

Criminalizing reprisals against the natural environment

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Abstract

Throughout history, armed conflicts have frequently seen serious harm committed against the natural environment. From the early 1960s to 1971, the United States used Agent Orange to defoliate large tracts of Vietnamese forests. In the 1990s, Saddam Hussein vengefully ordered the burning of Kuwaiti oil wells, resulting in massive pollution to the air, land and surrounding seas. More recently, ecocentric harm has been documented in the Colombian civil war, by the so-called Islamic State group, and in the Ukraine conflict, among others. Whilst international humanitarian law (IHL) contains several prohibitions against environmental harm, the most striking is Article 55(2) of Additional Protocol I, whereby “[a]ttacks against the

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natural environment by way of reprisals are prohibited". Although this provision appears absolute and unconditional, critical questions persist regarding its status under customary international law and its applicability in non-international armed conflicts. Moreover, its criminalization has not been explored in the jurisprudence of international courts or in the relevant scholarly literature, despite the fact that penal sanctions against individuals are an important factor for enforcement of environmental protections.

*To fill the lacuna, the following analysis examines the prohibition and criminalization of reprisals against the natural environment. It reviews conventional and customary international law to determine the current status of a putative criminal prohibition and its potential as *lex ferenda*. Importantly, it also assesses the relevance of reprisals against the natural environment for prosecutions under existing war crimes, such as attacks on civilian objects and destruction of enemy property. It generates novel insights for the application of international law to ecocentric harm, including that (1) reprisals against the natural environment are not criminal per se, but (2) conceptualizing the environment as a civilian object opens up clear paths for prosecuting attacks, including reprisals, against it; (3) the inherently intentional nature of reprisals has far-reaching implications for their prosecution; (4) reprisals can significantly impact the pivotal test of military necessity which arises in criminal prohibitions such as that found in Article 8(2)(b)(iv) of the Rome Statute; and (5) situations of reprisals could impact the application of the proposed definition of ecocide.*

Traversing IHL and international criminal law (ICL), the article identifies ways in which these traditionally anthropocentric bodies of law can be reoriented to accommodate ecocentric values. This reconceptualization is significant, as the prospect of criminal sanctions is critical for deterring potential perpetrators and potentially adds a basis for reparations designed to remediate damage to the environment. The assessment redresses the fact that the natural environment has been seen as a peripheral matter under both IHL and ICL and has remained under-explored despite the ongoing destruction wrought on nature including during armed conflict. It seeks to elevate the environment to a core protected value under these legal regimes, as a reflection of our increasing awareness that the natural environment is critical for the well-being of current and future generations and our growing appreciation of the intrinsic importance of protecting nature.

Keywords: reprisals, natural environment, International Criminal Court, Rome Statute, Additional Protocol I, ecocide, customary international law.

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Introduction

This article examines means of protecting the natural environment¹ under international humanitarian law (IHL) and international criminal law (ICL). It

1 This analysis uses a definition of "natural environment" provided by the International Law Commission (ILC), whereby "'natural environment' should be taken broadly to cover the environment of the human

seeks to enhance the protection of the environment both for its value for human well-being and in its own right.² As a silent victim of armed conflict,³ the natural environment can suffer damage that long outlasts the cessation of hostilities.⁴ Recent events in Ukraine have highlighted the direct and indirect risks posed to nature during warfare,⁵ particularly with the destruction of the Kakhovka Dam and resulting flooding of tens of thousands of hectares of land.⁶ Whereas environmental harm can occur accidentally, history has demonstrated that vindictive leaders will sometimes intentionally order attacks against the environment.⁷ The most notorious example of this in recent decades is that of Saddam Hussein's Iraqi forces burning around 600 oil wells in Kuwait during the 1990–91 Gulf War.⁸ Other conflicts, from the Second World War,⁹ to Vietnam,¹⁰

race and where the human race develops, as well as areas the preservation of which is of fundamental importance in protecting the environment. These words therefore cover the seas, the atmosphere, climate, forests, and other plant cover, fauna, flora and other biological elements." ILC, *Draft Code of Crimes against the Peace and Security of Mankind*, in *Yearbook of the International Law Commission*, Vol. 2, Part 2, 1991, UN Doc. A/CN.4/SER.A/1991/Add.I (Part 2), commentary to Art. 26, p. 107, para. 4. The terms "nature" and "environment" are used interchangeably with "natural environment" throughout this article.

- 2 The distinction between the facets of the environment which are useful to humans and those that constitute "pure" nature can be significant when it comes to proportionality assessments (as discussed below under the heading "Criminalizing Ecocentric Reprisals: The Key to Enforcement"); acts that harm both humans and nature are likely to be considered graver than acts limited to harming the environment.
- 3 Jonathan Watts, "The 'Silent Victim': Ukraine Counts War's Cost for Nature", *The Guardian*, 20 February 2023, available at: www.theguardian.com/world/2023/feb/20/ukraine-war-cost-for-nature-russia (all internet references were accessed in May 2023).
- 4 See, e.g., UNGA Res. 56/4, "Observance of the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict", 13 November 2001. For an overview of historic examples of environmental harm during armed conflict, see Dieter Fleck, "Legal Protection of the Environment: The Double Challenge of Non-International Armed Conflict and Post-Conflict Peacebuilding", in Carsten Stahn, Jens Iverson and Jennifer S. Easterday (eds), *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles and Practices*, Oxford University Press, Oxford, 2017.
- 5 See Zalakeviciute Rasa, Danilo Mejia, Hermel Alvarez, Xavier Bermeo, Santiago Bonilla-Bedoya, Yves Rybarczyk and Brian Lamb, "War Impact on Air Quality in Ukraine", *Sustainability*, Vol. 14, No. 21, 2022, pp. 14–15; United Nations Environment Program, *The Environmental Impact of the Conflict in Ukraine*, 14 October 2022, pp. 29–31; James Kilner, "Massive Blast after Russians Bomb Dam Near Kherson during Retreat", *The Telegraph*, 12 November 2022, available at: www.telegraph.co.uk/world-news/2022/11/12/retreating-russian-forces-destroyed-dam-near-city-kherson/; "Ukraine Dam Hit by Russian Missiles in Zelensky's Hometown", *Al Jazeera*, 15 September 2022, available at: www.aljazeera.com/news/2022/9/15/ukraine-dam-hit-by-russian-missiles-in-zelenskys-hometown.
- 6 Alex Binley and Paul Adams, "Ukraine Dam: Thousands Flee Floods after Dam Collapse Near Nova Kakhovka", *BBC News*, 7 June 2023, available at: www.bbc.co.uk/news/world-europe-65819591.
- 7 See Julian Wyatt, "Law-Making at the Intersection of International Environmental, Humanitarian and Criminal Law: The Issue of Damage to the Environment in International Armed Conflict", *International Review of the Red Cross*, Vol. 82, No. 879, 2010, pp. 596–597.
- 8 Ines Peterson, "The Natural Environment in Times of Armed Conflict: A Concern for International War Crimes Law?", *Leiden Journal of International Law*, Vol. 22, No. 2, 2009, p. 342.
- 9 See, e.g., International Military Tribunal (IMT), *Hostages Trial*, United Nations War Crimes Commission, *Law Reports of Trials of War Criminals*, Vol. 3, 1949, pp. 66–69.
- 10 See, e.g., Eliana Cusato, "From Ecocide to Voluntary Remediation Projects: Legal Responses to Environmental Warfare in Vietnam and the Spectre of Colonialism", *Melbourne Journal of International Law*, Vol. 19, No. 2, 2018, p. 494.

to the Colombian civil war,¹¹ to those involving the so-called Islamic State group,¹² have also seen the environment targeted.¹³

Now the international community faces the spectre of nuclear weapons being used against Ukraine,¹⁴ or a conventional weapon damaging the Zaporizhzhia Nuclear Power Plant.¹⁵ Such incidents would almost inevitably result in severe ecocentric damage – including destruction of natural features, flora and fauna – due to the blast, heat, and fallout of radioactive isotopes (some of which have half-lives decades or centuries long), alongside the grave anthropocentric consequences.¹⁶ Russian spokespersons and supporters have reportedly invoked reprisals to justify attacks against Ukraine on multiple occasions – such as President Putin in response to the Ukrainian attacks on the Crimean Bridge,¹⁷ and President Ramzan Kadyrov of Chechnya in response to drone attacks on Moscow¹⁸ – while also accusing Ukraine of committing reprisals.¹⁹ These threats (as well as similar ones from countries such as North

- 11 See, e.g., Jurisdicción Especial para la Paz (JEP), Salas de Justicia Sala de Reconocimiento de Verdad, de Responsabilidad y de Determinación de Los Hechos y Conductas, Case No. 5, Auto, Srvt, No. 001 de 2023, 1 February 2023, para. 523. See also Ricardo Pereira *et al.*, *The Environment and Indigenous People in the Context of the Armed Conflict and the Peacebuilding Process in Colombia: Implications for the Special Jurisdiction for Peace and International Criminal Justice*, Capaz Policy Brief 2-2021, 2021, p. 4.
- 12 See, e.g., Peter Schwartzstein, “The Islamic State’s Scorched-Earth Strategy”, *Foreign Policy*, 6 April 2016, available at: <https://foreignpolicy.com/2016/04/06/the-islamic-states-scorched-earth-strategy/>.
- 13 See, generally, Matthew Gillett, *Prosecuting Environmental Harm before the International Criminal Court*, Cambridge University Press, Cambridge, 2022, Chap. 5.
- 14 See United Nations, “Risk of Nuclear Weapons Use Higher than at Any Time since Cold War, Disarmament Affairs Chief Warns Security Council”, 31 March 2023, available at: <https://press.un.org/en/2023/sc15250.doc.htm>.
- 15 Andrian Prokip, “The Kakhovka Dam Disaster: Responsibility and Consequences”, *Focus Ukraine*, 14 June 2023, available at: www.wilsoncenter.org/blog-post/kakhovka-dam-disaster-responsibility-and-consequences.
- 16 See Matthew B. Bolton and Elizabeth Minor, “Addressing the Ongoing Humanitarian and Environmental Consequences of Nuclear Weapons: An Introductory Review”, *Global Policy*, Vol. 12, No. 1, 2021, pp. 84, 88; International Court of Justice (ICJ), *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 8 July 1996, *ICJ Reports* 1996 (Nuclear Weapons Advisory Opinion), para. 35 (“[N]uclear weapons as they exist today, release[] not only immense quantities of heat and energy, but also powerful and prolonged radiation”). See also Remus Pravalie, “Nuclear Weapons Tests and Environmental Consequences: A Global Perspective”, *Ambio*, Vol. 43, No. 6, 2014. Even if some areas subjected to nuclear fallout have eventually experienced regeneration, the recovery of an area impacted by nuclear fallout would likely be slower and more unpredictable than following other forms of ecological disruption: see Arthur H. Westing, “Environmental Impact of Nuclear Warfare”, *Environmental Conservation*, Vol. 8, No. 4, 1981.
- 17 See Zach Schonfield, “Putin Warns of ‘Harsh’ Reprisal after Bridge Explosion”, *The Hill*, 10 October 2022, available at: <https://thehill.com/policy/international/3680893-putin-warns-of-harsh-reprisal-after-bridge-explosion/>; President of Russia, “Meeting with Permanent Members of the Security Council”, 10 October 2022, available at: www.en.kremlin.ru/events/security-council/69568 (referring to “harsh” retaliation for “terrorist” attacks on the Crimean Bridge, and responses “commensurate” with the threats posed). In early August 2023, Dmitry Medvedev reportedly posted a threat online, warning that if Ukraine caused an ecological catastrophe in the Black Sea (by destroying Russian ships) then Russia would cause an ecological disaster in Ukraine, the effects of which would last for centuries.
- 18 “Kremlin Denies Mooting, Decision-Making on Potential Introduction of Martial Law in Russia”, *Tass*, 31 May 2023, available at: <https://tass.com/society/1625859>.
- 19 Kremlin, “Presidential Address to Federal Assembly”, 21 February 2023, available at: <http://en.kremlin.ru/events/president/news/70565>; “Kiev Morphed into neo-Nazi Dictatorship after Onset of Martial Law, Russian MFA Says”, *Tass*, 19 April 2023, available at: <https://tass.com/politics/1606591>.

Korea²⁰), along with the continuing threat to the environment during armed conflict, emphasize the pressing need for clarity regarding the legal framework governing reprisals and its application to attacks on the natural environment.

IHL is far from silent regarding environmental harm during armed conflict. Additional Protocol I (AP I), in particular, has several provisions that are directly relevant, including Articles 35(3) and 55(1), which have been subject to extensive scholarly attention.²¹ Less attention has been directed towards Article 55(2) of AP I, which states that “[a]ttacks against the natural environment by way of reprisals are prohibited”.²² Despite this ostensibly unconditional framing, reprisals against the natural environment raise critical questions, including their customary international law status, their potential criminalization *per se*, and their impact on existing criminal provisions. Those debates build on a contentious history. During the negotiations of AP I, reprisals “proved to be one of the most controversial and intractable of problems”.²³ In 2022, when commenting on the prohibitions against reprisals under Articles 51–55 of AP I, renowned IHL scholar Yoram Dinstein stated they are premised on

an unreasonable expectation that, when struck in contravention of [the law of international armed conflict], the victim would turn the other cheek to the attacker. This sounds more like an exercise in theology than in [the law of international armed conflict].²⁴

While Dinstein’s reservations reflect the fact that reprisals were historically countenanced as a way to unilaterally force compliance with legal obligations, there has been a discernible shift since the 1990s towards prosecutions under

20 See “North Korea Launches Short-Range Ballistic Missile toward Yellow Sea – Yonhap”, *Tass*, 9 March 2023, available at: <https://tass.com/defense/1586515> (reporting that North Korea launched short-range ballistic missiles and threatened South Korea and the United States with reprisals if they conduct joint military exercises).

