

Perspectives for a New International Crime Against the Environment: International Criminal Responsibility for Environmental Degradation under the Rome Statute

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Abstract

This article draws attention to the need of a reform of the environmental protection by means of international criminal law as enshrined in the Rome Statute of the International Criminal Court. After giving a short overview of the contemporary environmental protection in war- and peacetime offered by international criminal law, it becomes clear that international criminal law fails to succeed at offering sufficient environmental protection. This paper outlines that there is no convincing reason for a differentiated approach in international criminal law to environmental damage in wartime and in peacetime, and that a shift from an anthropocentric to an ecocentric approach would positively contribute to a more effective protection of the environment. It is therefore argued for the introduction of a new integral and ecocentric international crime against the environment in the Rome Statute. The paper then elaborates on existing proposals on such a new crime against the environment before some proper observations on the exact contours of the crime are made. A focus lies on the new crime's threshold of seriousness as well as on the necessary mens rea requirements. The insufficiency of the contemporary legal framework and the merits of a new crime against the environment are exemplified by an archetype example of peacetime environmental damage, the Chevron/Texaco oil spill scenario in Ecuador.

A. Introduction

The Preamble of the Rome Statute of the International Criminal Court [Rome Statute] enshrines that the International Criminal Court [ICC] has jurisdiction over “[...] *the most serious crimes of concern to the international community as a whole* [...]”.¹ So far, these crimes include genocide, crimes against humanity, war crimes and the crime of aggression. Other crimes had however been considered during the drafting process of the Rome Statute, *inter alia* the “[w]ilful and severe damage to the environment”.²

Although this crime did ultimately not find its way into the Rome Statute, modern times demonstrate that the environment, representing the “[...] *living space, the quality of life and the very health of human beings, including generations unborn*”,³ is threatened on a daily basis. Such threats occur both in the context of armed conflicts,⁴ and in peacetime constellations. Peacetime threats to the environment can *inter alia* be large amounts of carbon dioxide emissions, deforestation, contamination of natural resources by pollution or the unsustainable extraction of natural resources.⁵ Particularly, environmental crimes became an imminent threat not only to wildlife but to whole ecosystems,⁶ and consequently to peace and security of humankind.⁷

Individuals and corporations thereby massively contribute to the endangerment of the environment. It thus becomes a legitimate question whether

¹ *Rome Statute of the International Criminal Court*, 17 July 1998, Preamble, 2187 UNTS 3 (emphasis added) [Rome Statute].

² *Report of the ILC on the work of its 47th session*, UN Doc A/50/10, 21 July 1995, Art. 26, paras 119-121 (emphasis added).

³ *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, ICJ Reports 1996, 226, para. 29 (emphasis added) [Nuclear Weapons Advisory Opinion].

⁴ ICRC, ‘Natural environment: Neglected victim of armed conflict’ (2019), available at <https://www.icrc.org/en/document/natural-environment-neglected-victim-armed-conflict> (last visited 10 February 2021); G. Bartolini & M. Pertile, ‘The work of the ILC on the environment and armed conflicts: Enhancing protection for the ‘silent victim of warfare’?’, 34 *Questions of International Law* (2016), 1.

⁵ P. Higgins, D. Short & N. South, ‘Protecting the planet: a proposal for a law of ecocide’, 59 *Crime, Law and Social Change* (2013) 3, 251, 252-254.

⁶ C. Nellemann et al., *The Rise of Environmental Crime – A Growing Threat To Natural Resources, Peace, Development And Security, A UNEP-INTERPOL Rapid Response Assessment* (2016), 17.

⁷ INTERPOL-UNEP, *Strategic Report: Environment, Peace and Security – A Convergence of Threats* (2016).

international criminal law⁸ might contribute to protection of the environment. This interconnection was acknowledged by the Office of the Prosecutor [OTP] of the ICC in a policy paper on the case selection and prioritization in 2016, in which it announced to “[...] give particular consideration to prosecuting Rome Statute 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”.⁹ This Policy Paper was not able to establish new jurisdictional grounds for the ICC,¹⁰ but only addressed the criteria the Prosecutor would take into consideration in its future case selection while prosecuting the already existing Rome Statute crimes.¹¹

While the Policy Paper raises hopes for a more efficient environmental protection via the methods of international criminal law, there have only been a few instances, in which environmental issues had been taken into account during international criminal investigations,¹² and no cases of prioritized prosecution of environmental damages under the Rome Statute have become public.¹³ Two examples addressing environmental concerns are the alleged land grabbing

⁸ This term is understood to mean “[...] the body of international law governing the criminal responsibility of individuals for crimes under international law”, A. Mistura, ‘Is There Space for Environmental Crimes Under International Criminal Law?’, 43 *Columbia Journal of Environmental Law* (2018) 1, 181, 188.

⁹ OTP, *Policy Paper on Case Selection and Prioritisation* (2016), available at https://www.icc-cpi.int/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf (last visited 10 February 2021), para. 41 (emphasis added) [OTP Policy Paper].

¹⁰ R. Pereira, ‘After the ICC Office of the Prosecutor’s 2016 Policy Paper on Case Selection and Prioritisation – Towards an International Crime of Ecocide?’, 31 *Criminal Law Forum* (2020) 2, 179, 208; On the impact of the Policy Paper on the ICC’s jurisdiction, see in detail Mistura, *supra* note 8, 215-220.

¹¹ See on this Policy Paper: L. Prosperi & J. Terrosi, ‘Embracing the “Human Factor”, Is There New Impetus at the ICC for Conceiving and Prioritizing Intentional Environmental Harms as Crimes Against Humanity?’, 15 *Journal of International Criminal Justice* (2017) 3, 509, 514-516; P. Patel, ‘Expanding Past Genocide, Crimes Against Humanity, and War Crimes’, 14 *Loyola University Chicago International Law Review* (2016-2017), 175, 191-192; Pereira, *supra* note 10, 179.

¹² See examples in Prosperi & Terrosi, *supra* note 11, 511-512 (notes 7-8 with references to situations in Honduras and the Democratic Republic of the Congo). In its second decision on an Arrest Warrant for *Omar Al Bashir*, the Pre-Trial Chamber [PTC] agreed with the Prosecutor’s Application regarding the contamination of wells in the context of the crime of genocide: *Situation in Darfur, Sudan in the case of the Prosecutor v. Omar Hassan Ahmad Al Bashir*, Second Decision on the Prosecution’s Application for a Warrant of Arrest, ICC-02/05-01/09 (Pre-Trial Chamber I), 12 July 2010, paras 36-38.

¹³ This could also be a consequence of the preliminary examination’s confidentiality, Prosperi & Terrosi, *supra* note 11, 512.

resulting from environmental degradation in Cambodia,¹⁴ as well as the more recent submission of a file by Palestinian Human Rights Organizations claiming *inter alia* crimes of “[...] [p]illage, [a]ppropriation and [d]estruction of Palestinian [n]atural [r]esources”.¹⁵ So far, the OTP did neither seem to have declined these requests nor to have opened preliminary examinations on their account.¹⁶

Faced with the increasing dangers to the environment, independent from a wartime context,¹⁷ and with insufficient tools to enforce environmental protection within international criminal law, this paper seeks to contribute to the existing discourse by arguing that it is necessary to consider an integral environmental protection by the means of international criminal law. The focus of the paper thereby lies within international criminal law as laid down in the Rome Statute of the International Criminal Court but does not address international criminal law in its entirety.

It does so by, first, examining the contemporary framework of international criminal law addressing the environment (B). In the following, it argues for an integral and ecocentric approach to the prosecution of environmental crimes

¹⁴ The Commission of Crimes Against Humanity in Cambodia, ‘Communication Under Article 15 of the Rome Statute of the ICC, July 2002 to Present’ (2014), available at https://www.fidh.org/IMG/pdf/executive_summary-2.pdf (last visited 10 February 2021); Prosperi & Terrosi, *supra* note 11, 512 (note 10 with further references); P. Patel, *supra* note 11, 194-195; R. Rogers, ‘ICL and Environmental Protection Symposium: The Environmental Crisis—Cases for ‘Particular Consideration’ at the ICC’, *Opinio Juris* (2020), available at <http://opiniojuris.org/2020/06/01/icl-and-environmental-protection-symposium-the-environmental-crisis-cases-for-particular-consideration-at-the-icc/> (last visited 10 February 2021); J. Durney, ‘Crafting a Standard: Environmental Crimes Against Humanity Under the International Criminal Court’, 24 *Hastings Environmental Law Journal* (2018) 2, 413, 426-429; M. Sarliève, ‘Can criminal courts help save the environment?’, *Justice Info* (2018), available at <https://www.justiceinfo.net/en/justiceinfo-comment-and-debate/opinion/39189-can-criminal-courts-help-save-the-environment.html> (last visited 10 February 2021).

¹⁵ Al-Haq Organisation, ‘Palestinian Human Rights Organisations Submit File to ICC Prosecutor: Investigate and Prosecute Pillage, Appropriation and Destruction of Palestinian Natural Resources’ (2018), available at <http://www.alhaq.org/advocacy/6144.html> (last visited 10 February 2021) (emphasis added).

¹⁶ With regard to a request to investigate on the situation in Ecuador, see Request to the OTP of the ICC from the Legal Representatives of the Victims, P. F. Mendoza & E. B. Toledo, ‘Communication: Situation in Ecuador’ (2014), available at <https://chevrontoxico.com/assets/docs/2014-icc-complaint.pdf> (last visited 10 February 2021); OTP, Letter to R. Doak Bishop, Chevron’s lawyer (2015), available at <http://freebeacon.com/wp-content/uploads/2015/04/ICC-letter.pdf> (last visited 10 February 2021). For more detail, see *infra* notes 31-32.

¹⁷ INTERPOL-UNEP, *supra* note 7, 4.

under international criminal law (C). In the subsequent part, an outline of possible perspectives for a new crime against the environment, often named *crime of ecocide*, will be given (D). Beginning with an elaboration on existing proposals, this paper then provides observation on the substantive contours of a crime of ecocide.

In order to exemplify the existing practical relevance for a new environmental international crime as well as the lacuna it would address, archetypes of peacetime environmental harm can serve as illustration.¹⁸ Incidents of peacetime environmental harm are numerous. To provide but a few examples for such peacetime threats: several pig-iron producers illegally deforested at least 105 square miles of the world's largest rainforest in Brazil,¹⁹ immense amounts of fracking waste had been dumped in the *Vaca Muerta* shale play in Argentina by multinational oil companies²⁰ and millions of cubic meters of mine tailings were released into the *Doce River* in Brazil due to a failure of the Mariana Dam.²¹

The Chevron/Texaco oil spill scenario in Ecuador²² constitutes another prominent incident and is taken as a case example of industrial pollution in this paper. From 1964 to 1993, the oil company Texaco, later acquired by Chevron,²³ explored and exploited the *Lago Agrio* region in Ecuador for oil. For more than

¹⁸ See for different key archetypes of environmental harm: Prosperi & Terrosi, *supra* note 11, 512-514; Higgins, Short & South, *supra* note 5, 252-254.

