments that have been made in *jus post bellum* scholarship. *Jus*

¹³⁶ ICC, OTP Policy Paper on Case Selection and Prioritisation, 15 September 2016, para 42, at <https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf> accessed 15 August 2017.

¹³⁷ In relation to international humanitarian law, see the famous statement by the ICTY, *Prosecutor v. Kupreškić*, 14 January 2000, IT-95-16-T, para 527 (‘This is however an area where *opinio iuris sive necessitatis* may play a much greater role than *usus*, as a result of the aforementioned Martens Clause’).

post bellum scholars have argued that responsible planning, pragmatic limitation, conciliation, and burden-sharing are fundamental elements of post-conflict peacebuilding. These elements are reflected in the ILC draft principles. There is emerging agreement that prevention and precaution, due diligence, and a collective approach to remediation of harm are building blocks of a post-conflict law that takes into account environmental protection.

Moreover, from a macro perspective, there might be a shifting of the lens regarding the treatment of responsibility. Traditional legal theories are agent-based. They look at individual contribution of actors to the harm, and their responsibility. In the field of environmental harm, this perspective is unsatisfactory. From a perspective of protection, the focus should not be exclusively on the wrongdoing of the agent, but mostly on the environment as object of care.¹³⁸ It is thus feasible to apply a care-driven approach towards responsibility, which is grounded in cooperation, solidarity, and capacity to remedy harm (remedial responsibility). Suggestions to improve the *status quo* include better monitoring of environmental harm, enhancing assistance models in environmental and disarmament agreements, closing gaps in relation to non-international armed conflict and non-state actors, strengthening of trust funds, and preventive mechanisms.

Of course, many challenges remain. The list is long. But the volume marks a starting point for states, international organizations, and civil society to discuss, debate, and engage on conflict and the environment. Such dialogue is urgently needed. It will need to be continued in future decades.

¹³⁸ For an assessment of duties of care under international humanitarian law, see Karen Hulme, 'Taking Care to Protect the Environment: A Meaningless Obligation?' (2010) 92 *International Review of the Red Cross* 675. On *jus post bellum*, see Sigal Ben-Porath, 'Care Ethics and Dependence—Rethinking *Jus Post Bellum*' (2008) 23 *Hypatia* 61; Carsten Stahn, 'Jus Post Bellum and the Ethics of Care', at <<http://opiniojuris.org/2014/05/09/jus-post-bellum-symposium-jus-post-bellum-ethics-care/>> accessed 15 August 2017.