21 See, e.g., Tara Weinstein, “Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?”, *Georgetown International Environmental Law Review*, Vol. 17, No. 4, 2005, p. 697; Steven Freeland, *Addressing the Intentional Destruction of the Environment during Warfare under the Rome Statute of the International Criminal Court*, Intersentia Series Supranational Criminal Law: Capita Selecta, Vol. 18, 2015; Matthew Gillett, “Eco-Struggles: Using International Criminal Law to Protect the Environment During and After Non-International Armed Conflict”, in Carsten Stahn, Jens Iverson and Jennifer S. Easterday (eds), *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles and Practices*, Oxford University Press, Oxford, 2017, Chap. 10.

22 Protocol Additional (I) to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, 1125 UNTS 3, 8 June 1977 (entered into force 7 December 1978) (AP I). The text of Articles 35(3) and 55(2) was drafted by a Working Group of Committee III of the Diplomatic Conference on Humanitarian Law: see Yves Sandoz, Christophe Swinarski and Bruno Zimmermann (eds), *Commentary on the Additional Protocols*, ICRC, Geneva, 1987 (ICRC Commentary on the APs), p. 613, para. 2130; Stanisław E. Nahlik, “Belligerent Reprisals as Seen in the Light of the Diplomatic Conference on Humanitarian Law, Geneva, 1974–1977”, *Law and Contemporary Problems*, Vol. 42, No. 2, 1978, p. 49.

23 Françoise J. Hampson, “Belligerent Reprisals and the 1977 Protocols to the Geneva Conventions of 1949”, *International and Comparative Law Quarterly*, Vol. 37, No. 4, 1988, p. 818.

24 Yoram Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict*, 4th ed., Cambridge University Press, New York, 2022, para. 1059.

international law as the key enforcement mechanism.²⁵ For environmental protection, there still have not been any convictions under ICL for harming nature.²⁶ Nonetheless, the shift towards criminal prosecution is significant, and the impetus to prosecute environmental destruction is gaining momentum.²⁷ However, the possibility of prosecuting reprisals against the natural environment remains under-explored in the literature.²⁸ Whereas other works have examined the application of ICL to environmental harm,²⁹ there has been no detailed consideration of criminal liability for reprisals in this respect. This reflects the fact that reprisals were traditionally used as a means to justify violations of IHL rather than being a basis on which to be prosecuted. Significant works on international criminal liability for environmental harm contain no discussion of reprisals,³⁰ and similarly, the concept of reprisals was overlooked entirely by the Independent Expert Panel in its definition of ecocide.³¹

This article seeks to redress that gap by reconceptualizing whether the IHL prohibition on reprisals against the natural environment could constitute a basis for criminal prosecution under ICL.³² The discussion first explains this ecocentric reconceptualization as a normative innovation which also has operational implications for the protection of the environment. It then examines the

25 See International Criminal Tribunal for the former Yugoslavia (ICTY), *Prosecutor v. Zoran Kupreškić et al.*, Case No. IT-95-16-T, Judgment (Trial Chamber), 14 January 2000. See also Veronika Bílková, “Belligerent Reprisals in Non-International Armed Conflicts”, *International and Comparative Law Quarterly*, Vol. 63, No. 1, 2014, p. 33; Ricardo Pereira, “After the ICC Office of the Prosecutor’s 2016 Policy Paper on Case Selection and Prioritisation: Towards an International Crime of Ecocide?”, *Criminal Law Forum*, Vol. 31, 2020, p. 186.

26 But see JEP, above note 11, para. 523 (in which environmental destruction is charged as a war crime).

27 See, e.g., ICC Office of the Prosecutor, *Policy Paper on Case Selection and Prioritisation*, 15 September 2016, para. 41 (prioritizing selection of cases that involve harm to the environment); Parliamentary Assembly of the Council of Europe, Recommendation 2246 (2023), 2 February 2022 (calling for the recognition of ecocide as a crime in international and national legislation).

28 See V. Bílková, above note 25, p. 34 (“There is no doubt that belligerent reprisals preclude wrongfulness at the level of the State responsibility ... It is less certain what role they may play in the area of individual criminal responsibility”); Stavros-Evdokimos Pantazopoulos, “Reflections on the Legality of Attacks against the Natural Environment by Way of Reprisals”, *Goettingen Journal of International Law*, Vol. 10, No. 1, 2020 (addressing reprisals against the natural environment under IHL but not assessing criminal liability therefor).

29 See above note 21.

30 See, e.g., V. Bílková, above note 25; S.-E. Pantazopoulos, above note 28; Eliana Teresa Cusato, “Beyond Symbolism: Problems and Prospects with Prosecuting Environmental Destruction before the ICC”, *Journal of International Criminal Justice*, Vol. 15, No. 3, 2017, p. 491; R. Pereira, above note 25, p. 179; S. Freeland, above note 21; Danuta Palarczyk, “Ecocide Before the International Criminal Court: Simplicity is Better than an Elaborate Embellishment”, *Criminal Law Forum*, 2023 (all lacking any assessment of criminal liability for reprisals against the natural environment). The present author’s own previous works on prosecuting environmental harm touched on the issue of reprisals without developing the analysis of their criminalization: see M. Gillett, above note 13, pp. 111–112.

31 Independent Expert Panel for the Legal Definition of Ecocide, *Commentary and Core Text*, June 2021, available at: www.stopecocide.earth/legal-definition.

32 Although the focus of this article is situations of armed conflict, environmental harm also occurs during peacetime: see Frédéric Mégret, “The Problem of an International Criminal Law of the Environment”, *Columbia Journal of Environmental Law*, Vol. 36, No. 2, 2011, pp. 246–247. However, the analysis in the present paper does not address the prosecution of such acts as crimes against humanity, genocide or aggression, as these provisions import extensive considerations that cannot be covered in the space available.

meaning, history, status and guiding parameters of reprisals, particularly against the environment, as a matter of IHL and customary international law. These are contested issues, subject to contrasting views from States and commentators, but are necessary prefatory matters in order to assess the criminalization of reprisals against the natural environment. The article takes a uniquely bifocal approach, looking both at the legal status of reprisals against the natural environment from a doctrinal perspective and at the factual relevance of reprisals from a litigation strategy perspective. The doctrinal discussion is important given the persistence of contentious questions regarding reprisals, such as their customary status.³³ Equally, the relevance of the factual scenario of reprisals is important for the operationalization of this source of potential environmental protection. Both facets of the discussion are undergirded by a rigorous analysis of IHL and ICL, which allows for the identification of areas of consonance and dissonance between these two international law regimes. At the theoretical level, the purpose is to inculcate ecocentric considerations into the traditionally anthropocentric realms of IHL and ICL.³⁴ A complementary purpose is to identify ways in which reprisals can be relevant at the operational level of international criminal justice when imposing criminal liability and ordering reparations for environmental harm.

Normative and operational facets of the analysis

The present examination of the ecocentric potential of reprisals entails innovations at both the normative and operational levels of analysis. Normatively, this article reorients debates regarding reprisals towards an ecocentric (also termed “eco-sensitive”) perspective, looking at how this doctrine can result in greater protection of the environment and not only of humans and their property.³⁵ In doing so, it diverges from the traditionally anthropocentric approach to IHL, which created an oppositional dichotomy between human and environmental interests, typically subjugating the latter to the former.³⁶

Specifically, it does so by eschewing the conventional understanding of reprisals as a form of unilateral self-help measure that aims to reduce violations

33 See below under the heading “Customary International Law Applicable to Reprisals against the Natural Environment”.

34 See S. Freeland, above note 21, pp. 242, 277.

35 This adheres to calls for an “eco-sensitive” approach to international criminal justice: see, e.g., Rachel Killean, “From Ecocide to Eco-Sensitivity: ‘Greening’ Reparations at the International Criminal Court”, *International Journal of Human Rights*, Vol. 25, No. 2, 2020, pp. 325–326.

36 See S.-E. Pantazopoulos, above note 28, p. 50 (“Parts of the environment, the silent victim of warfare, lend themselves to being targeted by way of reprisals, given the traditional anthropocentric approach – in the sense of aiming to alleviate human suffering – that transverses the entire field of IHL”). Although long overlooked by the formulators of IHL (see J. Wyatt, above note 7, p. 607; S. Freeland, above note 21, p. 220), environmental consciousness has started to permeate IHL since the Vietnam War, partly as a reaction to the egregious use of Agent Orange and its impact on the environment during that conflict: see, e.g., ICRC Commentary on the APs, above note 22, p. 661, paras 2124–2125 (noting that at the Diplomatic Conference in 1987, the natural environment had only recently become a matter of concern for the international community).

of IHL by the opposing side.³⁷ It assesses whether the prohibition of reprisals against the natural environment can provide a basis for criminal prosecution of those harming nature. Although this “greening”³⁸ of prosecutions involves a novel reconceptualization of the role of reprisals, it does not seek to undermine the core tenets of IHL and ICL.³⁹ Most importantly, it does not seek to displace the protection offered by these bodies of law against unnecessary suffering and death, in line with the principle of humanity.⁴⁰

Accordingly, the present study proceeds on the presumption that the overarching normative frameworks of these two fields of international law will remain in place,⁴¹ other than the proposed addition of the crime of ecocide, as discussed herein. Alternative conceptual approaches, such as equating the environment with humans and extending to it all human-centred protections,⁴² are not pursued herein. Such wholesale approaches would risk dissipating the hard-fought achievement of anthropocentric protections, such as the majority of the crimes enforced before the International Criminal Court (ICC). They would also risk conflating the two separate but overlapping concepts of “humanity” and the “natural environment”, which would in turn mystify critical notions required to redress atrocity crimes, such as agency, intentionality and victimhood.⁴³

Nonetheless, this article’s examination of the criminalization of the IHL prohibition of reprisals against the natural environment is normatively significant, as it demonstrates the extent to which a traditionally anthropocentric doctrine such as reprisals can be reassessed with an ecocentric objective in mind (to maximize its utility for environmental protection). This

37 V. Bílková, above note 25, p. 33.

38 See Florencio J. Yuzon, “Deliberate Environmental Modification through the Use of Chemical and Biological Weapons: ‘Greening’ the International Laws of Armed Conflict to Establish an Environmentally Protective Regime”, *American University Journal of International Law and Policy*, Vol. 11, No. 5, 1996, p. 815.

39 The current analysis does not seek to radically displace existing international law, but instead aims to reconceptualize the provisions of IHL and ICL to accommodate ecocentric considerations alongside anthropocentric ones.

40 See Nuclear Weapons Advisory Opinion, above note 16, para. 95 (“[A]s the Court has already indicated, the principles and rules of law applicable in armed conflict—at the heart of which is the overriding consideration of humanity—make the conduct of armed hostilities subject to a number of strict requirements”); Theodor Meron, “The Humanization of Humanitarian Law”, *American Journal of International Law*, Vol. 94, No. 2, 2000, p. 245. But see Yoram Dinstein, “The Principle of Proportionality”, in Kjetil Mujezinović Larsen, Camilla Guldahl Cooper and Gro Nystuen (eds), *Searching for a “Principle of Humanity” in International Humanitarian Law*, Cambridge University Press, Cambridge, 2012, pp. 72–73.

41 For an examination of the normative framework of ICL, see William A. Schabas, *An Introduction to the International Criminal Court*, 6th ed., Cambridge University Press, Cambridge, 2020. For an examination of the normative framework of IHL, see Y. Dinstein, above note 24.

42 See Sara de Vido, “A Quest for an Eco-centric Approach to International Law: The COVID-19 Pandemic as Game Changer”, *Jus Cogens*, Vol. 3, No. 2, 2021 (calling for the environment to be conceived as “us, including humans, non-human beings, and natural objects”).

43 Equating the environment with human persons would provoke questions including whether the environment has agency, whether it can evince intentionality, and whether it can be considered a victim in the same way as a human can.

reorientation adheres to the broader movement looking to situate the environment alongside human beings as core protected entities under international law.⁴⁴ It proceeds on the understanding that human well-being is reliant on a sustainable environment,⁴⁵ while also recognizing the intrinsic value of protecting the environment *per se*, irrespective of its utility to human beings.⁴⁶ The context of reprisals is particularly important for environmental protection – as Dinstein observes, an “obvious constraint of belligerent reprisals relates to the protection of the natural environment” because “[t]he interest in preserving the natural environment is shared by mankind as a whole”.⁴⁷ This protection has both anthropocentric and ecocentric facets; in the latter sense it can extend to elements of the environment including remote areas and ecosystems which do not directly benefit human life.