¹⁹ L. Coimbra & P. Murphy, 'Vale halts dealings with company over deforestation', Reuters (2011), available at <https://www.reuters.com/article/us-vale-amazon-idUSTRE7AN1SR20111124> (last visited 11 February 2021); see also on illegal deforestation in Brazil by a steel company: Climate Change Litigation Databases, *Federal Environmental Agency (IBAMA) v. Siderúrgica São Luiz Ltd. and Martins* (2019), available at <http://climatecasechart.com/non-us-case/federal-environmental-agency-ibama-v-siderurgica-sao-luiz-ltda-and-martins/?cn-reloaded=1> (last visited 11 February 2021).

²⁰ J. Raine, 'Argentina: toxic waste from fracking in Patagonia', Latin American Bureau (2019), available at <https://lab.org.uk/argentina-toxic-waste-from-fracking-in-patagonia/> (last visited 11 February 2021); see also on a criminal complaint: Climate Change Litigation Databases, *Mapuche Confederation of Neuquén v. YPF et al.* (2018), available at <http://climatecasechart.com/non-us-case/mapuche-confederation-of-neuquen-v-ypf-et-al/> (last visited 11 February 2021).

²¹ D. Philipps & D. Brasileiro, 'Brazil dam disaster: firm knew of potential impact months in advance', The Guardian (2018), available at <https://www.theguardian.com/world/2018/feb/28/brazil-dam-collapse-samarco-fundao-mining> (last visited 11 February 2021).

²² For an overview of the legal proceedings: Business & Human Rights Resource Centre, 'Summary profile: Texaco/Chevron lawsuits (re Ecuador)' (2003), available at <https://www.business-humanrights.org/en/latest-news/texacochevron-lawsuits-re-ecuador-1> (last visited 7 April 2021).

²³ From here on, referred to as "Chevron".

twenty years, Chevron had *inter alia* discharged formation water, drilling waste and produced water in unlined pits which thereby got into the environment.²⁴ These *by-products* of oil production contain ecologically harmful contents like “[...] leftover oil, metals, and water with high levels of benzene, chromium-6, and mercury”.²⁵ Each day, 3,2 million gallons of this toxic waste were deliberately dumped into the environment.²⁶ Chevron’s practices resulted, amongst others, in the following environmental degradation: soils in the region were polluted, the vegetation had been negatively impacted, innumerable rivers were contaminated, the source of drinking water was reduced, and fishing was rendered impossible.²⁷ Additionally, huge plumes of black smoke from burning of oil and waste entered the ozone layer and further noxious gases were released into the atmosphere.²⁸ Furthermore, the livelihood of the people was deeply affected by Chevron’s practices, as rates of deadly, digestive and respiratory diseases, miscarriages and skin disorders increased.²⁹ Two of the indigenous peoples inhabiting the region became extinct, whereas the other four are fighting to survive.³⁰

This summary of facts does not claim to be exhaustive, but it is sufficient for the analysis undertaken in this paper. The Chevron/Texaco incident constitutes an illustrative example of the existing lacuna of international criminal law in that it concerns heavy impacts on the natural environment by a private company’s activities without adequate legal accountability. Further, it is particularly interesting since a group of plaintiffs had requested the ICC in 2014

²⁴ J. Kimerling, ‘The Environmental Audit of Texaco’s Amazon Oil Fields: Environmental Justice or Business as Usual’, 7 *Harvard Human Rights Journal* (1994), 199, 204-205; A. Crasson, ‘The Case of Chevron in Ecuador: The Need for an International Crime against the Environment’, 9 *Amsterdam Law Forum* (2017) 3, 29, 30-32; S. Patel, ‘Delayed Justice: A Case Study of Texaco and the Republic of Ecuador’s Operations, Harms, and Possible Redress in the Ecuadorian Amazon’, 26 *Tulane Environmental Law Journal* (2012) 1, 71, 78.

²⁵ Patel, *supra* note 24, 78 (emphasis added).

²⁶ *Ibid.*, 79; Kimerling, *supra* note 24, 204-205.

²⁷ Crasson, *supra* note 24, 31; Amazon Defense Coalition, ‘Summary of Overwhelming Evidence against Chevron in Ecuador Trial’ (2012), available at <https://chevrontoxico.com/assets/docs/2012-01-evidence-summary.pdf> (last visited 11 February 2021); Environmental Justice Organizations, Liabilities and Trade, ‘The Texaco-Chevron Case in Ecuador’ (2015), available at <http://www.ejolt.org/wordpress/wp-content/uploads/2015/08/FS-42.pdf> (last visited 11 February 2021).

²⁸ *Ibid.*

²⁹ Crasson, *supra* note 24, 31; see also Kimerling, *supra* note 24, 206.

³⁰ Crasson, *supra* note 24, 31-32; Kimerling, *supra* note 24, 206-207.

to open investigations regarding the situation in Ecuador,³¹ which was rejected by the OTP.³² The following legal observations (in Parts B and D) will therefore be measured against their applicability in the outlined Chevron/Texaco oil spill case.

B. Contemporary International Criminal Law Protection of the Environment

To start with, it is necessary to examine the extent that international criminal law currently allows for the prosecution of crimes impacting the environment. Since the potential of international criminal law to address environmental damage in war- and peacetime has already been analyzed in a number of publications,³³ this paper will only give a short overview of the historical development of environmental crimes (I) and the current regime of wartime (II) and peacetime (III) protection of the environment.

I. Historical Development

First proposals to include a crime against the environment into international criminal law were made in the 1970s, in response to the massive environmental

³¹ Request to the OTP of the ICC from the Legal Representatives of the Victims, *supra* note 16.

³² Letter from the OTP to R. Doak Bishop, Chevron's lawyer, *supra* note 16. The Prosecutor of the ICC rejected the Lago Agrio's victims argument concerning the temporal jurisdiction of the ICC, see C. Lambert, 'Environmental Destruction in Ecuador: Crimes Against Humanity under the Rome Statute?', 30 *Leiden Journal of International Law* (2017) 707, 712-713.

³³ For wartime protection, e.g. ILC, *Protection of the environment in relation to armed conflicts, Text and titles of the draft principles provisionally adopted by the Drafting Committee on first reading*, UN Doc A/CN.4/L.937, 6 June 2019; T. Smith, 'Creating a Framework for the Prosecution of Environmental Crimes in International Criminal Law', in W. A. Schabas, Y. McDermott & N. HaHayes (eds), *The Ashgate Research Companion to International Criminal Law* (2013), 45, 52-57; M. A. Drumbl, 'Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes', 22 *Fordham International Law Review* (1998) 1, 122, 145; J. C. Lawrence & K. J. Heller, 'The First Ecocentric Environmental War Crime: The Limits of Article 8(2)(b)(iv) of the Rome Statute', 20 *Georgetown International Environmental Law Review* (2007) 1, 61, 95. For peacetime protection, e.g. Proserpi & Terrosi, *supra* note 11, 509; Durney, *supra* note 14, 413; P. Patel, *supra* note 11, 189-192; R. Mwanza, 'Enhancing Accountability for Environmental Damage under International Law', 19 *Melbourne Journal of International Law* (2018) 2, 586, 596-599.

damages inflicted by the US Army during the Vietnam War.³⁴ Further, in the development of the Rome Statute, the ILC considered the “[w]ilful and severe damage to the environment” as a major crime against the peace and security of mankind, regardless of its connection to an armed conflict.³⁵ Article 26 of the Draft Code of Crimes against the Peace and Security of Mankind (Draft Code of Crimes) stipulates that willfully causing or ordering to cause “[...] widespread, long-term and severe damage to the natural environment [...]” by an individual is an international crime.³⁶ It has been considered that environmental damage would not only encompass serious consequences for the present generations, but also for future generations, and thus needed to be addressed separately from other crimes pursuing the protection of human beings.³⁷ The ILC intended to achieve unity with the law of State responsibility, which was examined by the Commission at the same time and which originally provided for “serious breach[es] of an international obligation of essential importance for the safeguarding and preservation of the human environment” as an international crime.³⁸

Despite long and intensive discussions to include the serious violation of environmental obligations into the realm of international criminal law,³⁹ draft Article 26 was not adopted and the protection of the environment, as a separate provision, was not incorporated in the final draft of the Rome Statute.⁴⁰ There are however strong indicators that most States were influenced by economic considerations to object to its inclusion.⁴¹

³⁴ R. A. Falk, ‘Environmental Warfare and Ecocide, Facts, Appraisal, and Proposals’, 4 *Bulletin of Peace Proposals* (1973) 1, 80, 93-96; N. Ruhashyankiko, Special Rapporteur, *Study of the Question of the Prevention and Punishment of the Crime of Genocide*, UN Doc E/CN.4/Sub.2/416, 4 July 1978, paras 462-478.

³⁵ *Report of the ILC on the work of its 47th session*, *supra* note 2, paras 119-121 (emphasis added).

³⁶ *Ibid.*, Article 26, note 65.

³⁷ *Ibid.*, para. 120.

³⁸ *Report of the ILC on the work of its 28th session*, UN Doc A/CN.4/SER.A/1976/Add.1 (Part 2), 3 May-23 July 1976, 95-96 (emphasis added).

³⁹ *Document on crimes against the environment, prepared by Mr. Christian Tomuschat, member of the Commission*, *Yearbook of the International Law Commission* (1996), Vol. II (1), 16-27 [Proposal by Tomuschat].

⁴⁰ *ILC Draft Code of Crimes against the Peace and Security of Mankind with Commentaries*, *Yearbook of the International Law Commission* (1996), Vol II (2), 17-56. Cf. for a conclusive history of ecocide as a proper crime: P. Higgins, ‘Ecocide Law, History’, available at <https://eradicatingecocide.com/the-law/history/> (last visited 11 February 2020).

⁴¹ Human Rights Consortium, *The Ecocide Project: ‘Ecocide is the missing 5th Crime Against Peace’* (2013), 9-11; C. Tomuschat, ‘Crimes Against Environment’, 26 *Environmental Policy and Law* (1996) 6, 242, 243.

Consequently, international criminal law in its totality remains an anthropocentric regime, putting the human being in the center of its protection.⁴² The only explicit reference to the environment remains the wartime provision of Article 8(2)(b)(iv) of the Rome Statute.⁴³

II. Protection in Wartime Scenarios

Armed conflict scenarios bear the inherent risk of negatively impacting the environment either by direct attacks or as a collateral damage. This is well-illustrated by the conflicts in Kuwait,⁴⁴ the Former Yugoslavia,⁴⁵ Colombia,⁴⁶ or Vietnam.⁴⁷ It should thus come as no surprise that the ILC is currently addressing this issue and recently adopted draft principles concerning the protection of the environment in relation to armed conflicts.⁴⁸ International criminal law itself confers a certain status to the environment in international armed conflicts (1) while providing for implicit protection in non-international armed conflicts (2).

⁴² S. Jodoin, 'Crimes against Future Generations – A New Approach to Ending Impunity for Serious Violations of Economic, Social, and Cultural Rights and International Environmental Law', WFC & CISDL Legal Working Paper, Final Version, 15 August 2010, 13-14.