In responding to calls in the literature to increase the environmental protection offered by international criminal justice,⁴⁸ this article conducts an original inquiry.⁴⁹ Reprisals have hitherto been disregarded as a ground for criminal prosecution. They were not included as a crime in the Rome Statute of the ICC,⁵⁰ and have instead been used as a shield by defence teams seeking to avoid their clients’ liability for violations of IHL.⁵¹ Reorienting the relevance of reprisals away from a justification for serious harm to the environment and towards a basis for prosecution thereof enhances the ecocentric protection provided by international law.

At the operational level of achieving practical advances in protecting nature, prosecution is critical for deterrence, which constitutes an important tool for environmental protection.⁵² The International Committee of the Red Cross

44 See F. J. Yuzon above note 38.

45 Nuclear Weapons Advisory Opinion, above note 16, p. 241 (“[T]he environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn”).

46 See, e.g., UNGA Res. 76/300 (“Recognizing that sustainable development, in its three dimensions (social, economic and environmental), and the protection of the environment, including ecosystems, contribute to and promote human well-being and the full enjoyment of all human rights, for present and future generations”).

47 Y. Dinstein, above note 24, para. 1045.

48 See, e.g., Richard A. Falk, “Environmental Warfare and Ecocide – Facts, Appraisal, and Proposal”, *Bulletin of Peace Proposals*, Vol. 4, No. 1, 1973; Anastacia Greene, “The Campaign to Make Ecocide an International Crime: Quixotic Quest or Moral Imperative?”, *Fordham Environmental Law Review*, Vol. 30, No. 1, 2019.

49 Previous works on reprisals against the natural environment have called for the use of such reprisals to be “further constrained” but have not examined the relevance of reprisals against the natural environment for criminal prosecutions: see, e.g., S.-E. Pantazopoulos, above note 28, p. 66.

50 Of the multiple principles and provisions of IHL which directly or indirectly protect the environment, only one was included in the Rome Statute of the ICC, namely the war crime under Article 8(2)(b)(iv), and that crime was framed in highly restrictive terms: see M. Gillett, above note 13, pp. 94–114, 131. Consequently, it is important to explore other means of prosecuting environmental harm, such as through the criminalization of reprisals against the environment.

51 See the discussion below on the *Kupreškić* and *Martić* cases before the ICTY, under the heading “Elements and Etymology of Belligerent Reprisals”.

52 See Philippe Kirsch, “The Role of the International Criminal Court in Enforcing International Criminal Law”, *American University International Law Review*, Vol. 22, No. 4, 2007, p. 539.

(ICRC) and the International Law Commission (ILC) have both explicitly recognized that reprisals against the natural environment are prohibited as a matter of IHL.⁵³ But legal rules directed to conflicting parties are not sufficient to achieve accountability and deterrence, as they are applicable to abstract entities such as States and other parties to conflicts. Instead, criminal sanctions against decision-makers (specifically the military and political leadership, given that reprisals require that level of authorization, as discussed below⁵⁴) constitute the most direct means of enforcing international law. As observed by the judges of the International Military Tribunal at Nuremberg, “crimes are committed by men, not by abstract entities, and only by punishing individuals who commit such crimes can the provisions of international law be enforced”.⁵⁵ Convictions under ICL also form the basis for reparations orders, which could encompass environmental remediation and thereby constitute an important tool in redressing harm to nature.⁵⁶ Moreover, the possibility of criminal sanctions for reprisals against the environment sends a symbolic message⁵⁷ by placing those acts on a par with other atrocity crimes. Given that few individual cases are prosecuted as atrocity crimes before the ICC or other international (or internationalized) courts, the symbolism of recognizing the criminal nature of such reprisals will be of equal or even greater impact in deterring potential perpetrators of harm to the environment.

In light of the anthropogenic threat to the environment, the ICC Office of the Prosecutor’s 2016 case selection guidelines state that it will pay “particular consideration to 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”.⁵⁸ Yet the only provision under the Rome Statute explicitly referring to the natural environment, Article 8(2)(b)(iv),⁵⁹ is a war crime set out in such restricted terms that it is inapplicable in most conceivable circumstances.⁶⁰ Consequently, the potential for reprisals against the natural environment to be criminalized *per se* presents a novel potential basis of liability. Additionally, the occurrence of reprisals being undertaken against the natural environment is significant for prosecutions of environmental harm under

53 See ILC, *Draft Principles on Protection of the Environment in Relation to Armed Conflicts*, in *Report on the International Law Commission: Seventy-Third Session*, UN Doc. A/77/10, 2022 (ILC Draft Principles), Principle 15; ICRC, *Guidelines on the Protection of the Natural Environment in Armed Conflict*, Geneva, 2020 (ICRC Guidelines), Rule 4.

54 See below under the heading “Elements and Etymology of Belligerent Reprisals”.

55 IMT, *Trial of the Major War Criminals before the International Military Tribunal (“Blue Series”)*, Vol. 22, 1945, p. 186.

56 See Marja Lehto, *Second Report on Protection of the Environment in Relation to Armed Conflicts*, UN Doc. A/CN.4/728, 27 March 2019, para. 32; R. Killean, above note 35, pp. 335–337.

57 See Mark Drumbl, *Accountability for Property Crimes and Environmental War Crimes: Prosecution, Litigation, and Development*, International Center for Transitional Justice, 2009, pp. 21–22.

58 ICC Office of the Prosecutor, above note 27, para. 41.

59 Rome Statute of the International Criminal Court, UN Doc. A/CONF.183/9, 17 July 1998 (entered into force 1 July 2002) (Rome Statute).

60 See M. Gillett, above note 13, pp. 94–114, 131. See also Mark Drumbl, “International Human Rights, International Humanitarian Law, and Environmental Security: Can the International Criminal Court Bridge the Gaps?”, *ILSA Journal of International and Comparative Law*, Vol. 6, No. 2, 2000, p. 319.

other existing provisions in the Rome Statute, as well as for the proposed new crime of ecocide,⁶¹ due to its impact on proving the mental element of crimes and on disproving claims of military necessity, as detailed later in this article.⁶²

Elements and etymology of belligerent reprisals

Having set out the rationale and normative context of the present inquiry, the analysis now turns to the specific parameters of reprisals. According to Frits Kalshoven, reprisals are

intentional violations of a given rule of the law of armed conflict, committed by a Party to the conflict with the aim of inducing the authorities of the adverse party to discontinue a policy of violation of the same or another rule of that body of law.⁶³

Several conditions must be met for a claimed reprisal to provide a lawful justification for violating IHL. These are set out, with some variations, by the ICRC, and by the International Criminal Tribunal for the former Yugoslavia (ICTY) Trial Chambers in the *Kupreškić*⁶⁴ and *Martić*⁶⁵ cases, as follows:

1. The sole purpose of reprisals should be to pressure the opposing party to comply with the law of armed conflict.⁶⁶
2. Reprisals should be used only as a last resort when all other means have proven to be ineffective.

61 See Independent Expert Panel, above note 31; Matthew Gillett, “A Tale of Two Definitions: Fortifying Four Key Elements of the Proposed Crime of Ecocide”, *Opinio Juris*, 20 June 2023, available at: <https://opiniojuris.org/2023/06/20/a-tale-of-two-definitions-fortifying-four-key-elements-of-the-proposed-crime-of-ecocide-part-i/>.

62 See below under the heading “Operational Significance of Reprisals against the Natural Environment for Litigating Criminal Responsibility”.

63 Frits Kalshoven, *Constraints on the Waging of War*, Brill, Geneva, 1987, p. 65. See also Frits Kalshoven and Liesbeth Zegveld, *Constraints on the Waging of War*, Cambridge University Press, New York, 2011, p. 74 (“Belligerent reprisals are acts that wilfully violate given rules of the law of armed conflict, resorted to by a party to the conflict in reaction to conduct on the part of the adverse party that is perceived to reflect a policy of violation of the same or other rules of that body of law”); Christopher Greenwood, *Essays on War in International Law*, Cameron May, London, 2006, p. 297 (“A belligerent reprisal consists of action which would normally be contrary to the laws governing the conduct of armed conflict (the *ius in bello*) but which is justified because it is taken by one party to an armed conflict against another party in response to the latter’s violation of the *ius in bello*”); V. Bílková, above note 25, pp. 33–34 (“[A] state resorting to belligerent reprisals does not truly violate IHL, since an act taken in lawful reprisals is placed outside the area covered by IHL prohibitions. The primary rules of IHL do not cease to apply but are rendered temporarily inoperative”).

64 ICTY, *Kupreškić*, above note 25, para. 535.

65 ICTY, *Prosecutor v. Milan Martić*, Case No. IT-95–11-T, Judgment (Trial Chamber), 12 June 2007, paras 466–467. See also S.-E. Pantazopoulos, above note 28, pp. 54–55.

66 Y. Dinstein, above note 24, para. 1051; Dieter Fleck, “Methods of Combat”, in Dieter Fleck (ed.), *The Handbook of International Humanitarian Law*, 4th ed., Oxford University Press, Oxford, 2021, section 7.42.

3. Reprisals should only be imposed after a prior and formal warning to the adversary.⁶⁷
4. The actions taken in reprisal must be proportionate to the initial violation(s) of the law of armed conflict.⁶⁸
5. Reprisals should only be taken pursuant to a decision made at the highest political or military level.
6. Reprisals must terminate as soon as they have achieved their purpose of putting an end to the breach which provoked them.⁶⁹

Terminologically, the word “reprisals” (or the term “belligerent reprisals”) is primarily used in the context of *jus in bello*.⁷⁰ Reprisals must be distinguished from retortion,⁷¹ which has been described as a “severe countermeasure to the acts which it is wished to end, [which] nevertheless remains in accordance with ordinary law”.⁷² Legally, reprisals should also be distinguished from retaliation, which refers to actions undertaken for the motive of revenge. The claimed excuse of retaliation does not provide those launching attacks on the environment with any legal justification for their actions; if anything, admitting a retaliatory aim would undermine the legality of such attacks.⁷³ Reprisals also differ from the purported defence of *tu quoque*, whereby the fact that the adversary has also committed similar crimes is claimed as a defence for the accused’s crimes. Attempts to raise *tu quoque* as a defence have been routinely rejected by international courts, from the war crimes trials following the Second World War⁷⁴ through to the *ad hoc* tribunals in the 1990s.⁷⁵

The permissibility of reprisals, which continues to be debated, has divided scholarly opinion across at least three centuries. Whereas de Vitoria, Calvo and

67 ICTY, *Martić*, above note 65, paras 466–467.

68 See Nuclear Weapons Advisory Opinion, above note 16, para. 46 (“[A]ny right of recourse to such reprisals would, like self-defence, be governed inter alia by the principle of proportionality”). See also Frits Kalshoven, “Reprisals in the Second World War”, in Frits Kalshoven, *Belligerent Reprisals*, Brill, Leiden, 2005, pp. 176–177 (Kalshoven explains that “an action cannot be justified as a reprisal when it is so obviously and grossly disproportionate to the illegalities giving rise to it, that the belligerent having resort to it cannot reasonably have deemed it an appropriate reaction”).

69 ICTY, *Martić*, above note 65, para. 467.

70 Outside of armed conflict, the term “countermeasures” is typically used for self-help actions: see S.-E. Pantazopoulos, above note 28, p. 49; *Report of the International Law Commission to the Fifty-Third Session*, UN Doc. A/56/10, 23 April–1 June and 2 July–10 August 2001, p. 128, para. 3. See also V. Bílková, above note 25, p. 33.

71 Stuart Casey-Maslen, “The Use of Nuclear Weapons as a Reprisal under International Humanitarian Law”, in Gro Nystuen, Stuart Casey-Maslen and Annie Golden Bersagel (eds), *Nuclear Weapons under International Law*, Cambridge University Press, Cambridge, 2014, pp. 173–174.

72 Jean Pictet (ed.), *Commentary on the Geneva Conventions of 12 August 1949*, Vol. 4: *Geneva Convention Relative to the Protection of Civilian Persons in Time of War*, ICRC, Geneva, 1958, pp. 227–228 (“Thus, a belligerent would be able to withdraw from civilian internees privileges he had granted them over and above the treatment laid down in the Convention”).

73 F. J. Hampson, above note 23, p. 820.

74 See IMT, *US v. von Leeb et al. (High Command Case)*, in *Law Reports of the Trials of War Criminals*, Vol. 12, 1948, p. 64.

75 See, e.g., ICTY, *Kupreškić*, above note 25, para. 515; ICTY, *Prosecutor v. Milan Martić*, Case No. IT-95–11-A, Judgment (Appeals Chamber), 8 October 2008, para. 111; ICTY, *Prosecutor v. Dragomir Milošević*, Case No. IT-98–29-A, Judgment (Appeals Chamber), 12 November 2009, para. 250.