⁴³ Articles without further reference are Articles of the Rome Statute.

⁴⁴ D. McLaren & I. Willmore, 'The environmental damage of war in Iraq', *The Guardian* (2003), available at <https://www.theguardian.com/world/2003/jan/19/iraq5> (last visited 11 February 2020).

⁴⁵ ICTY, 'Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia' (2000), available at <https://www.icty.org/x/file/Press/nato061300.pdf> (last visited 11 February 2021), para. 14 [NATO Bombings Report].

⁴⁶ 'Colombia ELN rebel attack on Cano Limon pipeline extends pumping halt', *Reuters* (6 February 2018), available at <https://www.reuters.com/article/colombia-oil/colombia-eln-rebel-attack-on-cano-limon-pipeline-extends-pumping-halt-idUSL2N1PW10I> (last visited 11 February 2021).

⁴⁷ *Supra* note 34.

⁴⁸ *Protection of the environment in relation to armed conflicts, Text and titles of the draft principles provisionally adopted by the Drafting Committee on first reading*, UN Doc A/CN.4/L.937, 6 June 2019.

1. International Armed Conflict

a) Explicit Protection of the Environment

Article 8(2)(b)(iv) is the only provision in the Rome Statute that explicitly sets out individual responsibility for attacks against the environment. The prohibition of environmental degradation in international humanitarian law, as found in Articles 35(3) and 55(1) of the Additional Protocol I [AP I],⁴⁹ forms the basis for this crime.⁵⁰ Article 8(2)(b)(iv) criminalizes intentionally launching an attack with the knowledge that the attack will cause widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the military advantage anticipated. The provision is the first purely ecocentric crime and, therefore, has the potential to offer protection to the natural environment in wartime.⁵¹ Albeit, it is not free from criticism.⁵²

To begin with, the objective elements of Article 8(2)(b)(iv) are far from settled.⁵³ The exact meaning of the terms *widespread*, *long-term* and *severe* remains ambiguous⁵⁴ since neither the Rome Statute nor the Elements of Crime⁵⁵ provide for any clarification of the *actus reus* of Article 8(2)(b)(iv). Moreover, the ICC has not yet have the chance to elaborate on this issue. While there is common agreement that the understanding of similar terms in the ENMOD Convention⁵⁶ was not meant to be applied to other conventions,⁵⁷ guidance can

⁴⁹ *Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I)*, 8 June 1977, Art. 55(1), 1125 UNTS 3.

⁵⁰ K. Dörrman, *Elements of War Crimes under the Rome Statute of the International Criminal Court: Sources and Commentary* (2003), 166.

⁵¹ Lawrence & Heller, *supra* note 33, 71.

⁵² *Ibid.*, 75-85.

⁵³ *Ibid.*, 71-72.

⁵⁴ T. Weinstein, 'Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities', 17 *Georgetown International Environmental Law Review* (2005), 697, 707-708.

⁵⁵ *Report of the Preparatory Commission for the International Criminal Court: Addendum, Part II, Finalized draft text of the Elements of Crimes*, UN Doc PCNICC/2000/1/Add.2, 2 November 2000, 24 [ICC Elements of Crimes].

⁵⁶ *Convention on the prohibition of military or any hostile use of environmental modification techniques*, 10 December 1976, Art. I(1), 1108 UNTS 151.

⁵⁷ UN General Assembly, *Report of the Conference of the Committee on Disarmament (Volume I), Understanding Relating to Article I*, UN Doc A/31/27, 1976: *long-lasting* meaning "lasting for a period of months, or approximately a season". Cf. J. de Preux, in C. Pilloud et al., *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949* (1987), Art. 35, paras 1450-1454.

be drawn from the similar terms in Article 35(3) of AP I which was the main source of inspiration for Article 8(2)(b)(iv).⁵⁸

Further, Article 8(2)(b)(iv) sets out an overall threshold which can barely be reached and thereby renders the environmental crime considerably illusory.⁵⁹ It is cumulatively required that the attack on the environment causes widespread, long-term and severe damage.⁶⁰ The accumulation of these three requirements places “[...] *the prohibition of ecological warfare incomprehensively higher than what modern weapons could possibly achieve [...]*”.⁶¹ This is exemplified, for instance, by the fact that no environmental damage caused in recent decades has been considered sufficiently intense to reach the outlined threshold.⁶²

The scope of the crime is further heavily restricted by requiring that the attack is excessively disproportionate.⁶³ The inclusion of a proportionality test raises the already high threshold even higher. Due to the combination of ambiguous terms, the high threshold and the proportionality test, it is questionable whether Article 8(2)(b)(iv) has protective or preventive effects regarding the protection of the environment.⁶⁴ Thus, an international crime

⁵⁸ R. Arnold & S. Wehrenberg, in O. Triffterer & K. Ambos (eds), *The Rome Statute of the International Criminal Court*, 3rd ed. (2016), Art. 8, para. 253. For a detailed analysis of the three terms (in the context of a proposed crime of ecocide), see *infra* D.II.2.

⁵⁹ Smith, *supra* note 33, 55.

⁶⁰ Y. Dinstein, ‘Protection of the Environment in International Armed Conflict’, 5 *Max Planck Yearbook of United Nations Law* (2001), 523, 536; Arnold & Wehrenberg, *supra* note 58, Art. 8, para. 253.

⁶¹ K. Hulme, ‘Armed Conflict, Wanton Ecological Devastation and Scorched Earth Policies: How the 1990-91 Gulf Conflict Revealed the Inadequacies of the Current Laws to Ensure Effective Protection and Preservation of the Natural Environment’, 2 *Journal of Conflict and Security Law* (1997) 1, 45, 61 (emphasis added); see also D. Fleck, ‘The Protection of the Environment in Armed Conflict: Legal Obligations in the Absence of Specific Rules’, 82 *Nordic Journal of International Law* (2013) 1, 7, 8; Arnold & Wehrenberg, *supra* note 58, Art. 8, para. 253.

⁶² Smith, *supra* note 33, 55. For damage caused by Iraqi forces in Kuwait, see *ibid.*, 56, fn. 65; C. Droegge & M.-L. Tougas, ‘The Protection of the Natural Environment in Armed Conflict – Existing Rules and Need for Further Legal Protection’, 82 *Nordic Journal of International Law* (2013) 1, 21, 33. For damages caused by NATO forces in the Former Yugoslavia, see: NATO Bombings Report, *supra* note 45, para. 25. For the environmental impacts of the Vietnam War, see G. Lacombe & A. Pierret, ‘Hydrological impact of war-induced deforestation in the Mekong Basin’, 6 *Ecologyhydrology* (2013), 903.

⁶³ Lawrence & Heller, *supra* note 33, 75; Arnold & Wehrenberg, *supra* note 58, Art. 8, para. 253.

⁶⁴ Smith, *supra* note 33, 53.

against the environment certainly exists on paper but it is doubtful if it is more than a lip-service.⁶⁵

b) Implicit Protection of the Environment

The Rome Statute contains three other provisions that might *implicitly* lead to individual criminal responsibility for attacks on the natural environment. First, according to Article 8(2)(b)(ii), intentionally directing an attack against civilian objects constitutes a war crime. Second, the first alternative of Article 8(2)(b)(iv) prohibits launching an attack that would cause incidental loss clearly excessive in relation to the military advantage anticipated.⁶⁶ Since the natural environment is considered a civilian object,⁶⁷ direct attacks or incidental loss on the environment would constitute a war crime.⁶⁸ There is however a considerable difference between Article 8(2)(b)(ii) and (iv). Contrary to the ecocentric Article 8(2)(b)(iv),⁶⁹ the crimes concerning attacks against civilian objects are ultimately anthropocentric in nature.⁷⁰ Third, the natural environment is implicitly protected by the provision on the crime of pillage⁷¹ as it encompasses natural resources and would therefore protect the natural environment from being plundered.⁷²

It is however important to bear in mind that these provisions protect the environment implicitly since they were not drafted with this intention.⁷³

⁶⁵ *Ibid.*, 52.

⁶⁶ J.-M. Henckaerts & L. Doswald-Beck, *Customary International Humanitarian Law, Volume I: Rules* (2009), Rule 156, 576-577.

⁶⁷ Fleck, *supra* note 61, 9; ICRC, Henckaerts & Doswald-Beck, *supra* note 66, 34.

⁶⁸ It might however lose its protected status if, by the manner it is used, it is transformed to a military object, see Fleck, *supra* note 61, 7, 10; G. Werle & F. Jessberger, *Principles of International Criminal Law*, 3rd ed. (2014), para. 1307.

⁶⁹ Lawrence & Heller, *supra* note 33, 71.

⁷⁰ Werle & Jessberger, *supra* note 68, paras 1279-1280; opposing view: S.-E. Pantazopoulos, 'Protection of the environment during armed conflicts: An appraisal of the ILC's work', 34 *Questions of International Law* (2016), 7, 17.

⁷¹ Article 8(2)(b)(xvi).

⁷² *Armed Activities on the Territory of the Congo Case (Democratic Republic of Congo v. Uganda)*, Judgment, ICJ Reports 2005, 168, 252, para. 245. However, on the lack of jurisprudence on the connections between pillage and the impact on natural resources: Pereira, *supra* note 10, 179.

⁷³ Cf. T. Carson, 'Advancing the Legal Protection of the Environment in Relation to Armed Conflict', 82 *Nordic Journal of International Law* (2013) 1, 83, 93. The author is referring to the companion provisions in AP I, the argument is however also valid regarding the crimes set out in Article 8.

2. Non-International Armed Conflict

Article 8(2)(b)(iv) only applies to international armed conflict scenarios and there exists no counterpart provision in conflicts of a non-international character in contemporary international criminal law.⁷⁴ The same is true for the crime concerning attacks against civilian objects.⁷⁵ Closer scrutiny to conventional international humanitarian law leads to a similar finding. Unlike in international armed conflicts, there exists neither an *explicit* conventional prohibition of attacks against the environment⁷⁶ nor a prohibition of attacks against civilian objects.⁷⁷ Solely customary humanitarian law provides for the said prohibitions.⁷⁸ Due to the lack of a counterpart of Article 8(2)(b)(iv) in non-international armed conflicts, criminal liability for wartime environmental damage under the Rome Statute hence ultimately depends on the opposing party, i.e. whether the State armed forces are facing another State party or non-State armed groups.⁷⁹

III. Protection in Peacetime Scenarios

Beyond this narrow protection of the environment in wartime scenarios, international criminal law does not provide for explicit *peacetime* protection comparable to Article 8(2)(b)(iv). Protection of the natural environment can however be deduced from the crime of genocide (1) and crimes against humanity (2) since these crimes are not limited to a specific scenario and may consequently be committed in both peace- and wartime.

⁷⁴ Lawrence & Heller, *supra* note 33, 84-85.