Fiore opposed their use, Grotius thought they were justifiable subject to certain conditions.⁷⁶ Nonetheless, the scope for permissible reprisals has clearly reduced over time. Under the Lieber Code of 1863, reprisals (then called retaliation) were regulated under Article 27, which stated that “[t]he law of war can no more wholly dispense with retaliation than can the law of nations”.⁷⁷ The Lieber Code noted in Article 28, however, that reprisals should

never be resorted to as a measure of mere revenge, but only as a means of protective retribution, and moreover, cautiously and unavoidably; that is to say, retaliation shall only be resorted to after careful inquiry into the real occurrence, and the character of the misdeeds that may demand retribution.⁷⁸

Prior to the Second World War, the scope for reprisals was wider than it is today. Whereas Article 2 of the 1929 Convention on Prisoners of War prohibited reprisals against prisoners of war, reprisals against the civilian population were still arguably permissible.⁷⁹ From 1949, the Geneva Conventions excluded most reprisals against civilians.⁸⁰ Later, in the Additional Protocols of 1977, further prohibitions on reprisals were enshrined into conventional law. Several of these are directly and indirectly applicable to attacks on the natural environment, as detailed below.⁸¹

Despite having lost considerable favour in modern times, the logic behind reprisals must be borne in mind. Reprisals were conceived as a form of self-help, in an era prior to the period of criminal enforcement of international law. By allowing for unilateral deviation from the usual protections of IHL, they theoretically created an incentive for belligerent parties to adhere to law of armed conflict, subject to the threat of “painful consequences” from the opposing party should they fail to do so.⁸² But the evident risk of reprisals turning into escalatory spirals of violence should also be heeded. It was explained during the negotiations of AP I that “often recourse to reprisals – in retaliation for the conduct, whether proven or only imputed, of the

76 See F. J. Hampson, above note 23, pp. 821–822, citing Francisco de Vitoria (Victoria), *Of the Indians, or On the Law of War Made by the Spaniards on the Barbarians* [*De Indis et de Jure Belli Relectiones*], trans. John Pawley Bate, *Classics of International Law*, Vol. 7, Carnegie Institution of Washington, 1917; Charles Calvo, *Le droit international théorique et pratique*, 5th ed., Guillaumin, Paris, 1896, pp. 518–519; Pasquale Fiore, *Nouveau droit international public suivant les besoins de la civilisation moderne*, 2nd ed., A. Durand et Pedone-Lauriel, Paris, 1885, p. 214; Hugo Grotius, *The Law of War and Peace*, trans. Francis W. Kelsey, *Classics of International Law*, Carnegie Institution of Washington, 1925, p. 624.

77 Francis Lieber, *Instructions for the Government of Armies of the United States in the Field*, General Order No. 100, War Department, Washington DC, 24 April 1863 (Lieber Code).

78 *Ibid.*, Art. 28. What we now call reprisals are referred to as “retaliation” in the Lieber Code.

79 F. Kalshoven, above note 68, pp. 176–178. Kalshoven considers that Germany’s bombing of London did not satisfy the purpose and proportionality elements, as Goebbels’ statement expressing disappointment that the British raid on Berlin had been too minor to provide the necessary excuse to justify enormous attacks on London undermined the purpose element by seeking further violations rather than seeking their termination.

80 Geneva Convention (IV) relative to the Protection of Civilian Persons in Time of War of 12 August 1949, 75 UNTS 287 (entered into force 21 October 1950) (GC IV), Art. 33.

81 See below under the heading “Conventional International Law Applicable to Reprisals against the Natural Environment”.

82 Y. Dinstein, above note 24, para. 1041. See also Shane Darcy, “What Future for the Doctrine of Belligerent Reprisals?”, *Yearbook of International Humanitarian Law*, Vol. 5, 2002, pp. 125–126.

adverse party – was invoked in justification of most atrocious cruelties perpetrated against the innocent”.⁸³ In the worst cases, reprisals not only fail to achieve their purported aim but instead can lead to “counter-reprisals and, in the final analysis, to an escalation of atrocities inexorably contributing to make of an armed conflict a truly *Dantesque* hell”.⁸⁴ Although human civilians have to be protected from the ravages of callous abuses as a priority,⁸⁵ the environment can also be victimized in cycles of escalating violence. On this basis, a detailed examination of the legal prohibition and prosecution of reprisals against the natural environment is essential, in order to forestall cycles of violence against anthropocentric and ecocentric interests alike.

Outlawing reprisals against the natural environment: A powerful yet imperfect set of prohibitions

Following on from the preceding discussion of the origin and parameters of reprisals, this section engages in a doctrinal assessment of the current status of reprisals under treaty and customary law, in both international armed conflicts (IACs) and non-international armed conflicts (NIACs). In this respect, it primarily focuses on IHL, which is important for reprisals, given that they sit at the intersection of law and military strategy. In turn, IHL is relevant for ICL,⁸⁶ as the framework and principles of IHL are incorporated into the Rome Statute of the ICC via the references to the framework of the law of armed conflict in Articles 8 and 21.⁸⁷

In assessing these conventional provisions, a foundational point for the present discussion is the view of the ICRC and many other commentators that the natural environment is a civilian object.⁸⁸ Although the categorization of the environment as an “object” could be seen as contrary to the ecocentric ethos insofar as it implies the objectification of the environment,⁸⁹ it is better

83 S. E. Nahlik, above note 22, p. 56.

84 *Ibid.*, p. 56. See also Lassa F. L. Oppenheim, *Oppenheim's International Law*, 7th ed., Vol. 2, 1952, p. 565 (“[R]eprisals instead of being a means of securing legitimate warfare may become an effective instrument of its wholesale and cynical violation in matters constituting the very basis of the law of war”).

85 Pantazopoulos notes that, from an anthropocentric viewpoint, “targeting a forest or a nature reserve, so as to induce the violating enemy State to comply with IHL is preferable to directing attacks at the civilian population with the same aim in mind”. S.-E. Pantazopoulos, above note 28, p. 49.

86 See J. Wyatt, above note 7, pp. 642–643.

87 Rome Statute, above note 59, Arts 8, 21.

88 ICRC Guidelines, above note 53, para. 18 (“It is generally recognized today that, by default, the natural environment is civilian in character”), citing ILC, *Draft Principles on the Protection of the Environment in Relation to Armed Conflicts*, 2019, Principles 13–14, pp. 250–256; Nuclear Weapons Advisory Opinion, above note 16, paras 30, 32; ICTY, *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia*, 14 June 2000, paras 15, 18; Louise Doswald-Beck (ed.), *San Remo Manual on International Law Applicable to Armed Conflicts at Sea*, Cambridge University Press, Cambridge, 1995, p. 9, para. 13(c) *et al.*

89 See Brazilian Superior Court of Justice, Recurso Especial No. 1.797.175–SP (*Wild Parrot* case), 21 March 2019, pp. 5–7, referred to in Cyrus R. Vance Center for International Justice, Earth Law Center, and International Rivers, *Rights of Rivers: A Global Survey of the Rapidly Developing Rights of Nature Jurisprudence Pertaining to Rivers*, 2020.

considered as a terminological matter aimed at reimagining existing IHL provisions in order to extend their protections to the environment. Equally, despite using the term “civilian”, this view does not restrict the “natural environment” to those areas or facets which are of use to humans. Instead, it is a broader conception that encompasses flora, fauna and natural spaces irrespective of their use to humans.

Conventional international law applicable to reprisals against the natural environment

The core of IHL comprises international treaties including the 1949 Geneva Conventions and their Additional Protocols of 1977. These instruments contain several land-based (non-naval and non-aerial, where there are no impacts on land)⁹⁰ prohibitions against reprisals that are potentially relevant to destruction of the natural environment.

Beginning with the Geneva Conventions, Article 33 of Geneva Convention IV (GC IV), which is applicable during IACs, prohibits reprisals against protected persons and their property.⁹¹ The term “property” is interpreted broadly for Article 33, including “all types of property, whether they belong to private persons or to communities or the State”.⁹² A broad interpretation has also been given to the term “property” by the *Katanga* Trial Chamber.⁹³ In line with these approaches, aspects of the environment, including those not typically conceived as property, such as wild flora and fauna and hinterlands, could qualify as property for the purposes of Article 33.⁹⁴ That qualification is problematic, as discussed below,⁹⁵ but provides a means of extending IHL protections to the environment.

Looking to the Additional Protocols, after extensive debates on the issue of reprisals,⁹⁶ the final text of AP I considerably expanded the range of reprisals that are prohibited under IHL. As noted, Article 55(2) of AP I is directly and explicitly relevant to attacks on the environment, as it provides that “[a]ttacks

90 Rules prohibiting reprisals against the natural environment, such as under AP I, do not apply to naval and air warfare unless the reprisals impact civilian objects on land: AP I, Art. 49(3). See also George Walker, *The Tanker War 1980–1988: Law and Policy*, International Law Studies No. 74, Naval War College, 2000, p. 518. The current assessment is focused on the core IHL prohibitions concerning impacts on land.

91 See GC IV, Art. 33.

92 J. Pictet (ed.), above note 72, pp. 226–227.

93 ICC, *The Prosecutor v. Germain Katanga*, Case No. ICC-01/04-01/07, Judgment Pursuant to Article 74 of the Statute (Trial Chamber II), 7 March 2014, para. 892 (describing property for the war crime under Article 8(2)(e)(xii) as “moveable or immovable, private or public [property belonging] to individuals or entities aligned with or with allegiance to a party to the conflict adverse or hostile to the perpetrator, which can be established in the light of the ethnicity or place of residence of such individuals or entities”).

94 See Daniëlla Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations*, Cambridge University Press, Cambridge, 2015, p. 217. See also JEP, above note 11, para. 523 (in which destruction of wild areas and flora and fauna is charged as the war crime of destroying enemy property).

95 See discussion of the notion of the environment as property below under the heading “Rome Statute Provisions Indirectly Applicable to Ecocentric Reprisals”.

96 See F. J. Hampson, above note 23, p. 818; S. E. Nahlik, above note 22, p. 56.

against the natural environment by way of reprisals are prohibited”. Several other prohibitions on reprisals in AP I are also potentially relevant to attacks on the natural environment, including:⁹⁷

- Article 52(1): “civilian objects shall not be the object of attack or of reprisals”.
- Article 53(c): concerning cultural objects and of places of worship, “it is prohibited: to make such objects the object of reprisals”.
- Article 54(4): concerning objects indispensable to the survival of the civilian population, “[t]hese objects shall not be made the object of reprisals”.
- Article 56(4): concerning works and installations containing dangerous forces, “[i]t is prohibited to make any of the works, installations or military objectives mentioned in paragraph 1 [dams, dykes and nuclear electrical generating stations] the object of reprisals”.

More indirectly, Article 51(6) prohibits attacks against the civilian population or civilians by way of reprisals, which is relevant when attacks against a civilian population impact the environment. Other treaty-based prohibitions against reprisals, such as Article 4(4) of the 1954 Convention for the Protection of Cultural Property, which prohibits them against both human and natural cultural property “of great importance to the cultural heritage of a people”, are potentially relevant.

Taking these provisions collectively, the natural environment is both directly protected from reprisals under AP I and indirectly protected through prohibitions on reprisals against several other types of entities. However, while this web of protection is substantively far-reaching, it is a conventional prohibition and is therefore restricted to States party to AP I,⁹⁸ which itself is directed to IACs. Accordingly, it is important to assess the status of restrictions on reprisals under customary international law, including during NIACs.

Customary international law applicable to reprisals against the natural environment

Moving from conventional to customary international law, the status of the prohibitions on reprisals varies considerably. For persons and their property falling within the protection of GC IV, the prohibition on reprisals is also reflected in customary international law.⁹⁹ Similarly, Rule 147 of the ICRC Customary Law Study indicates that the prohibitions on reprisals against objects cited in the 1949 Geneva Conventions and 1954 Hague Cultural Property

97 Note that the United Kingdom entered reservations against the prohibitions in Articles 51–55: AP I, Declarations and Reservations of United Kingdom of Great Britain and Northern Ireland, 28 January 1998. See also Julie Gaudreau, “The Reservations to the Protocols Additional to the Geneva Conventions for the Protection of War Victims”, *International Review of the Red Cross*, Vol. 85, No. 849, 2003, pp. 159–160; Y. Dinstein, above note 24, para. 1058.

98 See Marja Lehto, *Third Report on Protection of the Environment in Relation to Armed Conflicts*, UN Doc. A/CN.4/750, 16 March 2022, para. 180 (noting that France and Canada considered that the prohibition of reprisals against the natural environment is a treaty-based rule, limited to IACs).

99 Y. Dinstein, above note 24, para. 1046.

Convention have attained customary law status.¹⁰⁰ However, for persons and objects falling outside the confines of those treaties (including the environment, to the extent that it does not qualify as an object protected under those treaties), the customary picture is more complex.

On the one hand, international criminal tribunals have concluded that reprisals against civilians are prohibited in all circumstances. In the context of a NIAC, the ICC *Mbarushimana* Pre-Trial Chamber held that “reprisals against the civilian population as such, or individual civilians, are prohibited in all circumstances, regardless of the behaviour of the other party”.¹⁰¹ In *Kupreškić*, the ICTY Trial Chamber held that practices had moved on since the 1970s and that all civilians are protected against reprisals under customary international law.¹⁰² It apparently considered that the law governing reprisals applies in the same way in both IACs and NIACs, as it held that “it is not necessary ... to determine whether the armed conflict was international or internal”.¹⁰³

On the other hand, the ICTY’s reasoning in *Kupreškić* was called “unconvincing” by the United Kingdom, which argued that “the assertion that there is a prohibition in customary law flies in the face of most of the state practice that exists”.¹⁰⁴ For its part, the ICRC considers that “it is difficult to conclude that there has yet crystallized a customary rule specifically prohibiting reprisals against civilians during the conduct of hostilities” but “there appears, at a minimum, to exist a trend in favour of prohibiting such reprisals”.¹⁰⁵ This schism hints at the differing entry points to the inquiry that are taken by international courts which focus on criminalized prohibitions as opposed to IHL-centred institutions.