⁷⁵ *Situation in Darfur, Sudan in the Case of the Prosecutor v. Abu Garda*, Public Redacted Version, Decision on the Confirmation of Charges, ICC-02/05-02/09-243-red (Pre-Trial Chamber I), 8 February 2010, para. 85; J.-P. Pérez-León-Acevedo, 'The Challenging Prosecution of Unlawful Attacks as War Crimes at International Criminal Tribunals', 26 *Michigan State International Law Review* (2018) 3, 407, 412.

⁷⁶ Dinstein, *supra* note 60, 540.

⁷⁷ Pérez-León-Acevedo, *supra* note 75, 410-411; N. Quéniwet, in M. Klamberg (ed.), *Commentary on the Law of the International Criminal Court* (2017), 79; *Prosecutor v. Abu Garda*, *supra* note 75, para. 85.

⁷⁸ Henckaerts & Doswald-Beck, *supra* note 66, Rule 45, 151; *ibid.*, Rule 7, 25-29.

⁷⁹ This divergence of protection is a general shortcoming of international humanitarian law, see L. Moir, 'Towards the unification of international humanitarian law?', in R. Burchill, N. D. White & J. Morris, *International Conflict and Security Law* (2009), 127.

1. Genocide

The crime of genocide might, in the first place, offer such incidental protection. Article 6 punishes *inter alia* the act of “[d]eliberately inflicting on [a national, ethnical, racial or religious] group conditions of life calculated to bring about its physical destruction in whole or in part”. Destruction of the environment, which might itself lead to a group’s physical destruction, could fulfill the *actus reus* criteria of the crime of genocide.⁸⁰ The difficulty of attributing environmental crimes to the crime of genocide rests in its high *mens rea* threshold – i.e. the intent to destroy the envisaged group in whole or in part. This strong subjective requirement entails an almost unsurmountable obstacle for a proper prosecution.⁸¹ Though, the destruction of the environment will be covered by Article 6 if the perpetrator seeks to destroy a protected group, in cases of environmental damage this will be even more difficult to prove.⁸²

2. Crimes Against Humanity

Article 7, punishing crimes against humanity, is another possible means of implicitly protecting the environment by international criminal law.⁸³ Crimes against humanity are conceived as one of the enumerated acts “[...] when committed as part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack [...]”.⁸⁴ The most important distinction to genocide lies within the *mens rea* element. The respective objective elements of Article 7 must be committed with intent and knowledge pursuant to Article 30.⁸⁵ The perpetrator must further have knowledge regarding the contextual element of the crime, i.e. that the conduct was committed as part

⁸⁰ Mwanza, *supra* note 33, 596; *ICC Elements of Crimes*, *supra* note 55, 7; Mistura, *supra* note 8, 204-207. This form of genocidal act is sometimes referred to as ecocide (T. Lindgren, ‘Ecocide, Genocide and the Disregard of Alternative Life-Systems’ 22 *International Journal of Human Rights* (2018) 525, 531-534), in distinction to the separate concept of *ecocide* as a proper crime against the environment, see *infra* D.I.

⁸¹ Smith, *supra* note 33, 48; Mistura, *supra* note 8, 207.

⁸² See for some examples: Smith, *supra* note 33, 48-50; P. Patel, *supra* note 11, 190.

⁸³ Lambert, *supra* note 32, 707; Prospero & Terrosi, *supra* note 11; S. I. Skogly, ‘Crimes Against Humanity – Revisited: Is There a Role for Economic and Social Rights?’ 5 *International Journal of Human Rights* (2001) 1, 58; Weinstein, *supra* note 54, 720; Durney, *supra* note 14, 413.

⁸⁴ Werle & Jessberger, *supra* note 68, paras 881-911.

⁸⁵ *Ibid.*, paras 467-507, 913-915; D. K. Pigaroff & D. Robinson, in Triffterer & Ambos (eds), *supra* note 58, Art. 30, paras 9-13, 22-23.

of a widespread or systematic attack directed against any civilian population.⁸⁶ Since Article 7 does not require an intention to destroy a protected group, as far as environmental damage is concerned, its *mens rea* element is less strict than in the context of the crime of genocide.⁸⁷

Environmental damage is not explicitly enumerated in Article 7(1) but various of the listed conducts could be fulfilled by means of environmental degradation, such as extermination, forcible transfer of population, persecution and “[o]ther inhumane acts of a similar character [...]”.⁸⁸ Particularly, Article 7 (1)(k) could be fitting for punishing crimes against the environment, as it deals with inhumane acts “[...] intentionally causing great suffering, or serious injury to body or to mental or physical health”.⁸⁹

However, three limitations must be borne in mind: First, like all crimes under Article 7, the conduct must be “[...] committed as part of a widespread or systematic attack [...]”, constituting the contextual element of crimes against humanity.⁹⁰ This requires the act to be part of a series of multiple acts, “[...] pursuant to or in furtherance of a State or organizational policy to commit such attack”.⁹¹ Second, regarding environmental damage, it is important to underline the prerequisite impact of humanitarian character: a behavior is not punished unless it affects human beings in a way as atrocious as to amount to a crime against humanity.⁹² Third, the existing crimes must not be applied too broadly to cases of environmental degradation, in order to not contradict the principle of legality.⁹³

⁸⁶ C. K. Hall & K. Ambos, in Triffterer & Ambos (eds), *supra* note 58, Art. 7 para. 26.

⁸⁷ Smith, *supra* note 33, 51.

⁸⁸ *Rome Statute*, Art. 7(1)(b),(d),(h),(k). See Prosperi & Terrosi, *supra* note 11, 517-524; Lambert, *supra* note 32, 726-728.

⁸⁹ Notice that the requirement of intentionally causing such suffering or injury does not introduce a deviation from the general requirement in Article 30; it is sufficient that the perpetrator knew that the conduct was likely to cause such consequences: Werle & Jessberger, *supra* note 68, para. 1023.

⁹⁰ *ICC Elements of Crimes*, *supra* note 55, 9.

⁹¹ *Rome Statute*, Art. 7(2)(a). See on this *policy element* and its implications on the accountability of private organizations Werle & Jessberger, *supra* note 68, paras 904-909. Mwanza interprets the provision as leaving room for a successful punishment of environmental damage committed by a corporation: Mwanza, *supra* note 33, 597.

⁹² Mwanza, *supra* note 33, 597; Smith, *supra* note 33, 52; Lambert, *supra* note 32, 713.

⁹³ M. S.-A. Wattad, “The Rome Statute and Captain Planet: What Lies between “crimes against humanity” and the “natural environment””, 19 *Fordham Environmental Law Review* (2009) 2, 265, 268-269; Pereira, *supra* note 10, 217-218; J. Nilsson, in Klamberg (ed), *supra* note 77, 60-61.

IV. Summarizing Remarks and Application to the Situation in Ecuador

De lege lata, international criminal law does not provide for comprehensive criminal liability for environmental damage.⁹⁴ In wartime, explicit protection of the environment is only granted by Article 8(2)(b)(iv) in conflicts of an international character. However, the high threshold of this provision renders its application extremely limited. Outside wartime scenarios, explicit protection is foreign to contemporary international criminal law, thus, protection of the environment can only be deduced from the crime of genocide or crimes against humanity. Again, this protection appears insufficient due to the anthropocentric limits of the contemporary framework which disregard future impacts of environmental crimes on ecosystems and future human beings alike.⁹⁵

This insufficiency is well-illustrated by the oil spill in Ecuador. Even if the ICC had jurisdiction *rationae temporis* concerning the acts of pollution,⁹⁶ the environmental degradation caused by Chevron's oil exploitation would not entail any criminal responsibility under the Rome Statute.⁹⁷

In the absence of an armed conflict in Ecuador, criminal responsibility under Article 8 does not come into question. Further, none of the acts in Ecuador were committed with the genocidal intent necessary for a violation of Article 6. But even the most promising provision of Article 7 would not entirely encompass the situation in Ecuador: Admittedly, there are strong arguments that the objective elements, particularly of the *chapeau*, could have been satisfied by Chevron's behavior due to the visible corporate policy behind the dumping and the widespread as well as systematic nature of the acts.⁹⁸ However, the difficulty would be to establish the mental element which is required for all of

⁹⁴ Mistura, *supra* note 8, 213; K. Cornelius, 'Der Umweltschutz im Völkerstrafrecht', 58 *Archiv des Völkerrechts* (2020) 1, 21-23.

⁹⁵ P. Patel, *supra* note 11, 197; Mistura, *supra* note 8, 214. Cf. on the anthropocentric nature of environmental protection in general: S. Malhotra, 'The International Crime that could have been but never was: An English School perspective on the Ecocide Law', 9 *Amsterdam Law Forum* (2017) 3, 49.

⁹⁶ Cf. *supra* note 32.

⁹⁷ The specific reasons for this conclusion have been analysed in more detail by several commentators, e.g. Lambert, *supra* note 32, 717-729; Crasson, *supra* note 24, 37-38; Pereira, *supra* note 10, 212-218.

⁹⁸ See particularly Lambert, *supra* note 32, 720-725 with reference to, *inter alia*, the number of victims as well as the immense geographical scope of polluted area, but also to the continued pattern of avoidance of civil liability by Chevron. Lambert further affirms the "knowledge" of the widespread or systematic attack.

the possible enumerated acts listed in Article 7: Whereas the exploitation was certainly intended to achieve maximum profit, it was however not intended to cause humanitarian harm as a consequence of the environmental devastation.⁹⁹

C. Reasons for an Integral Protection of the Environment Under International Criminal Law

While international criminal law is certainly not the only or the main means to achieve better environmental protection, it could at least contribute to a more coherent framework of protection in coexistence with other areas of international law.¹⁰⁰ Several reasons exist to further develop international criminal law towards a proper environmental protection. There is no convincing reason for a differentiated approach in international criminal law to environmental damage in wartime and in peacetime (I). It is further time to shift the predominately anthropocentric perspective of international criminal law towards a more ecocentric approach (II). The introduction of a new international crime against the environment is thus reasonable and appropriate (III).

I. Towards an Integral Protection From Wartime and Peacetime Environmental Damage

As exemplified, the environment's protection differs depending on the context in which certain conduct occurs – i.e. whether it occurs in wartime or in peacetime. However, this differentiation is not justified under international law, neither on normative nor on factual grounds.

By qualifying damage to the environment as a war crime under Art. 8(2)(b)(iv), the Rome Statute acknowledges the importance of the environment's preservation for humankind in wartime. The outstanding value of the environment is also acknowledged in other areas of international law.¹⁰¹ During the last decades, the legal regime of international environmental law has expanded rapidly, developing from soft law considerations¹⁰² to legally

⁹⁹ Lambert, *supra* note 32, 726-728.

¹⁰⁰ F. Mégret, 'The Case for a General International Crime against the Environment', in M.-C. Cordonier Segger & S. Jodoin (eds), *Sustainable development, international criminal justice, and treaty implementation* (2013), 50, 56 [Mégret, Crime against the Environment].

¹⁰¹ Overview in: P. Sands & J. Peel, *Principles of International Environmental Law*, 4th ed. (2018), 3-6.