Of particular relevance to the natural environment are reprisals against civilian objects.¹⁰⁶ However, the customary status of reprisals against civilian objects is disputed.¹⁰⁷ Dinstein distinguishes reprisals against civilians from those directed at civilian objects, stating that “[t]he exclusion of civilian persons from the lawful scope of belligerent reprisals, spurred by basic precepts of human rights law, does not imply that every inanimate civilian object must be equally protected”.¹⁰⁸

100 Jean-Marie Henckaerts and Louise Doswald-Beck (eds), *Customary International Humanitarian Law*, Vol. 1: *Rules*, Cambridge University Press, Cambridge, 2005 (ICRC Customary Law Study), Rule 147, available at: <https://ihl-databases.icrc.org/en/customary-ihl/rules>.

101 ICC, *Prosecutor v. Callixte Mbarushimana*, Case No. ICC-01/04-01/10-465-Red, Decision on the Confirmation of Charges, 16 December 2011, para. 143. See also Michael N. Schmitt, “Ukraine Symposium – Reprisals in International Humanitarian Law”, *Lieber Blog*, 6 March 2023, available at: <https://lieber.westpoint.edu/reprisals-international-humanitarian-law/>.

102 ICTY, *Kupreškić*, above note 25, para. 529. On the approach to custom formation in *Kupreškić*, see Alexandre Galand, “Approaching Custom Identification as a Conflict Avoidance Technique: *Tadić* and *Kupreškić* Revisited”, *Leiden Journal of International Law*, Vol. 31, No. 2, 2018.

103 ICTY, *Kupreškić*, above note 25, para. 53.

104 UK Ministry of Defence, *The Manual of the Law of Armed Conflict*, 2005, para. 16.20.

105 ICRC Customary Law Study, above note 100, Rule 146.

106 On the environment as a civilian object, see above under heading “Conventional International Law Applicable to Reprisals against the Natural Environment”.

107 S.-E. Pantazopoulos, above note 28, p. 58.

108 Y. Dinstein, above note 24, para. 1059.

Turning to reprisals against the natural environment itself, the issue is contentious, but some State practice and *opinio juris*,¹⁰⁹ along with notable commentators, provides a measure of support for asserting that these are prohibited as a matter of customary law. Several countries include prohibitions on reprisals against the natural environment in their military manuals.¹¹⁰ While acknowledging the debates on this issue, Dinstein¹¹¹ and Schmitt¹¹² nonetheless consider that the collective interest of humanity in protecting the environment, as outlined above,¹¹³ justifies outlawing reprisals against it.¹¹⁴

Principle 15 of the ILC's Draft Principles on Protection of the Environment in Relation to Armed Conflicts (ILC Draft Principles) holds that reprisals against the natural environment are prohibited in all types of armed conflict.¹¹⁵ However, while Germany, Switzerland, Austria, New Zealand, Italy, the Nordic countries and the ICRC supported the text of Principle 15, they did not explicitly frame it as a customary principle.¹¹⁶ Conversely, States opposed to Principle 15, such as the United States, the United Kingdom, France and Israel (the first three of which are declared nuclear powers and the last of which reportedly has such capacity¹¹⁷), indicated that they did not consider the prohibition to reflect custom.¹¹⁸ Consequently, in its commentary to the Principle 15, the ILC concluded that "the customary nature of the prohibition of attacks against the environment by way of

109 See ICJ, *North Sea Continental Shelf Cases (Federal Republic of Germany v. Denmark; Federal Republic of Germany v. Netherlands)*, Judgment, 20 February 1969, *ICJ Reports* 1969, p. 4, para. 77 ("Not only must the acts concerned amount to a settled practice, but they must also be such, or to be carried out in such a way, as to be evidence of a belief that this practice is rendered obligatory by the existence of a rule requiring it. The need for such a belief, i.e., the existence of a subjective element, is implicit in the very notion of the *opinio juris sive necessitatis*").

110 See S.-E. Pantazopoulos, above note 28, p. 59, citing Australia, *The Manual of the Law of Armed Conflict*, 2006, para. 5.50; National Defence Canada, *The Law of Armed Conflict at the Operational and Tactical Levels*, Office of the Judge Advocate General, 13 August 2001, para. 1507.4.i; Danish Ministry of Defence and Defence Command Denmark, *Military Manual on International Law Relevant to Danish Armed Forces in International Operations*, 2016, p. 425, para. 2.16; Germany, Bundesministerium der Verteidigung, *Law of Armed Conflict Manual*, Joint Service Regulation 15/2, 2013, p. 60, para. 434; New Zealand Defence Force, *Manual of Armed Forces Law*, 2008, para. 17.10.4(e); Spain, Ministerio de Defensa, *El derecho de los conflictos armados*, Vol. 1, 2007, para. 3.3.c(5); UK Ministry of Defence, above note 104, paras 16.19.1, 16.19.2.

111 Dinstein's claim appears to be a statement of general principle rather than a specific reflection on customary international law; Y. Dinstein, above note 24, para. 1045.

112 Schmitt's statement is made in the context of discussing the Kupreskić Trial Chamber's treatment of the customary status of reprisals: see M. N. Schmitt, above note 101.

113 See discussion above under heading "Normative and Operational Facets of the Analysis".

114 See also ILC, *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, in *Yearbook of the International Law Commission*, Vol.2, Part 2, 2001, UN Doc. A/CN.4/SER.A/2001/Add. 1, para. 7 (noting that the environment is a collective interest).

115 See ILC Draft Principles, above note 53.

116 M. Lehto, above note 98, paras 179–180.

117 The use of nuclear weapons remains debated insofar as reprisals are concerned: see S.-E. Pantazopoulos, above note 28, pp. 62–63; Thibaud de La Bourdonnaye, "Greener Insurgencies? Engaging Non-State Armed Groups for the Protection of the Natural Environment during Non-International Armed Conflicts", *International Review of the Red Cross*, Vol. 102, No. 914, 2020, p. 596; Nuclear Weapons Advisory Opinion, above note 16, Dissenting Opinion of Judge Weeramantry, pp. 320–322.

118 M. Lehto, above note 98, paras 179–180. See also S.-E. Pantazopoulos, above note 28, p. 60.

reprisals is not settled”.¹¹⁹ Similarly, the ICRC’s *Guidelines on the Protection of the Environment in Times of Armed Conflict* (ICRC Guidelines) frame reprisals against the natural environment in relation to AP I, indicating that the ICRC does not consider the underlying prohibition to have customary status.¹²⁰ Consequently, while there is a reasonable basis to assert the customary status of reprisals against the natural environment, it is not established beyond all debate that the necessary requirements of showing general State practice and *opinio juris* in conformity with the rule have been met.¹²¹ This lingering ambiguity has consequent effects for the criminalization of such reprisals, as discussed below.

The challenging framework governing prohibition of reprisals in NIACs

Having examined the legal status of reprisals against the natural environment, several additional observations must be set out regarding the context of NIACs. Challenging questions arise concerning reprisals under the more “rudimentary” framework governing NIACs.¹²² Given that NIACs are the most frequent type of conflict, and given that the applicability of reprisals in this context has only been subjected to limited examination,¹²³ it is important to address the issue before examining the implications for criminal enforcement.

Reprisals are not mentioned at all in Additional Protocol II (AP II).¹²⁴ For some, this implies that reprisals are simply inapplicable to NIACs (termed the “extralegal” approach).¹²⁵ De La Bourdonnaye interprets this as prohibiting

119 ILC Draft Principles, above note 53, Principle 15, para. 3.

120 ICRC Guidelines, above note 53. See also S.-E. Pantazopoulos, above note 28, p. 61.

121 See ICJ, *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v United States)*, Judgment on Jurisdiction and Admissibility, 26 November 1984, *ICJ Reports 1984*, para. 186 (stating that “the conduct of States should, in general, be consistent with such rules, and that instances of State conduct inconsistent with a given rule should generally have been treated as breaches of that rule, not as indications of the recognition of a new rule”).

122 S.-E. Pantazopoulos, above note 28, p. 56; V. Bilková, above note 25, pp. 31, 35; Samuel V. Jones, “Has Conduct in Iraq Confirmed the Moral Inadequacy of International Humanitarian Law? Examining the Confluence between Contract Theory and the Scope of Civilian Immunity during Armed Conflict”, *Duke Journal of Comparative and International Law*, Vol. 16, No. 2, 2006, pp. 292–293.

123 V. Bilková, above note 25, pp. 32, 36; Shane Darcy, *Collective Responsibility and Accountability under International Law*, Transnational Publishers, Leiden, 2007, pp. 166–172.

124 Protocol Additional (II) to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts, 1125 UNTS 609, 8 June 1977 (entered into force 7 December 1978) (AP II). See S. E. Nahlik, above note 22, p. 64 (“However, toward the end of the fourth session of the Conference, Protocol II as a whole (for reasons that lead beyond the scope of the present study) was opposed by a comparatively strong group of delegations. After much negotiation, when it was clear that Protocol II could be saved only at the price of being considerably shortened, none of the articles that the supporters of Protocol II succeeded in saving contained any clause on reprisals under any denomination. At the most, the prohibition of ‘collective punishments’ and of ‘taking of hostages,’ listed among the ‘fundamental guarantees,’ could perhaps be considered to give the victims of non-international conflicts some minimum protection against measures comparable to reprisal”).

125 V. Bilková, above note 25, p. 35. Similarly, Schmitt, above note 101, notes: “It must be remembered that reprisal operates as a circumstance precluding the wrongfulness of an otherwise unlawful act or omission under international humanitarian law. Thus, this is not a case of needing to find State practice and *opinio juris* to establish crystallization of a *prohibition*.” See also ICRC Customary Law Study, above note 100, Rule 148, pp. 526–528 (parties to NIACs “do not have the right to resort to belligerent reprisals”).

attacks against the natural environment by way of reprisal.¹²⁶ For others, the silence on reprisals necessitates a “permissive” approach whereby parties to conflict “are free to use reprisals without any legal impediments”.¹²⁷ A third “restrictive” approach would see reprisals available in NIACs, but subject to the exacting parameters imposed on them, which are discussed above.¹²⁸

Although the extralegal approach may align with the theoretical framework of IHL,¹²⁹ when it comes to individual criminal responsibility and legal procedure before international courts, a different set of considerations arise, including the onus on the prosecution to prove its case beyond reasonable doubt, the legality principle, and the latter’s associated edict of *in dubio pro reo*, whereby ambiguity must be read in favour of the accused.¹³⁰ In this context, the extralegal approach of categorically excluding a potential legal justification will not sit well with criminal judges.

This conclusion is borne out by the fact that international courts confronted with parties claiming to have been conducting lawful reprisals have gravitated towards strictly interpreting the requirements for those reprisals’ applicability.¹³¹ For present purposes, the analysis presupposes that there is a possibility of the doctrine of reprisals being allowed in IACs and NIACs, but that it would always at minimum be limited by the usual customary requirements of purpose, last resort, proportionality, decisions at the policy level and so forth, as set out above.¹³²

Turning to reprisals against the natural environment in NIACs, the lack of any provision in AP II corresponding to Article 55(2) of AP I creates a broad scope for interpretation. As with many IHL principles, those relating to reprisals in IACs are not necessarily automatically transferable to NIACs.¹³³ Permanent sovereignty over natural resources is usually considered to vest in the State,¹³⁴ and international environment law obligations are usually considered to fall on the national government.

On this issue, Principle 15 of the ILC Draft Principles, which prohibits reprisals against the natural environment, is applicable to all types of conflicts. However, noting the legal uncertainty regarding its customary status, the ILC expressly states that “the principle is not intended to qualify or alter the scope and meaning of existing rules on reprisals under either conventional or

126 T. de La Bourdonnaye, above note 117, p. 589.

127 See V. Bílková, above note 25, p. 35.

128 See above under the heading “Elements and Etymology of Belligerent Reprisals”. See also ICRC Customary Law Study, above note 100, Rule 145 (referring to the “stringent” rules governing reprisals in IACs).

129 See V. Bílková, above note 25, pp. 59–64.

130 See, *inter alia*, Rome Statute, above note 59, Art. 22.

131 See above under the heading “Elements and Etymology of Belligerent Reprisals”.

132 See above under the heading “Elements and Etymology of Belligerent Reprisals”.

133 See David Turns, “Implementation and Compliance”, in Elizabeth Wilmshurst and Susan Breau (eds), *Perspectives on the ICRC Study on Customary International Humanitarian Law*, Cambridge University Press, Cambridge, 2007, p. 372; S.-E. Pantazopoulos, above note 28, pp. 57–58.