¹⁰² E.g. *Declaration of the United Nations Conference on the Human Environment*, UN Doc A/Conf.48/14/Rev. 1 (1973), 16 June 1972 [Stockholm Declaration].

binding instruments.¹⁰³ International courts similarly underlined the value of the environment on various occasions, e.g. in connection with the principle of sustainable development.¹⁰⁴ This value is however inherent to the environment itself; thus not dependent on whether harms occur in peacetime or wartime. If international criminal law considers the environment to be worthy of protection for its own sake during an international armed conflict, it is therefore normatively inconsistent with international law not to recognize such worthiness of protection outside wartime scenarios.¹⁰⁵

Whereas the explicit protection of the environment in wartime is certainly motivated by the increased endangerment of the environment in an armed conflict,¹⁰⁶ it is at least questionable whether this increased endangerment in comparison to peacetime environmental degradation stands up to further scrutiny. Wartime environmental damage only constitutes a small proportion in comparison to other factors threatening the environment during peacetime.¹⁰⁷ Environmental crime contributes to a large extent to the endangerment of wildlife and ecosystems as a whole, regardless of war and peace.¹⁰⁸ While military considerations may increase the potential dangers for the environment in wartime, economic considerations of States and private corporations constitute the corresponding self-justification in peacetime scenarios. These economic considerations have factually become a much larger threat to the global human and non-human environment than any military operation could ever be.¹⁰⁹ Consequently, there is no conclusive reason for an enhanced protection of the

¹⁰³ E.g. *United Nations Framework Convention on Climate Change*, 9 May 1992, 1771 UNTS 107 [UNFCCC]; *Convention on Biological Diversity*, 5 June 1992, 1760 UNTS 79 [CBD].

¹⁰⁴ *Nuclear Weapons Advisory Opinion*, *supra* note 3, para. 29; *Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment, ICJ Reports 1997, 7, paras 140-141 [Gabčíkovo-Nagymaros Project].

¹⁰⁵ Mégret, 'Crime against the Environment', *supra* note 100, 56-57; Crasson, *supra* note 24, 43.

¹⁰⁶ UNEP, *Protecting the Environment During Armed Conflict, An Inventory and Analysis of International Law*, (2009), 8.

¹⁰⁷ Mistura, *supra* note 8, 222.

¹⁰⁸ Nellesmann *et al.*, *supra* note 6, 17-21.

¹⁰⁹ See on the contribution of carbon majors to climate change: P. Griffin, 'The Carbon Majors Database, CDP Carbon Majors Report 2017', available at <https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1501833772> (last visited 18 February 2021); for the exploitation of natural resources by transnational corporations cf. *Final report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo*, UN Doc S/2002/1146, Annex III, 16 October 2002.

environment by international criminal law during times of war in contrast to the non-existent protection in peacetime.

II. Towards an Ecocentric Protection From Environmental Damage

The focus of international criminal law on an integral protection of the natural environment should further be accompanied by a shift of perspective. The existing provisions of international criminal law, except for Article 8 (2)(b)(iv), are based on strong anthropocentric considerations.¹¹⁰ However, these merely anthropocentric mechanisms ignore the fact that humans are environmentally embedded beings.¹¹¹ At least since the 1970s, the inherent interdependence¹¹² between the environment and the enjoyment of human rights has been acknowledged and restated in many documents and judicial decisions.¹¹³ Additional developments in human rights law, i.e. the *greening of human rights*¹¹⁴ as well as literature and jurisprudence on a potential “[...] human right to a [...] healthy environment [...]”¹¹⁵ have contributed to shape this relationship.¹¹⁶ These recent developments in human rights law also depart from an anthropocentric perspective on the environment, envisaging it as a means to the guarantee of fundamental human rights.¹¹⁷ Notwithstanding, the IACHR clarified in 2017

¹¹⁰ P. Patel, *supra* note 11, 191-192. See *supra* B.II., B.III.

¹¹¹ Mwanza, *supra* note 33, 593.

¹¹² J. Knox, *Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, UN Doc A/HRC/22/43, 24 December 2012, para. 10 (emphasis added).

¹¹³ *Stockholm Declaration*, *supra* note 102, Principle 8; *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment*, UN Doc A/HRC/37/59, 24 January 2018; *Gabčíkovo-Nagymaros Project*, *supra* note 104, para. 112.

¹¹⁴ This notion was shaped by *Alan Boyle*: see A. E. Boyle, ‘Environment and Human Rights’, in R. Wolfrum, *Max Planck Encyclopedia of Public International Law* (2009), paras 16-22.

¹¹⁵ *Ibid.*, paras 9-15.

¹¹⁶ The most recent confirmation of the existence of such a right was made by the Inter-American Court on Human Rights [IACHR] in its Advisory Opinion in 2017: *The Environment and Human Rights*, Advisory Opinion OC-23/17 of 15 November 2017, IACHR Series A, No. 23, paras 47–55 [The Environment and Human Rights]. For the interconnectedness between these developments and international criminal law, see Durney, *supra* note 14, 418-425.

¹¹⁷ K. Wolfe, ‘Greening the international human rights sphere, Environmental rights and the draft declaration of principles on human rights and the environment’, 9 *APPEAL: Review of Current Law and Law Reform* (2003) 1, 45, 55-56, 58; Boyle, *supra* note 114, para. 4.

that nature and the environment are worth a specific protection “[...] *not only because of the benefits they provide to humanity [...], but because of their importance to the other living organisms [...] that also merit protection in their own right*”.¹¹⁸

An environmental crime should be based on that very rationale: to envision the protection of the environment for its own sake.¹¹⁹ This is plausible for two reasons: The first reason is mainly consequential as it departs from the foregoing assessment that environmental protection can be better achieved by means of an ecocentric perspective on international law.¹²⁰ In many of the existing provisions, it is their anthropocentric requirement of an actual harm to human beings, that results in an ineffective environmental protection under current international criminal law. Second, the risk of exceeding the planetary boundaries increases and thus can lead to destabilizing damage to the complex global ecosystems.¹²¹ This directly impacts on human and non-human life in general without that there is always a linear causal relationship between specific environmental harms and specific lives.¹²² As long as the prosecution of conducts damaging the environment depends on the occurrence of harm to individual human beings,¹²³ these complex interrelations between impacts of human behavior on the planet and subsequent harm to life in general is not properly taken into consideration.¹²⁴ For this reason, some commentators argue in favor of a mere ecocentric view of environmental ethics and law, which would ascribe proper value to the environment and thereby better address the contemporary environmental challenges.¹²⁵

¹¹⁸ The Environment and Human Rights, *supra* note 116, para. 62 (emphasis added).

¹¹⁹ Mwanza, *supra* note 33, 590-595; R. Rauxloh, ‘The Role of International Criminal Law in Environmental Protection’, in F. N. Botchway (ed.), *Natural Resources Investment and Africa’s Development*, (2011), 423, 446; Drumbl, *supra* note 33, 129-130.

¹²⁰ Lawrence & Heller, *supra* note 33, 67.

¹²¹ Stockholm Resilience Centre, The Nine Planetary Boundaries, available at <https://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/about-the-research/the-nine-planetary-boundaries.html> (last visited 18 February 2021).

¹²² Mwanza, *supra* note 33; Cornelius, *supra* note 94, 24-25.

¹²³ Mwanza, *supra* note 33, 597; Smith, *supra* note 33, 52; Lambert, *supra* note 32, 713.

¹²⁴ Mwanza, *supra* note 33, 592-595; Lindgren, *supra* note 80, 528-531.

¹²⁵ R. E. Kim & K. Bosselmann, ‘Operationalizing Sustainable Development: Ecological Integrity as a Grundnorm of International Law’, *24 Review of European Comparative & International Environmental Law* (2015), 194; Mwanza, *supra* note 33, 592-595 with further references. The statement of the IACHR could be understood in a similar way: *The Environment and Human Rights*, *supra* note 116, para. 62. An exhaustive analysis of the theoretical foundations of ecocentric approaches to international law would however exceed the scope of the present work.

Even if one remains reluctant to fully endorse such an ecocentric approach, the introduction of a crime against the environment can also be justified with intermediary approaches between ecocentric and anthropocentric considerations.¹²⁶ Due to the inescapable dependence of human beings on the preservation of global ecosystems, the latter's protection amounts to a necessary means to secure the survival of humankind in the long-term.¹²⁷ As *Tomuschat* puts it: “*The human being is the ultimate beneficiary of the efforts undertaken, but the disruptive effect of damage to the environment does not necessarily need to be measured in terms of injury to human life and physical integrity*”.¹²⁸

For these reasons, this paper dismisses proposals for a new “[crime] against future generations”,¹²⁹ since such a crime ultimately remains anthropocentric in character.¹³⁰ While it draws on the principle of intergenerational equity,¹³¹ it only incidentally relies on long-term harm by considering the notion of “future generations” to be only of “[...] *conceptual, rather than legal, importance*[...]”.¹³² Particularly, most of its prohibited acts still require a direct impact on identifiable groups, thus on the present generation.¹³³ Thereby, this crime remains ill-suited

¹²⁶ Cornelius, *supra* note 94, 24-25. Cf. Lawrence & Heller, *supra* note 33, 66-67. Arguing for an approach of *weak anthropocentrism* which would reach the same results: B. G. Norton, ‘Environmental Ethics and Weak Anthropocentrism’, 6 *Environmental Ethics* (1984) 2, 131, 133.

¹²⁷ *Proposal by Tomuschat*, *supra* note 39, para. 29.

¹²⁸ *Ibid* (emphasis added).

¹²⁹ Jodoin, *supra* note 42, 2, proposes as such crimes: “[...] *acts within any sphere of human activity [...] when committed with knowledge of the substantial likelihood of their severe consequences on the long-term health, safety and means of survival of any identifiable group or collectivity*” (emphasis added). Cf. S. Jodoin & Y. Saito, ‘Crimes against Future Generations: Harnessing the Potential of Individual Criminal Accountability for Global Sustainability’, 7 *McGill International Journal of Sustainable Development Law & Policy* (2012) 115; see also E. Gaillard, ‘Des crimes contre l’humanité aux crimes contre les générations futures’, 7 *McGill International Journal of Sustainable Development Law & Policy* (2012) 181

¹³⁰ The only ecocentric exception to this is sub-paragraph (1)(h) of the Draft Definition.

¹³¹ Jodoin, *supra* note 42, 20-22 with further references.

¹³² Jodoin & Saito, *supra* note 129, 129 (emphasis added). Considering this as misleading: F. Mégret, ‘Offences against Future Generations: A Critical Look at the Jodoin/Saito Proposal and a Suggestion for Future Thought’, 7 *McGill International Journal of Sustainable Development Law & Policy* (2012) 2, 157, 160-162 [Mégret, ‘Offences against Future Generations’].

¹³³ *Ibid.*, 165-168. Cf. para. 2 of the Draft Definition of Crimes against Future Generations, Jodoin, *supra* note 42, 2, 8, 34; Jodoin & Saito, *supra* note 129, 128-129.

to enhance the protection of the environment itself by the means of international criminal law.