134 See D. Dam-de Jong, above note 94, p. 223.

customary international law”.¹³⁵ Given the foundational importance of IHL for ICL, this uncertainty regarding the customary international law status of the prohibition on reprisals in NIACs¹³⁶ is legally unsatisfactory. It could arguably manifest in judges entering a finding of *non liquet*¹³⁷ in criminal proceedings, which would undermine the justiciability and thereby the enforceability of the legal protections of the environment against individuals who order attacks causing serious ecocentric harm.

Criminalizing ecocentric reprisals: The key to enforcement

Building on the preceding foundational survey of IHL, the assessment now turns to whether the doctrine of reprisals against the natural environment may have a role in ICL. The exegesis is dual-faceted, looking at the criminalization of such reprisals *per se* as well as their relevance for prosecuting environmental harm under established Rome Statute crimes. This focus on enforcement is important. Without enforcement mechanisms, prohibitions risk lacking a significant deterrent effect and will therefore have limited, if any, influence on the decisions of individual perpetrators of attacks on the natural environment.¹³⁸ Moreover, ICL can obviate any justification for parties to engage in the horizontal self-help mechanism of reprisals,¹³⁹ and can instead induce compliance through the credible threat of “the prosecution and punishment of war crimes and crimes against humanity by national or international courts”.¹⁴⁰ By examining the criminalization of reprisals, the present study looks to open up a new avenue for enforcing environmental protections. The potential addition of a new basis for penal sanctions concerning reprisals is operationally significant. It would expand the options available for prosecuting environmental harm under ICL (currently, Article 8(2)(b)(iv) of the Rome Statute is the only direct means of doing so). Normatively, it would demonstrate how an ecocentric reconceptualization of IHL can flow into increased means of enforcing environmental protections under ICL.¹⁴¹

A prefatory issue is whether adding the label of “reprisals” to attacks on the natural environment could in fact *exclude* liability.¹⁴² While this may fly in the face

135 See ILC Draft Principles, above note 53, commentary, p. 148.

136 V. Bilková, above note 25, pp. 31–32. But see T. de La Bourdonnaye, above note 117, p. 589.

137 See Daniel Bodansky, “Non Liquet”, in *Max Planck Encyclopedia of Public International Law*, 2006.

138 See P. Kirsch, above note 52, p. 539. Other measures, such as sanctions, can also impact decision-makers, though through less direct means than criminal punishment.

139 See V. Bilková, above note 25, p. 33.

140 See ICTY, *Kupreškić*, above note 25, para. 520.

141 See above under the heading “Normative and Operational Facets of the Analysis”.

142 An argument on this basis could potentially be brought under Article 8 of the Rome Statute, when assessing whether a war crime had occurred, as discussed below in note 147. Alternatively, it could be brought under Article 31(3), which provides that “[a]t trial, the Court may consider a ground for excluding criminal responsibility other than those referred to in paragraph 1 where such a ground is derived from applicable law as set forth in article 21”, as Article 21(1)(b) refers to the “established principles of the international law of armed conflict”.

of the emphatic prohibition of such reprisals in AP I, there are non-States Parties which are arguably not bound by AP I's terms.¹⁴³ Accused persons from these States may attempt to argue that reprisals are available to excuse the unlawfulness of such attacks against the natural environment.¹⁴⁴ However, with eminent experts such as Schmitt and Dinstein arguing that reprisals against the natural environment should be prohibited in all circumstances,¹⁴⁵ and the ICC and ICTY's jurisprudence indicating a restrictive view of reprisals,¹⁴⁶ it is far from evident that the ICC would accept even the potential applicability of reprisals as a justification in this respect.¹⁴⁷ Even if reprisals against the natural environment could be raised as a potential justification, they would almost certainly be subject to the exacting conditions (last resort, proportionality and so forth) set out above. Precedents such as the *Martić* case show that an accused will struggle to fulfil these preconditions required to claim a justification of reprisals. In *Martić*, the Trial and Appeals Chambers found that Martić's claimed excuse of reprisals did not avail as (1) the shelling of Zagreb was not a measure of last resort and (2) the Republika Srpska Krajina authorities had not formally warned the Croatian authorities before shelling Zagreb.¹⁴⁸ Given that the conditions are cumulative, the likelihood of an accused successfully using reprisals as a justification for violations during armed conflict is negligible.

Do reprisals against the natural environment constitute a war crime *per se*?

The most direct basis for accountability and enforcement would arise if the prohibition on reprisals against the natural environment entailed individual criminal responsibility in and of itself.¹⁴⁹ To amount to a war crime, such reprisals would have to constitute a "serious" violation of IHL.¹⁵⁰

143 States Parties that entered reservations to the coverage of reprisals concerning the environment could also potentially propose this argument.

144 See above under the heading "Elements and Etymology of Belligerent Reprisals".

145 See above under the heading "Customary International Law Applicable to Reprisals against the Natural Environment".

146 See above under the heading "Customary International Law Applicable to Reprisals against the Natural Environment".

147 An accused may seek to introduce reprisals as a justification for violating IHL, relying on the reference to the law of armed conflict in Article 8 of the Rome Statute. Alternatively, an accused may seek to present such a justification as a defence under Article 31 of the Rome Statute. The approach at the ICTY indicates that reprisals will be assessed as a potential justification rather than a defence (see ICTY, *Martić*, above note 75, para. 263, analyzing reprisals as a "justification"), with the Court assessing whether the accused demonstrated the preconditions, without elaborating on whether the burden of proving these preconditions falls on the prosecution or the accused.

148 ICTY, *Martić*, above note 65, paras 467–468; ICTY, *Martić*, above note 75, para. 263.

149 See, e.g., ICTY, *Prosecutor v. Stanislav Galić*, Case No. IT-98–29-A, Judgment (Appeals Chamber), 30 November 2006, paras 87–95. This is the fourth *Tadić* condition: "the violation of the rule must entail, under customary or conventional law, the individual criminal responsibility of the person breaching the rule".

150 ICRC Customary Law Study, above note 100, Rule 156.

Looking to the core instruments of IHL (the Geneva Conventions and Additional Protocols), reprisals against the natural environment are not listed as grave breaches.¹⁵¹ Turning to the ICC, reprisals are not *per se* included in the Rome Statute as war crimes.¹⁵² The only war crime provision that explicitly addresses attacks on the natural environment is Article 8(2)(b)(iv), which prohibits

[i]ntentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.

There is considerable overlap with a putative crime of reprisals against the natural environment. The term “attack” lends itself to a similar interpretation in Article 8(2)(b)(iv) of the Rome Statute to that found in Article 55(2) of AP I.¹⁵³ Nonetheless, the two notions are not coterminous; specifically, Article 8(2)(b)(iv) is limited to IACs and contains the conjunctive elements of widespread, long-term and severe, as well as the need to show excessive harm,¹⁵⁴ which render it narrower and more stringent than a general prohibition on reprisals against the natural environment.¹⁵⁵

More broadly, Drumbl has argued that there is “residual jurisdiction” under Article 8 of the Rome Statute for additional war crimes, going beyond the enumerated ones.¹⁵⁶ However, this conflicts with the requirement of reading the Statute strictly, under Article 22(2), whereby “[t]he definition of a crime shall be strictly construed and shall not be extended by analogy” and “[i]n case of ambiguity, the definition shall be interpreted in favour of the person being investigated, prosecuted or convicted”.¹⁵⁷ Consequently, there is no specific basis criminalizing reprisals against the natural environment under the Rome Statute or IHL.

151 See GC IV, Art. 147; AP I, Art. 85.

152 See Rome Statute, above note 59, Art. 8.

153 Contrastingly, “attack” is used differently for crimes against humanity, as defined in Article 7(2) of the Rome Statute as a “course of conduct involving the multiple commission of acts referred to in [Article 7(1)] ... pursuant to or in furtherance of a State or organizational policy to commit such attack”. See also the discussion of William Schabas’s concerns regarding the term “attack” in the context of the *Al-Mahdi* proceedings, below under the heading “Operational Significance of Reprisals against the Natural Environment for Litigating Criminal Responsibility”.

154 See M. Drumbl, above note 60, p. 319.

155 In its 1996 Draft Code of Crimes against the Peace and Security of Mankind, the ILC included Article 20 (g), which lists the following as a war crime applicable in IAC or NIAC: “in the case of armed conflict, using methods or means of warfare not justified by military necessity with the intent to cause widespread, long-term and severe damage to the natural environment and thereby gravely prejudice the health or survival of the population and such damage occurs”. ILC, *Draft Code of Crimes against the Peace and Security of Mankind*, in *Yearbook of the International Law Commission*, Vol. 2, Part 2, 1996, p. 56. This could provide “support for the contention that there is a customary prohibition against disproportionate environmental attacks during NIACs that entails individual criminal responsibility”: M. Gillett, above note 21, p. 242.

156 Mark Drumbl, “Waging War against the World: The Need to Move from War Crimes to Environmental Crimes”, *Fordham International Law Journal*, Vol. 22, No. 1, 1998, pp. 138–139, referring to the *chapeau* of Article 8(2)(b).

157 See William Schabas, “Al Mahdi Has Been Convicted of a Crime He Did Not Commit”, *Case Western Reserve Journal of International Law*, Vol. 49, No. 1, 2017, p. 77. Schabas states that “[i]n this respect, the International Criminal Court may differ from other international criminal tribunals that have been set up on a temporary basis and where a more liberal and teleological approach to judicial

In the absence of definitive or explicit criminalization of reprisals against the natural environment under the Rome Statute or the main instruments of IHL, the analysis now turns to customary international law. Several soft-law instruments, such as the World Charter for Nature and the Rio Declaration, contain broad hortatory statements about protecting the environment from warfare, but nothing in the nature of a precise criminal prohibition.¹⁵⁸ The ILC has referred to “massive pollution of the atmosphere or of the seas” as “international crimes”,¹⁵⁹ but these broad terms are not framed with the precision of a criminal provision, and the ILC did not delve into key considerations such as individual criminal responsibility.¹⁶⁰

Article 15 of the ILC Draft Principles contains a more precise prohibition on reprisals against the natural environment. However, this cannot be used to support criminalization, as Principle 9(3) provides that “[t]he present draft principles are also without prejudice to: (a) the rules on the responsibility of non-State armed groups; (b) the rules on individual criminal responsibility”.

Based on the foregoing, it can be concluded that there is no specific war crime of committing reprisals against the natural environment, whether as a matter of conventional or customary international law.

Using other war crimes to indirectly prosecute reprisal attacks against the natural environment

In lieu of a direct war crime of attacking the environment by way of reprisal, a variety of other war crimes are nonetheless potentially applicable to this conduct.

IHL provisions indirectly applicable to ecocentric reprisals

Regarding grave breaches of IHL, reprisals against the natural environment could potentially qualify under several prohibitions contained in Article 147 of GC IV

interpretation has been adopted”, and notes that according to Judge Van den Wyngaert, “[b]y including this principle in Part III of the Statute, the drafters wanted to make sure that the Court could not engage in the kind of ‘judicial creativity’ of which other jurisdictions may at times have been suspected.”

158 UNGA Res. 37/7, 28 October 1982, Annex: World Charter for Nature, Principle 5: “Nature shall be secured against degradation caused by warfare or other hostile activities.” Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26, Vol. 1, 13 June 1992, Principle 24: “Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.”

159 ILC, *Report of the Commission to the General Assembly on the Work of Its Twenty-Eighth Session*, in *Yearbook of the International Law Commission*, Vol. 2, Part 2, 1976, UN Doc. A/CN.4/SER.A/1976/Add.I (ILC 1976 Report), pp. 95–96. See also ILC, “Chapter IV Peremptory Norms of General International Law (Jus Cogens)”, in *Report of the International Law Commission on the Work of Its Seventy-Third Session*, UN Doc. A/CN.4/L.960 + Add.1, 17 June 2022, p. 88; M. Drumbl, above note 156, p. 139. See also R. Pereira, above note 25, p. 187.

160 ILC 1976 Report, above note 159, paras 64–71. See also Jessica E. Seacor, “Environmental Terrorism: Lessons from the Oil Fires of Kuwait”, *American University Journal of International Law and Policy*, Vol. 10, No. 1, 1994, p. 523, cited in M. Drumbl, above note 156, p. 142 (examining criminal prohibitions on environmental harm and concluding that the “current international legal framework is vague and unenforceable in environmental matters”).

and Article 85 of AP I.¹⁶¹ Under Article 147, grave breaches of GC IV include extensive destruction and appropriation of “protected” property. This covers both private and public property, as set out above.¹⁶² Noting that the natural environment is considered a civilian object,¹⁶³ and that in many States components of the natural environment will be public (or private in some cases) property, any extensive destruction of the natural environment would *prima facie* violate this prohibition. Labelling the environment as property in order to justify the criminalization finds precedent in the ILC’s Draft Code of Crimes against Peace and Mankind. In that document, Article 20(g) addresses harm to the environment, but was justified as a criminal sanction by relying *inter alia* on Article 23(g) of the Hague Regulations of 1907, which focuses on the destruction or seizure of enemy property.¹⁶⁴ Under national constitutions, the environment is often characterized as the property of the State;¹⁶⁵ this also accords with the principle of permanent sovereignty.¹⁶⁶ However, labelling the environment as property is problematic from an ecocentric viewpoint,¹⁶⁷ particularly for areas such as the global commons and for areas that are traditionally home to indigenous peoples, as detailed below.¹⁶⁸

As a matter of IHL, if the natural environment is made into a military object, for example through the use of a forest as a military base or a hilltop location for launching attacks, then it would no longer qualify as a civilian object and its destruction would not qualify as a war crime under Article 147.¹⁶⁹ The fact that the acts were undertaken as reprisals could significantly expand the scope of applicable circumstances for the crime of extensive destruction; according to Dörmann, whereas extensive destruction is usually limited to

161 States are under an obligation to impose penal sanctions to punish grave breaches of these provisions: GC IV, Art. 146; AP I, Art. 85.