Instead, a new crime against the environment should depart from such strict anthropocentric understandings of harm. It should endorse a more ecocentric – or at least an intermediary – perspective by protecting the essential parts of the environment from human-made destruction, regardless of whether human beings might be directly affected or not.

III. Towards an International Protection Under International Criminal Law

The aforementioned does not yet answer the question why such protection should be granted by the means of international criminal law. Although an exhaustive assessment of international criminal law's effectiveness in this regard would exceed the present work's scope, a few arguments are given in the following analysis.¹³⁴ First, the deterrent effect of criminal law constitutes a crucial reason for criminal prosecution of conduct that significantly harms the environment.¹³⁵ Criminal sanctions are more effective than remedies of civil and administrative sanctions to prevent ecologically reckless behavior.¹³⁶ Environmental criminal prosecution can have such a promising deterrent effect in cases where the environmental harm is caused by the result of a cost-benefit assessment and as long as there is a sufficient probability of prosecution and strong applicable sanctions.¹³⁷

Beyond that, it is justified to include a new crime against the environment into the corpus of *international* criminal law. A coordinated and institutionalized global approach of prosecution for environmental crimes would have positive effects in contrast to a patchwork system which governs such prosecution on the domestic level.¹³⁸ At the minimum, criminal prosecution can encourage States

¹³⁴ For a detailed analysis, see Mégret, 'Crime against the Environment', *supra* note 100, 53-64; Crasson, *supra* note 24, 41-47.

¹³⁵ Crasson, *supra* note 24, 41-42; B. Cho, 'Emergence of an International Environmental Criminal Law', 19 *UCLA Journal of Environmental Law and Policy* (2000) 1, 11.

¹³⁶ M. Watson, 'The Enforcement of Environmental Law: Civil or Criminal Penalties', 17 *Environmental Law and Management* (2005) 3, 6; Mégret, 'Crime against the Environment', *supra* note 100, 53-54.

¹³⁷ G. Becker, 'Crime and Punishment: An Economic Approach', 76 *Journal of Political Economy* (1968) 2, 169; Cho, *supra* note 135, 11-47.

¹³⁸ Mégret, 'Crime against the Environment', *supra* note 100, 57-59; *Proposal by Tomuschat*, *supra* note 39, para. 20. See also Mistura, *supra* note 8, 181, 189-192, although eventually rejecting the introduction of a new international crime, *ibid.*, 223-226.

to bring their domestic laws into conformity with environmental obligations of international law,¹³⁹ going beyond isolated attempts of regional harmonization.¹⁴⁰

Other arguments address the question of *what* turns a criminal offence to an international crime.¹⁴¹ The Rome Statute itself stipulates in its Preamble that it is dedicated to measure against “[...] atrocities that deeply shock the conscience of humanity [...]” and “[...] grave crimes [that] threaten the peace, security and well-being of the world [...]”.¹⁴² For instance, according to *Tomuschat*, conduct has to fulfill two criteria in order to qualify as an international crime: it has to reach a certain seriousness and must have disruptive effects on the foundations of human society.¹⁴³ If a crime satisfies these criteria, it is of such universal concern that it *can* become subject to international criminal prosecution.¹⁴⁴ As previously mentioned,¹⁴⁵ some cases of environmental destruction can have horrible effects on the well-being of present and future human society.¹⁴⁶ While this might not be true for all environmental crimes, there are certainly instances in which the effects are similar or worse.¹⁴⁷ This holds especially true for cases in which environmental degradation reaches an irreversible status and has seriously negative long-term impacts on future generations.¹⁴⁸ Further, environmental

¹³⁹ Rauxloh, *supra* note 119, 445; Crasson, *supra* note 24, 45-46.

¹⁴⁰ For such an attempt, see *Convention on the Protection of the Environment through Criminal Law*, 4 November 1998, ETS No. 172 [CoE Convention]. This convention has only been ratified by one State so far.

¹⁴¹ Mégret, ‘Crime against the Environment’, *supra* note 100, 59-61.

¹⁴² *Rome Statute*, Preamble (emphasis added). See also *Report of the ILC on the work of its 39th session*, UN Doc A/42/10, 17 July 1987, 13, Art. 1, para. 2; M. A. Gray, ‘The International Crime of Ecocide’, 26 *California Western International Law Journal* (1995) 2, 215, 264-265; Mégret, ‘Crime against the Environment’, *supra* note 100, 59-61; M. Cherif Bassiouni, *A draft international criminal code and draft statute for an international criminal tribunal* (1987), 36.

¹⁴³ *Proposal by Tomuschat*, *supra* note 39, paras 14-19.

¹⁴⁴ Cf. also McLaughlin, ‘Improving Compliance: Making Non-State International Actors Responsible for Environmental Crimes’, 11 *Colorado Journal of International Environmental Law and Policy* (2000) 2, 377, 393; Cornelius, *supra* note 94, 26-27.

¹⁴⁵ Stockholm Resilience Centre, *supra* note 121; Higgins, Short & South, *supra* note 5, 252-254.

¹⁴⁶ B. Lay et al., ‘Timely and Necessary, Ecocide Law as Urgent and Emerging’, 28 *Journal of Jurisprudence* (2015) 431, 437; Rauxloh, *supra* note 119, 446. In this context, see UN Secretary-General, *Climate change and its possible security implications*, UN Doc A/64/350, 11 September 2009.

¹⁴⁷ Mégret, ‘Crime against the Environment’, *supra* note 100, 55.

¹⁴⁸ Rauxloh, *supra* note 119, 446. On intergenerational equity, see Sands & Peel, *supra* note 101, 221-222.

crimes typically concern behavior that has global impacts since the environment itself is not bound by national borders.¹⁴⁹ These instances thereby touch upon public interests of the whole international community.¹⁵⁰

The question should not be *whether*, in general, crimes against the environment merit a prosecution under international criminal law, but *under which specific circumstances* a crime against the environment is to be considered an international crime.

D. Perspectives for an Integral Protection of the Environment Under International Criminal Law

Based on the abovementioned arguments, an international environmental crime would have to address environmental damage in war- and peacetime and depart from a strictly anthropocentric approach. Further, it would have to be of certain objective and subjective seriousness in order to qualify as a crime of international concern. Various suggestions have been made on an integral protection of the environment through the lens of international criminal law. After shortly summarizing the main proposals (I), some observations and analysis on a *crime of ecocide* are made (II).

I. Existing Proposals for a New Crime Against the Environment

In line with the originally proposed draft Article 26 of the Draft Code of Crimes,¹⁵¹ there have been multiple calls for the inclusion of an international crime against the environment.¹⁵² Particularly, *Poly Higgins'* proposal to the ILC in 2010 of the introduction of a fifth core crime of "ecocide" has been the focus of recent attention.¹⁵³ *Higgins'* proposal defines ecocide as "[...] extensive damage to, destruction of or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of

¹⁴⁹ Mégret, 'Crime against the Environment', *supra* note 100, 60-61.

¹⁵⁰ *Ibid.*, 64; Pereira, *supra* note 10, 191-192. Cf. *supra* notes 101-104.

¹⁵¹ *Supra* notes 35-37.

¹⁵² E.g. Crasson, *supra* note 24, 40-47; Rauxloh, *supra* note 119, 432-434, 446; Gray, *supra* note 142, 270; Mwanza, *supra* note 33, 612-613.

¹⁵³ P. Higgins, *Eradicating ecocide. Laws and governance to prevent the destruction of our planet*, 2nd ed. (2015), 61-71 [Higgins, Eradicating ecocide]; see also Human Rights Consortium, *supra* note 41; End Ecocide on Earth Initiative, 'Ecocide Amendments Proposal' (2016), available at <https://www.endecocide.org/wp-content/uploads/2016/10/ICC-Amendments-Ecocide-ENG-Sept-2016.pdf> (last visited 18 February 2021).

that territory has been or will be severely diminished".¹⁵⁴ Comparable proposals only differ in detail or denomination.¹⁵⁵

An important similarity that these proposals share is their shift from exclusively anthropocentric protection to a perspective which is at least partly ecocentric.¹⁵⁶ By punishing the loss, damage or destruction of *ecosystem*, the crime of ecocide shifts away from international criminal law's focus on humanitarian protection and introduces a genuine environmental protection.¹⁵⁷ It does not limit the relevant effects to *human inhabitants* but explicitly includes non-human life,¹⁵⁸ and recognizes the profound interconnectedness between human beings and their surrounding ecosystems in an abstract way.¹⁵⁹ It further addresses environmental crimes in an integral way, extending the scope from mere wartime to also include peacetime scenarios.

In order to keep the prosecution by international criminal law limited to the gravest crimes, Higgins' proposal introduces a counterbalance in form of a threshold of seriousness: *serious* loss, damage or destruction is thus connected to impacts which are widespread, long-term or severe.¹⁶⁰ Although slightly differing in the specific delimitations, approaches of ecocide commonly incorporate limitations of seriousness.¹⁶¹ However, they largely differ with regard to the *mens rea* standard.¹⁶² While most of the proposals agree to that point that they seek to move away from the strict *mens rea* requirement of genocide according to Article 6,¹⁶³ controversy persists as to what would be an appropriate standard.¹⁶⁴ Comparable controversy exists with regard to the crime's potential perpetrators.¹⁶⁵

¹⁵⁴ P. Higgins, *Earth Is Our Business. Changing the Rules of the Game* (2012), 157 (emphasis added) [Higgins, *Earth Is Our Business*].

¹⁵⁵ See as well the propositions of Gray, *supra* note 142, 258; Mégret, 'Crime against the Environment', *supra* note 100, 65-67; Rauxloh, *supra* note 119, 445-448; L. Berat, 'Defending the Right to a Healthy Environment: Toward a Crime of Genocide in International Law', 11 *Boston University International Law Journal* (1993), 327, 342-343.

¹⁵⁶ It thereby differs decisively from the anthropocentric basis of *crimes against future generations* mentioned earlier, *supra* notes 129-133.

¹⁵⁷ Malhotra, *supra* note 95, 61-66.

¹⁵⁸ End Ecocide on Earth Initiative, *supra* note 153.

¹⁵⁹ Mwanza, *supra* note 33, 607.

¹⁶⁰ Higgins, *Earth Is Our Business*, *supra* note 154, 162.

¹⁶¹ In detail *infra* D.II.2.

¹⁶² Mwanza, *supra* note 33, 599-600.

¹⁶³ *Supra* B.III.1.

¹⁶⁴ In detail *infra* D.II.3.

¹⁶⁵ See *infra* D.II.1.

II. Substantive Observations on a Potential *New Crime of Ecocide*

The introduction of a new international crime of ecocide¹⁶⁶ would have to meet different requirements in order to put it on par with the other international core crimes.¹⁶⁷ At the same time, its requirements must not be as restrictive as those of Article 8(2)(b)(iv) to provide for added value in the protection of the environment.