162 See above note 92 and accompanying text.

163 ICRC Guidelines, above note 53, para.18.

164 Noting that the wording of Art. 20(g) is based on Articles 35 and 55 of AP I, violations of which “are not characterized as a grave breach entailing individual criminal responsibility under the Protocol”, the ILC explained that it had added “three additional elements which are required for violations of the Protocol to constitute a war crime” – namely, military necessity, the specific “intent to cause widespread, long-term and severe damage to the natural environment and thereby gravely prejudice the health or survival of the population”, and the fact that such damage actually occurred as a result of the prohibited conduct.

165 See, e.g., the Constitution of Colombia, wherein Article 332 provides that the State is the owner of the subsoil and of the country’s natural, non-renewable resources without prejudice to the rights acquired and fulfilled in accordance with prior laws; and Article 63 provides that property in public use, natural parks, communal lands of ethnic groups, security zones, the archaeological resources of the nation, and other property determined by law are inalienable, imprescriptible and not subject to seizure.

166 ICJ, *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, Judgment, 19 December 2005, para. 244.

167 See M. Gillett, above note 13, p. 118.

168 See discussion on the notion of the environment as property below under the heading “Rome Statute Provisions Indirectly Applicable to Ecocentric Reprisals”.

169 William H. Boothby, *Weapons and the Law of Armed Conflict*, 2nd ed., Oxford University Press, Oxford, 2016, p. 85; S.-E. Pantazopoulos, above note 28, p. 59.

occupied territory, if the destruction is undertaken as a form of reprisal, then it is not so territorially limited.¹⁷⁰

Turning to AP I, reprisals against the natural environment would qualify as war crimes (grave breaches) if they involved:

- Article 85(3)(b): launching indiscriminate attacks on civilian objects with knowledge that the attacks would result in excessive damage to the natural environment (as a civilian object);¹⁷¹
- Article 85(3)(c): launching attacks on works or installations containing dangerous forces (such as dams or nuclear power plants) with knowledge that the attacks would result in excessive¹⁷² damage to the natural environment (whether as a civilian object or in some cases as a military objective);¹⁷³ or
- Article 85(4)(d): attacking a facet of the natural environment which is a place of worship constituting the cultural or spiritual heritage of peoples (such as natural World Heritage Sites), and to which special protection has been given by special arrangement, and causing extensive destruction to it (presuming the site had not been used in support of the military effort in the sense of Article 53(b) of AP I), whether as a civilian object or in some cases as a military objective.¹⁷⁴

On first view, these provisions criminalize a significant range of activities that cause environmental destruction, particularly in relation to attacks on dams, nuclear power plants, and places of worship constituting cultural and spiritual heritage. However, the expansive potential is somewhat limited by the requirement that, to constitute war crimes, the relevant attacks would have to be committed wilfully and cause death or serious injury to the body or health of persons.¹⁷⁵ On this

170 Knut Dörmann *et al.*, *Elements of Crimes under the Rome Statute of the International Criminal Court: Sources and Commentary*, Cambridge University Press, Cambridge, 2004, p. 83 (apparently based on the fact that Article 33 does not contain the reference to destruction by the “occupying power” which is contained in Article 53). In all circumstances, the crime under Article 8(2)(b)(iv) requires that the destruction was not justified by military necessity and was carried out unlawfully and wantonly

171 See Rome Statute, above note 59, Art. 8(2)(b)(ii) for the progeny criminal provision. There is no corresponding provision in the Rome Statute for NIACs.

172 This is defined in Article 57(2)(a)(iii) as “incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated”.

173 There is no specific progeny criminal provision under the Rome Statute for this IHL prohibition. Under Article 56 of AP I, this prohibition also covers attacks on objects which are military objectives, “if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population. Other military objectives located at or in the vicinity of these works or installations shall not be made the object of attack if such attack may cause the release of dangerous forces from the works or installations and consequent severe losses among the civilian population.”

174 See Rome Statute, above note 59, Art. 8(2)(b)(ix) and (e)(iv) for the progeny criminal provisions. However, the Rome Statute provisions are of limited, if any, relevance to the natural environment, as they are framed more narrowly than AP I’s terms (the Rome Statute refers to “[i]ntentionally directing attacks against buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not military objectives”).

175 AP I, Art. 85(3).

basis, attacks purely directed against the environment which did not cause death or serious injury would not qualify as grave breaches under AP I.

Rome Statute provisions indirectly applicable to ecocentric reprisals

Regarding ICL, the most comprehensive treaty is the Rome Statute of the ICC. Reprisals against the natural environment could fulfil the elements of a small number of war crimes in IACs under Article 8 of the Rome Statute.

As mentioned above, the only Rome Statute provision mentioning the natural environment is Article 8(2)(b)(iv), which is limited to IACs.¹⁷⁶ This provision is subject to such stringent requirements – including the conjunctive elements of widespread, long-term and severe damage, a multi-part *mens rea* test, and a proportionality assessment from the perspective of the commander – that any conviction under its terms is unlikely.¹⁷⁷ Nonetheless, as discussed below, a reprisals-type scenario opens up possible means of meeting those restrictive elements.

Additionally, some other provisions that do not mention the environment could nonetheless be used to indirectly prosecute reprisals against it. First, there is Article 8(2)(a)(iv), setting out the crime of extensive destruction and appropriation of property not justified by military necessity and carried out unlawfully and wantonly. This essentially corresponds to the grave breach under Article 147 of GC IV (as qualified by Article 33), as discussed above. Conceptualizing the environment as property would allow reprisals against nature to be prosecuted under this provision – although it would also require the commodification of the natural environment, by viewing it simply as the property of humans, which runs counter to the ecocentric animus.¹⁷⁸ A related provision is Article 8(2)(b)(xiii) on destroying or seizing the enemy's property, but this would similarly require conceptualizing the targeted environmental feature as property, which is problematic,¹⁷⁹ and qualifying it as property belonging to the opposing side,¹⁸⁰ which would potentially exclude aspects of the environment falling under the perpetrating side's ownership – a notable gap in coverage, particularly in scorched-earth-type scenarios.¹⁸¹

Second, there is Article 8(2)(b)(ii), which prohibits intentionally directing attacks against civilian objects – that is, objects which are not military objectives. On the presumption that the environment (or targeted part thereof) is civilian in nature, this is a significant basis for prosecution, albeit limited to IACs.¹⁸²

176 See above notes 154–155 and accompanying text.

177 M. Gillett, above note 13, pp. 94–114, 131.

178 Ricardo Pereira, *Environmental Criminal Liability and Enforcement in European and International Law*, Koninklijke Brill, Leiden, 2015, pp. 93–94.

179 See discussion below on the notion of the environment as property.

180 Rome Statute, above note 59, Elements of Crimes, p. 25 (element 3 of Art. 8(2)(b)(xiii)).

181 See John A. Cohan, “Modes of Warfare and Evolving Standards of Environmental Protection under the International Law of War”, *Florida Journal of International Law*, Vol. 15, No. 4, 2003, p. 500.

182 See ICRC Guidelines, above note 53, para. 315.

For NIACs, there are fewer paths to prosecution of reprisal attacks on the natural environment under the Rome Statute. The provision with the most potential applicability is Article 8(2)(e)(xii), which prohibits destroying or seizing the property of an adversary unless such destruction or seizure be imperatively demanded by the necessities of the conflict.¹⁸³

However, as mentioned above, the requirement that the target of the destruction be “property” of the adversary can be problematic for the natural environment. Many aspects of the natural environment are not considered property *per se*, most notably the global commons such as Antarctica, the high seas or outer space,¹⁸⁴ and indigenous groups may well contest Western notions of ownership over natural features of the landscape.¹⁸⁵ Categorizing the natural environment as “property” risks sending a symbolic message that runs counter to efforts to enforce eco-sensitive international law, and may create a conceptual basis for profit-seeking persons or entities to attempt to acquire property rights over these areas of the natural environment. The gains in potential prosecutorial pathways must be carefully weighed against the risk of the unintended commodification of the natural environment. Moreover, Article 8(2)(e)(xii) would not cover the destruction of components of the natural environment belonging to the perpetrator’s side as a reprisal. In this way, there is a risk that this could create an asymmetric application of the prohibition, potentially violating the IHL principle of the equal application of the law between belligerents.¹⁸⁶ Because environmental features considered as property would typically vest in the State,¹⁸⁷ the opposing forces could be covered by the crime of destroying or seizing it, whereas there would be no corresponding liability for the State’s armed forces.

Aside from those mentioned above, less directly applicable war crimes that could nonetheless potentially encompass aspects of environmental harm include pillage under Article 8(2)(b)(xvi) and (e)(v) of the Rome Statute,¹⁸⁸ and intentionally using starvation of civilians as a method of warfare under Article 8(2)(b)(xxv) for IACs and Article 8(2)(e)(xix) for NIACs.

In sum, while there is some promise in pursuing the indirect route to prosecuting reprisals against nature under other war crimes, each crime brings

183 See K. Dörmann *et al.*, above note 170, p. 145 (noting that Article 8(2)(e)(xii) is derived to a large extent from Article 23(g) of the Hague Regulations and that the Hague Regulations do not apply explicitly to NIACs. Given that AP II also does not contain a prohibition on directing attacks against civilian objects, there is no explicit treaty reference for this offence in IACs; however, the general protection in Article 13(1) of AP II may be broad enough to encompass it). See, further, ICRC Customary Law Study, above note 100, p. 27, citing Michael Bothe, Karl Joseph Partsch and Waldemar A. Solf (eds), *New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949*, Martinus Nijhoff, The Hague, 1982, p. 677.

184 M. Drumbl, above note 156, p. 141; R. Pereira, above note 178, pp. 93–94; M. Gillett, above note 13, p. 118–121, 233.

185 See JEP, above note 11, Concurring Opinion of Judge Belkis.

186 Adam Roberts, “The Equal Application of the Laws of War: A Principle under Pressure”, *International Review of the Red Cross*, Vol. 90, No. 872, 2008, p. 932.

187 D. Dam-de Jong, above note 94, pp. 223–224.

188 Though this has a highly circumscribed definition under the Rome Statute and makes for an awkward fit with environmental destruction: M. Gillett, above note 13, pp. 117–119.

with its specific elements that will require proof to the requisite standard. Enforcement via these alternative prohibitions is imperfect, because the specific harmful conduct of conducting reprisals against the natural environment will not be the *raison d'être* underlying the criminal provision. Moreover, several of these routes will require the environment to be conceptualized as property, which has provoked concerns of expropriation of land rights, particularly from the indigenous perspective. Nonetheless, while imperfect, the use of alternative provisions does provide viable legal means to redress situations of reprisals against the natural environment, which is particularly important during times of armed conflict. To fulfil these legal avenues, facts and evidence will be the necessary sustenance. In this respect, the factual scenario of reprisal attacks will present several uniquely significant factors for litigation strategies, as is explored in the following section.

Operational significance of reprisals against the natural environment for litigating criminal responsibility

Having conducted the survey of the doctrinal basis for prosecuting reprisals against the natural environment, the examination now turns to the operational significance of the scenario of reprisals for prosecutions of environmental harm under existing international crimes. Applying the reprisals scenario to the framework of ICL, with a particular focus on the natural environment, produces several conclusions of relevance to prosecuting this type of harm.

First, because the environment is presumptively a civilian object,¹⁸⁹ there is a clear path to prosecute its destruction under the label of directing attacks against civilian objects, for example under Article 8(2)(b)(ii) of the Rome Statute or Article 85(3)(b) of AP I. In fact, it may be more feasible to prosecute reprisal attacks on the natural environment in this way than attacks on other types of civilian objects, such as houses or vehicles. This is because there is a stronger basis to argue that reprisal attacks on the natural environment are banned as a matter of custom than there is for reprisals against more traditional civilian objects.¹⁹⁰ Prosecuting a reprisal against the natural environment under the label of deliberate attacks on civilian objects avoids the potentially insurmountable challenge of meeting the triple conjunctive requirements of widespread, long-term and severe harm to the natural environment under Article 8(2)(b)(iv) of the Rome Statute.¹⁹¹

Second, the inherently intentional facet of reprisals bears far-reaching implications for prosecuting attacks on the environment. In asserting an IHL justification under the doctrine of reprisals, an accused would have to admit to purposefully targeting the natural environment. Indeed, if the act was not

¹⁸⁹ See above note 14 and accompanying text.

¹⁹⁰ See above referring to Schmitt and Dinstein's argument that reprisals against the natural environment should not be permitted. M. N. Schmitt, above note 101; Y. Dinstein, above note 24; S.-E. Pantazopoulos, above note 28.

¹⁹¹ Y. Dinstein, above note 24, para. 832.

undertaken as an intentional means of forcing the opposing side to desist from its own violations, it will not qualify as a reprisal.¹⁹² For criminalization, intentionality is always a significant factor, and is often the most difficult to prove. Defendants in environmental harm cases will typically deny any intent to cause ecocentric harm and will instead argue that the harm was an unfortunate incidental outcome of their actions, perhaps not even foreseen at all.¹⁹³ Acknowledging intentional action would be a risky tactic for the accused, as it would considerably alleviate the prosecution's burden of demonstrating that the targeting was intentional. This *mens rea* issue is typically one of the most difficult elements to establish, particularly in shelling and bombardment cases.¹⁹⁴ Acknowledging that the attacks were purposefully directed against a non-military target, such as the natural environment, would also open up a clear path to prosecuting for the war crime of intentionally directing attacks against civilian objects under Article 8(2)(b)(iv) of the Rome Statute.¹⁹⁵

Third, to the extent that reprisal attacks against the natural environment are strictly prohibited, this can be seen as effectively obviating the exacting "excessive" harm assessment of Article 8(2)(b)(iv).¹⁹⁶ The "excessive" harm assessment requires the weighing of the "damage to the natural environment" against the "concrete and direct overall military advantage anticipated". However, impermissible conduct, such as reprisals against the natural environment, cannot be included as part of the permissible military advantage for this test, as that would undermine the carefully crafted prohibitions set out under IHL. Similarly, the commander seeking to justify the military advantage sought could not argue that destroying cultural sites, or killing prisoners, could provide a concrete and direct military advantage; consequently, there is no permissible "military advantage" being sought. In the same way, if reprisal attacks against the natural environment are strictly prohibited, this would also be relevant to prosecutions based on Article 85(3)(b) and (c) of AP I, potentially in domestic criminal proceedings, as these provisions also refer to an "excessive" harm assessment.

On a similar basis, reprisals against the natural environment also cannot be countenanced as justifiable pursuant to military necessity. Reprisals are only

192 See above under the heading "Elements and etymology of belligerent reprisals".

193 See Adam Branch and Liana Minkova, "Ecocide, the Anthropocene, and the International Criminal Court", *Ethics and International Affairs*, Vol. 37, No. 1, 2023, pp. 53–54.

194 See, in the context of targeting civilians and civilian objects, ICTY, *Prosecutor v. Ante Gotovina and Mladen Markac*, Case No. IT-06-90-A, Judgment (Appeals Chamber), 16 November 2012, paras 24, 65–67, 83–84 (noting that "the touchstone of the Trial Chamber's analysis concerning the existence of a [joint criminal enterprise] was its conclusion that unlawful artillery attacks targeted civilians and civilian objects" and overturning the unlawful targeting and joint criminal enterprise findings).

195 See M. Drumbl, above note 60, pp. 321–322. See also Y. Dinstein, above note 24, para. 830 (Dinstein notes in relation to the disparity between the prohibitions on launching attacks against the natural environment in AP I and Article 8(2)(b)(iv) of the Rome Statute that "only a person acting with both knowledge and intent would have the necessary *mens rea* exposing him to penal sanctions").

196 Y. Dinstein, above note 24, para. 803, citing Carson Thomas, "Advancing the Legal Protection of the Environment in Relation to Armed Conflict: Protocol I's Threshold of Impermissible Environmental Damage and Alternatives", *Nordic Journal of International Law*, Vol. 83, No. 1, 2013. This excessive harm assessment must be differentiated from the proportionality assessment conducted to test whether an action constitutes a legitimate reprisal. Y. Dinstein, above note 24, para. 1053.

applicable to the natural environment if it is not being used for military purposes (if the environment were attacked because of its use as a military objective – for instance, if a cave complex were used as a weapons depot and military base – this would not be a reprisal, as it would not be an unlawful act under IHL, which is an inherent requirement to qualify as a reprisal).¹⁹⁷ This is significant for the IAC crime of extensive destruction and appropriation of property not justified by military necessity and carried out unlawfully and wantonly¹⁹⁸ and the NIAC crime of destroying or seizing the property of an adversary unless such destruction or seizure be imperatively demanded by the necessities of the conflict.¹⁹⁹

A fourth way in which the reprisals scenario would impact criminal prosecution arises from the leadership requirement. As noted, a decision to launch reprisal attacks must be taken at the “highest political or military level”.²⁰⁰ This requirement, which equates to the leadership element of the crime of aggression,²⁰¹ is an important factor for harms such as aggression and environmental harm, which are primarily produced by policies and strategic decisions, rather than by individual actors at the foot soldier level.²⁰² It would satisfy the leadership clause which has been suggested for possible inclusion in a proposed definition of ecocide.²⁰³ Additionally, this factor may be taken into account as weighing in favour of selecting a case according to the ICC Office of the Prosecutor’s policy of focusing on those most responsible for crimes within the Court’s remit.²⁰⁴

The requirement that authorizations for reprisals are given by the political or military leadership, as set out above,²⁰⁵ will also assist when demonstrating the mental element required to prove criminal responsibility for environmental destruction. By specifically requiring authorization from the leadership, the framework of reprisals addresses situations in which decision-makers have been made aware of the nature of the targeted entity rather than situations in which the attack has been undertaken by errant soldiers acting outside of the chain of command. Although the mental element will still be contested in litigation, and the extent of the awareness of environmental impacts will depend on the facts of specific cases, this concentration of information in the hands of decision-makers will considerably advance efforts to establish that awareness in order to prove criminal responsibility of the members of the military or political leadership who order reprisal strikes on the environment.

197 See above under the heading “Elements and Etymology of Belligerent Reprisals”.

198 Rome Statute, above note 59, Art. 8(2)(a)(iv).

199 *Ibid.*, Art. 8(2)(b)(xii).

200 ICTY, *Martić*, above note 65, para. 467.

201 Rome Statute, above note 59, Art. 8*bis*(1).

202 Matthew Gillett, “The Anatomy of an International Crime: Aggression at the International Criminal Court”, *International Criminal Law Review*, Vol. 13, No. 4, 2013, p. 860.

203 M. Gillett, above note 13, pp. 326, 353.

204 ICC Office of the Prosecutor, above note 27, para. 43 (although the policy states that the “notion of the most responsible does not necessarily equate with the de jure hierarchical status”, this has traditionally been a factor weighing in favour of proceeding with a case).

205 See above under the heading “Elements and Etymology of Belligerent Reprisals”.

Although the preceding analysis has shown four ways in which reprisals can be relevant to prosecuting environmental harm under ICL, an interpretive issue arises in relation to the term “attack” in Article 55(2) of AP I.²⁰⁶ Does this mean that harm to the environment through acts like deforestation, land clearing and animal species eradication would be excluded from Article 55(2) if these acts were not considered attacks? It is questionable whether these forms of ostensibly non-military harm would amount to attacks. Under Article 49(1), “attacks” are defined as “acts of violence against the adversary, whether in offence or in defence”.²⁰⁷ Concerning the conviction under Article 8(2)(e)(iv) against Al-Mahdi for the crime of “[i]ntentionally directing attacks against buildings dedicated to religion, education, art, science or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not military objectives”, Bill Schabas has argued that

the term “attack” [in the context of IHL] is not the word that would be used to describe the demolition or destruction of structures, using implements that are not weapons or military in nature, and where armed adversaries are not to be found within hundreds of kilometres.²⁰⁸

Similar objections may arise if the label of attacks on the natural environment is applied to non-military-type environmental harm, such as the dismantling of environmental protections like nuclear power plant or hydroelectric dam safety measures, as has reportedly been seen in the Ukraine context.²⁰⁹ Whether such conduct may be considered an “attack” would be subject to dispute if litigated as a form of IHL-based crime against the environment. The issue further highlights that this potentially impactful area of law remains contentious and will necessitate close judicial attention in future legal proceedings, an endeavour which the present article seeks to assist.

Conclusions: Criminalizing reprisals as a means to avoid escalatory spirals of ecocentric and anthropocentric harm

The scenario of attacks in reprisal against the natural environment brings into sharp focus the divergences between IHL and ICL. Whereas such reprisals are categorically prohibited under Article 55(2) of AP I, that emphatic statement has not been carried through to the criminalization of this conduct. There is no grave breaches or war crimes provision explicitly outlawing reprisals against the natural environment. The lack of an explicit crime in this respect means that the IHL prohibition is

206 See Michael N. Schmitt, “Rewired Warfare: Rethinking the Law of Cyber Attack”, *International Review of the Red Cross*, Vol. 96, No. 893, 2014, pp. 193–195.

207 See also *ibid.*, p. 194 (stating that “attacks” encompass “acts having violent consequences, in addition to those that are violent in the kinetic sense”).

208 W. Schabas, above note 157, p. 78. See also the recent judgment of the ICC Appeals Chamber in the *Ntaganda* case, which also interpreted the term “attack” narrowly in the context of Article 8.

209 See above under the heading “Introduction”.

addressed only to States and other belligerent parties, and lacks direct enforceability against individuals who order attacks on the environment as measures of reprisal.

Despite the lack of a direct criminal sanction, the preceding analysis demonstrates that scenarios involving purposeful reprisal attacks have considerable significance for the prosecution of environmental harm. In particular, this form of reprisals scenario opens up clear paths to prosecute environmental harm via other provisions under the Rome Statute (and potentially under other grave breaches in AP I and GC IV), it obviates the restrictive “excessive” damage test and military necessity test, and the leadership requirement may be a factor in case selection and in prosecuting environmental harm under a putative definition of ecocide should that be adopted before the ICC or any other criminal court. Moreover, asymmetry persists in relation to NIACs, in which there is no crime of attacking civilian objects *per se*; instead, the crime of destroying enemy property under Article 8(2)(e)(xii) of the Rome Statute is the most applicable alternative, but that creates several incongruities in relation to the natural environment.²¹⁰ The practical implications of these doctrinal points of analysis are important, as they address core obstacles to prosecuting environmental harm under ICL, and potentially provide a basis for reparations to be ordered, which could include environmental remediation.

Moreover, the analysis involves a significant reinterpretation of the normative framework governing conduct in armed conflict. By reconceptualizing reprisals from their traditionally anthropocentric grounding to a more ecocentric orientation, the approach herein departs from the conventional understanding that reprisals are a means of excusing accountability for violations of IHL (as a utilitarian means of seeking to end greater violations of IHL). In doing so, it provides a framework within which to realize the significant latent potential of reprisals to protect the environment. However, this “greening” of the normative basis of reprisals does not seek to undermine the core tenets of IHL and ICL, most importantly the protection of human life from unnecessary suffering and death. Rather, it seeks to ensure that the laudable shift in the conceptualization of IHL and ICL from a State-sovereignty-oriented approach to a human-centred approach (the principle of *hominum causa omne jus constitutum est* – all law is created for the benefit of human beings) progresses to recognizing the imperative value of protecting nature and human beings (in accordance with the emerging principle of *natura et hominum causa omne jus constitutum sunt* – all law is created for the benefit of human beings and the natural environment).²¹¹

These practical and normative considerations show that any element of reprisal inherent in an attack on the natural environment should be given close attention and thoroughly investigated. It should certainly not be shied away from due to a misplaced concern that reprisals against the natural environment are likely to be seen as justified under IHL. To the contrary, the tenor and detail of

210 See above under the heading “Rome Statute Provisions Indirectly Applicable to Ecocentric Reprisals”. See also T. de La Bourdonnaye, above note 126, pp. 590–591.

211 See M. Gillett, above note 13, p. 354.

IHL provides a strong indication that the opposite would be true, particularly to the extent that an accused acknowledges the intentionality of an attack on the environment.

At the same time, the analysis shows that critical questions persist regarding the difference, if any, between a military “attack” on the environment, on the one hand, and harm to or destruction of the environment during an armed conflict, on the other, and the relevance of incidental harm to the environment arising from reprisal attacks. The imperative to address these questions is pressing.²¹² There has been a discernible shift away from horizontal *ad hoc* enforcement of international law through unilateral State actions and towards the vertical enforcement of law according to commonly accepted red lines such as war crimes, crimes against humanity, genocide and aggression.²¹³ These efforts continue to cement reliance on atrocity crimes prosecutions rather than unilateral reprisals, and can reduce the core risk of reprisals – namely, the prospect of “escalatory spirals” that act to the detriment of the life and health of humans and the planet.²¹⁴

212 Thilo Marauhn, “Environmental Damage in Times of Armed Conflict – Not ‘Really’ a Matter of Criminal Responsibility”, *International Review of the Red Cross* Vol. 82, No. 840, 2000, p. 1036 (“[A]s long as ambiguities remain, environmental damage in times of armed conflict will not ‘really’ be a matter of criminal responsibility, and the general rule will remain deprived of the deterrent effect of criminal law provisions”).

213 V. Bílková, above note 25, pp. 33–34; S.-E. Pantazopoulos, above note 28, p. 66.

214 See S. E. Nahlik, above note 22, p. 56.