Many issues require a sophisticated analysis in more detail: the crime's threshold of seriousness, the necessary *mens rea* requirement, an appropriate list of its punishable acts, its potential perpetrators, its relationship to other international crimes, as well as matters of causation and evidence. It goes beyond the scope of this article to exhaustively address all these issues. Nonetheless, a few remarks on the crime's general structure and requirements will be made (1.) before turning in detail to the question of ecocide's threshold of seriousness (2.) and its *mens rea* requirement (3.).

1. Structure and Requirements of a Crime of Ecocide

In order to fit the context of the other four core crimes of international criminal law, the elements of ecocide should be as far as possible parallel to the structure of these other crimes.¹⁶⁸ It follows that it should consist of an introductory *chapeau*, followed by a detailed enumeration of potential acts to be punished.¹⁶⁹ While the *chapeau* could contain the potential perpetrators, the *mens rea* requirement of the crime, its threshold of seriousness and a reference to the necessary causal link,¹⁷⁰ the enumerative catalogue would include possible punishable forms of conduct.¹⁷¹

For the *chapeau*, this article makes the following proposal, which is partly inspired by the aforementioned proposals:

¹⁶⁶ Despite different terms used, *supra* note 155, this paper subsequently labels the proposed new crime as *crime of ecocide*.

¹⁶⁷ See *supra* C.III.

¹⁶⁸ Mégret, 'Crime against the Environment', *supra* note 100, 55; Pereira, *supra* note 10, 196.

¹⁶⁹ As to the risk of otherwise violating the principle of legality, see Mistura, *supra* note 8, 198-199.

¹⁷⁰ See on this aspect briefly *infra* D.II.2.

¹⁷¹ Rauxloh, *supra* note 119, 447-448.

“Ecocide” means any of the following acts or omissions committed in times of peace or conflict which cause or may be expected to cause widespread or long-term and severe damage to the environment.

This chapeau would be followed by the enumerative catalogue of punishable acts, which is mainly inspired by the structure of crimes against humanity. Punishable acts or omissions can neither depend on the domestic law of any individual State¹⁷² nor on the existence of specific prohibitions in international environmental law.¹⁷³ Inspiration *could* however be drawn from international environmental treaties,¹⁷⁴ such as the Basel Convention, or CITES,¹⁷⁵ in order to find a broad and common understanding what States consider binding obligations under international environmental law.¹⁷⁶ The enumerative catalogue would properly define the crime’s *actus reus* and could include, *inter alia* the pollution of certain environmental mediums, the disposal of hazardous wastes, nuclear testing, the trade in endangered species or systematic deforestation.¹⁷⁷ To prevent improperly limiting the punishable acts and to leave room for the further evolution of environmental law, the list’s final provision should be shaped in a flexible and open way, comparable to Article 7(1)(k).¹⁷⁸ For example, it could read: *“other acts or omissions of a similar character causing widespread or long-term and severe damage to the environment”*.

The new crime could further include subsequent paragraphs which are able to clarify certain elements. One of these paragraphs could set out the crime’s *mens rea* requirement.¹⁷⁹ Another issue to be addressed is the crime’s potential perpetrators. There are basically two main groups of perpetrators: individuals or a corporation itself, hence a legal entity. The Rome Statute’s default rule of

¹⁷² See also McLaughlin, *supra* note 144, 396.

¹⁷³ *Proposal by Tomuschat*, *supra* note 39, paras 34-36.

¹⁷⁴ Mégret, ‘Crime against the Environment’, *supra* note 100, 65; Rauxloh, *supra* note 119, 447-448. Cf. McLaughlin, *supra* note 144, 396.

¹⁷⁵ *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, 22 March 1989, 1673 UNTS 57; *Convention on international trade in endangered species of wild fauna and flora*, 3 March 1973, 993 UNTS 243. See also *CoE Convention*, *supra* note 140.

¹⁷⁶ Rauxloh, *supra* note 119, 448.

¹⁷⁷ For some of these examples, see Rauxloh, *supra* note 119, 447-448; Higgins, *Eradicating ecocide*, *supra* note 153, 63; L. Neyret, *Des écocrimmes à l’écocide. Le droit pénal au secours de l’environnement* (2015), 288; McLaughlin, *supra* note 144, 396.

¹⁷⁸ *Rome Statute*, Article 7(1)(k) reads: *“Other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health”*.

¹⁷⁹ See *infra* D.III.3.

Article 25 provides for a legal framework of individual criminal responsibility.¹⁸⁰ There is common agreement that an individual may either perpetrate a crime on their own¹⁸¹ or alternatively, by subordinates over whom the individual is exercising a certain degree of control,¹⁸² such as it may be the case with corporate executives. It is therefore beyond all doubt, that the first group of potential perpetrators is perfectly consistent with the general rules of current international criminal law.¹⁸³ A specific inclusion into the new crime's provision is therefore unnecessary.

The much more debated question is whether corporations themselves are to be admitted to the circle of potential perpetrators of ecocide.¹⁸⁴ *De lege lata*, corporate liability does not fall within the remit of the Rome Statute.¹⁸⁵ The inclusion of corporations as potential perpetrators would therefore require an amendment of Article 25¹⁸⁶ and should additionally be clarified in the definition of the crime of ecocide. It has been advocated in the context of ecocide to recognize such form of responsibility.¹⁸⁷ While criminal corporate liability might contradict domestic legal orders requiring culpability for criminal responsibility,¹⁸⁸ developments in other domestic systems tend towards the recognition of such forms of criminal accountability.¹⁸⁹ In any case, the issue of criminal corporate liability entails numerous legal issues that need to be examined.

Further, it is important to emphasize the new crime's relation to the already existent crimes, particularly to the war crime of Article 8(2)(b)(iv).¹⁹⁰

¹⁸⁰ K. Bowman, in Klamberg (ed.), *supra* note 77, 262.

¹⁸¹ *Rome Statute*, Article 25.

¹⁸² *Rome Statute*, Article 28.

¹⁸³ Lay et al., *supra* note 146, 435-436.

¹⁸⁴ D. Scheffer, 'Corporate Liability under the Rome Statute', 57 *Harvard International Law Journal* (2016) 35, 38.

¹⁸⁵ K. Ambos, 'General Principles of Criminal Law in the Rome Statute', 10 *Criminal Law Forum* (1999), 1, 7; M. Davoise, 'Business, Armed Conflict, and Protection of the Environment: What Avenues for Corporate Accountability?', 10 *Goettingen Journal of International Law* (2020) 1, 151, 173-178.

¹⁸⁶ Scheffer, *supra* note 184, 38; Mwanza, *supra* note 33, 601.

¹⁸⁷ Rauxloh, *supra* note 119, 449-450; Mwanza, *supra* note 33, 604; Crasson, *supra* note 24, 43-44; End Ecocide on Earth Initiative, *supra* note 153, Art. 25.

¹⁸⁸ Bowman, *supra* note 180, 262. See in detail: N. Bernaz, 'An Analysis of the ICC Office of the Prosecutor's Policy Paper on Case Selection and Prioritization from the Perspective of Business and Human Rights', 15 *Journal of International Criminal Justice* (2017) 527, 530-533.

¹⁸⁹ Gray, *supra* note 142, 266; C. de Maglie, 'Models of Corporate Criminal Liability in Comparative Law', 4 *Washington University Global Studies Law Review* (2005) 547.

¹⁹⁰ Cornelius, *supra* note 94, 28.

One possible approach would be the *lex specialis* of this war crime in relation to ecocide, as it had been envisaged for example for crimes against future generations.¹⁹¹ However, such a subordination of ecocide under the precedence of war crimes would defeat the aspiration of ecocide to introduce a new ecocentric approach to international criminal law which is worth its name. Instead, the prosecution of ecocidal behavior under the new provision must be possible in war- and peacetime alike to effectively strengthen the environment by means of international criminal law. It is therefore proposed that the new crime fits in the existing system of crimes that does not consider a crime as *lex specialis* but all as coordinate.¹⁹² This would factually lead to Article 8(2)(b)(iv) being deprived from its autonomous meaning since each violation of the environmental war crime would coincidentally be a violation of ecocide.¹⁹³ In order to advance the protection of the environment by international criminal law in an integral and ecocentric manner,¹⁹⁴ this is the result this paper aims to achieve.

2. Threshold of Seriousness

A common argument of opponents of a crime of ecocide is the fear that it would open the competent court to a “[...] flood of frivolous litigation”¹⁹⁵ due to its unlimited scope of application. Indeed, an inclusion of the new crime into international criminal law would only be reasonable if it is limited to the “[...] most serious crimes of international concern [...]”.¹⁹⁶ Its parallel standing and equal status with the existing crimes can only be justified if the punished crimes satisfy a certain threshold of seriousness.¹⁹⁷ Drawing from existing proposals (a), this paper suggests specific definitions for the criteria of such a threshold (b) before turning to their interrelationship (c).

¹⁹¹ Jodoin, *supra* note 42, 22.

¹⁹² Werle & Jessberger, *supra* note 68, para. 754.

¹⁹³ Though, this would not be the case the other way round due to Article 8(2)(b)(iv) strict requirements.

¹⁹⁴ See *supra* C.I., C.II.

¹⁹⁵ Mwanza, *supra* note 33, 605.

¹⁹⁶ *Rome Statute*, Art. 1.

¹⁹⁷ *ILC Draft Code of Crimes against the Peace and Security of Mankind, Yearbook of the International Law Commission* (1991), Vol. II (2), 94, Art. 26 para. 5 [ILC Draft Code of Crimes]. On the role of *gravity* for prosecution under international criminal law, see OTP Policy Paper, *supra* note 9, paras 35-41; Mistura, *supra* note 8, 217-219.

a) Existing Proposals for a Threshold of Seriousness

The threshold of seriousness serves the same purpose as the contextual elements necessary for crimes against humanity and war crimes,¹⁹⁸ namely to constitute the essential element of an international crime.¹⁹⁹ Thereby, it limits the crime of ecocide to those instances of environmental damage that have the necessary global impact.²⁰⁰

There is consensus in the different proposals that the prosecuted crimes must exceed a certain threshold of seriousness.²⁰¹ However, the exact contents of such a threshold differ:²⁰² Higgins leans on the criteria stipulated in the existing ecocentric war crime of Article 8(2)(b)(iv) as well as the proposals of the ILC²⁰³ and requires impacts which are widespread, long-term or severe.²⁰⁴ By replacing the original cumulative conjunction of the three elements with an alternative *or*, Higgins's proposal is broader than its sources of inspiration.²⁰⁵ The same alternative approach is taken by Mégret, who adds the notion of irreversibility.²⁰⁶ Similarly, *Rauxloh* mentions geographical (“[...] scale of damage [...]”)²⁰⁷ as well as temporal elements (“[...] longevity of the environmental harm”)²⁰⁸ as criteria to assess the severity threshold, while *McLaughlin* only makes reference to geographical and severity aspects (“[...] large scale or serious [...]”).²⁰⁹ Further, *Gray* uses comparable terminology as *Higgins* but requires serious damage in any case, and only puts the geographical (“[...] extensive [...]”) and temporal (“[...] lasting [...]”) qualifications in an alternative relation.²¹⁰

¹⁹⁸ Werle & Jessberger, *supra* note 68, paras 443, 458.

¹⁹⁹ An additional contextual element, such as *committed as part of a widespread or systematic action*, is not necessary since the threshold of seriousness itself guarantees the crime's gravity. See however Neyret, *supra* note 177, 288; Mégret, *Crime against the Environment*, *supra* note 100, 65.

²⁰⁰ *Ibid.*, 67; see also *supra* C.III. Gray considers the damage's “[i]nternational [c]onsequences” as a separate criteria, see *Gray*, *supra* note 142, 217.

²⁰¹ Cf. Mégret, ‘Offences against Future Generations’, *supra* note 132, 171.

²⁰² Lay *et al.*, *supra* note 146, 447; Mwanza, *supra* note 33, 605-606.

²⁰³ *Report of the ILC on the work of its 47th session*, *supra* note 2, Art. 26.

²⁰⁴ Higgins, *Earth Is Our Business*, *supra* note 154, 162.

²⁰⁵ In contrast: Neyret, *supra* note 177, 288.

²⁰⁶ Mégret, ‘Crime against the Environment’, *supra* note 100, 65.

²⁰⁷ Rauxloh, *supra* note 119, 448.

²⁰⁸ *Ibid.*

²⁰⁹ McLaughlin, *supra* note 144, 396. See also *ibid.*, 397-398.

²¹⁰ Gray, *supra* note 142, 217.

b) Delimitation of the Threshold's Criteria

It is systematically consistent to lean on established provisions of international criminal law.²¹¹ Therefore, the triad of features *widespread*, *long-term* and *severe* is a reasonable terminology for a new international crime of ecocide. Despite the scientific substantiation necessary for these terms,²¹² the following understanding should be the starting point for efforts to codify the crime of ecocide.

Severe is to be understood as referring to the scale of the harm and the numbers of people and species ultimately affected.²¹³ In contrast to the requirement in Art. 8(2)(b)(iv),²¹⁴ it is due to the new crime's partly ecocentric nature that not only effects on human beings would be of concern for the environmental damage's severity, but the damage's impact on human and non-human beings alike.²¹⁵ As shown by the proposed enumerated acts of the new crime, its *victims* could also be parts of the ecosystem or biodiversity as such.²¹⁶

The second criteria, the *widespread* nature of the damage, implies a certain geographical coverage of the environmental harm.²¹⁷ In order to satisfy the general prerequisite for international criminalization,²¹⁸ the term *widespread* could be fulfilled in one of three possible ways: First, the requirement could be met by the transboundary nature of environmental damage caused or, second, in the case that global commons are harmed by the act in question.²¹⁹ However,

²¹¹ Cornelius, *supra* note 94, 27.

²¹² *ILC Draft Code of Crimes against the Peace and Security of Mankind. Titles and texts of articles adopted by the Drafting Committee: Parts One and Two; articles 1–26*, UN Doc A/CN.4/L.459 + Corr.1 + Add.1, 5 July 1991, 236, para. 81 [ILC Draft Code of Crimes, Titles and texts of articles adopted].

²¹³ Gray, *supra* note 142, 217; cf. Rauxloh, *supra* note 119, 448; Higgins, *Eradicating ecocide*, *supra* note 153, 64. With regard to Article 8(2)(b)(iv) Rome Statute, see Arnold & Wehrenberg, *supra* note 58, Art. 8, para. 253.

²¹⁴ Lawrence & Heller, *supra* note 33, 73; M. D. Kouba, International and Operational Law Department, US Army, 'Operational Law Handbook' (2017), available at https://www.loc.gov/rr/frd/Military_Law/pdf/operational-law-handbook_2017.pdf (last visited 21 February 2021), 350.

²¹⁵ Pointing to the difficulty in defining *victims* of ecocide: McLaughlin, *supra* note 144, 398. See *supra* C.II.

²¹⁶ Proposed for example by McLaughlin, *supra* note 144, 395-396; Higgins, *Eradicating ecocide*, *supra* note 153, 63. See also Neyret, *supra* note 177, 288; Jodoin & Saito, *supra* note 129, 129.

²¹⁷ Gray, *supra* note 142, 217; *ILC Draft Code of Crimes*, *supra* note 197, 107, para. 5.

²¹⁸ See *supra* C.III.

²¹⁹ As to this distinction, see *Proposal by Tomuschat*, *supra* note 39, para. 32.

since modern international law does not necessarily require a transboundary element for its applicability,²²⁰ the geographical coverage of ecocide does not need to amount to a transboundary or global nature if the geographically affected area is large enough in itself.²²¹ Therefore, third, for the establishment of such a non-transboundary but widespread scale of damage, the mark of “[...] several hundred square kilometers [...]” could be used, as suggested in the context of Article 8(2)(b)(iv).²²²

Lastly, and of a particularly controversial nature,²²³ long-term damage introduces a temporal element into the threshold. It refers to the *long-lasting* consequences of environmental damage as can be seen in the various alternative proposals for a crime of ecocide.²²⁴ Parallel to understandings with regard to Art. 55 of AP I,²²⁵ *long-term* should be understood as “[...] decades rather than months”.²²⁶ Although the *irreversible* nature of the damage is not suggested as a separate condition here,²²⁷ it could constitute one particular case of long-term damage, i.e. damage which is lasting because of the difficulties or even the impossibility to reverse its consequences.²²⁸ At this point, the environmental concern for the impacts on future generations comes into play since long-term effects are a typical characteristic of environmental degradation.²²⁹

In this context, it is important to stress the suggested formulation that the acts *cause or may be expected to cause* this damage: Thus, it suffices if the

²²⁰ Cornelius, *supra* note 94, 28-29.

²²¹ *Proposal by Tomuschat*, *supra* note 39, para. 32.

²²² Higgins, *Eradicating ecocide*, *supra* note 153, 64. With regard to Article 8(2)(b)(iv): Lawrence & Heller, *supra* note 33, 73; Arnold & Wehrenberg, *supra* note 58, Art. 8, para. 253; Weinstein, *supra* note 54, 707-708; Kouba, *supra* note 214, 350.

²²³ *ILC Draft Code of Crimes, Titles and texts of articles adopted*, *supra* note 212, paras 67-92.

²²⁴ Gray, *supra* note 142, 217; Rauxloh, *supra* note 119, 448; *ILC Draft Code of Crimes*, *supra* note 197, 107, para. 5.

²²⁵ *ILC Draft Code of Crimes, Titles and texts of articles adopted*, *supra* note 212, para. 60.

²²⁶ *Report of the Secretary-General on the protection of the environment in times of armed conflict*, UN Decade of International Law, UN Doc A/48/269, 29 July 1993, 7, para. 34. See also *Official Records of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts*, Vol. XV, UN Doc CDDH/215/Rev.1, 1978, 268, para. 27; NATO Bombings Report, *supra* note 45, para. 15. Contrary to that, Higgins suggests an understanding in the sense of “period of months, or approximately a season”: Higgins, *Eradicating ecocide*, *supra* note 153, 64.

²²⁷ Contrary to Mégret’s proposal: Mégret, *Crime against the Environment*, *supra* note 100, 65.

²²⁸ Gray, *supra* note 142, 217.

²²⁹ *Supra* notes 146, 148; Mégret, *Crime against the Environment*, *supra* note 100, 65; See also Mégret, *Offences against Future Generations*, *supra* note 132, 168-172.

probability of long-term damage to the environment is foreseeable to a sufficient certainty at the time of the prosecution.²³⁰ Criteria for the exact elaboration of the level of sufficient certainty could be deduced from applicable principles of international environmental law, such as the principle of prevention.²³¹ However, the sufficient certainty of the causal link has to go beyond a mere possibility, therefore beyond the criteria required by the environmental precautionary principle.²³² The causal link has to be confined to a certain degree to secure that international criminal law is not to be misused to prosecute all kinds of distant, untraceable consequences of a conduct.²³³ On the other hand, it is not necessary that the long-term damage, which might manifest itself only years after the commission, *has* already occurred.²³⁴ Otherwise, the requirement of an actually occurred long-term damage would constitute an almost insurmountable evidentiary hurdle which would make any effective prosecution of a new environmental crime illusory.²³⁵

Due to these difficulties of causation, international criminal law has sometimes been criticized as being unable to deal with issues of damage to the environment, particularly in the context of climate change.²³⁶ One possibility to counter this argument could be the exclusion of too remote consequences of punishable acts from the crime's scope of application. However, further research on this issue would still be necessary to properly define the degree of certainty for long-term damage.

c) Interrelation of the Three Threshold Criteria

After having established the meaning of *severe*, *widespread* and *long-term*, their relation to each other, i.e. their cumulative or alternative requirement is

²³⁰ Rauxloh, *supra* note 119, 448.

²³¹ E.g. A. Proelß, 'Prinzipien des *Internationalen Umweltrechts*', in A. Proelß (ed.), *Internationales Umweltrecht* (2017), 75, 79-80.

²³² *Ibid.*, 85.

²³³ On the requirement of causation under international criminal law: Werle & Jessberger, *supra* note 68, paras 455-456.

²³⁴ Rauxloh, *supra* note 119, 448; Mégret, 'Crime against the Environment', *supra* note 100, 66.

²³⁵ Mégret, 'Crime against the Environment', *supra* note 100, 66; *ILC Draft Code of Crimes, Titles and texts of articles adopted*, *supra* note 212, para. 69; *ILC Draft Code of Crimes*, *supra* note 197, 107, para. 5.

²³⁶ Mistura, *supra* note 8, 224; G. Gilbert, 'International Criminal Law is not a Panacea – Why Proposed Climate Change 'Crimes' Are Just Another Passenger on an Overcrowded Bandwagon', 14 *International Criminal Law Review* (2014) 3, 551, 555-556.

important. While Article 8(2)(b)(iv) requires all three characteristics of the damage in a cumulative way,²³⁷ such a high threshold has been characterized as being too restrictive and it could deprive the new crime of any practical relevance.²³⁸ While it is necessary to limit prosecution by introducing clear-cut and limitative criteria of damage, these should be determined by a careful balance between diverse situations and consequences involving differing severities of harm, geographical ambits and temporal impacts.²³⁹

Therefore, it is suggested to require the damage in any case to be *severe* in order to exceed a certain minimum level of harm which could otherwise be addressed on the national level. On top of this, the damage would need to be either widespread or long-term, but not necessarily both.²⁴⁰ The reason for this distinction is that severe damage should in itself be *necessary* for international criminal prosecution but not *sufficient*. However, a severe damage which exceeds a certain geographical area amounts to a crime worth of international concern and prosecution – without it having to be long-lasting.²⁴¹ On the other hand, a severe damage which has lasting impacts on ecosystems and future human beings equally satisfies this international concern-threshold by its temporal gravity – regardless of its geographical scope.

3. *Mens Rea* Requirement

The *mens rea* element might be the most disputed element of the concept of ecocide, as it establishes the basis of subjective wrong, which is necessary for every criminalized behavior.²⁴² In regard to the *mens rea* element, the existing proposals vary from “[...] objective recklessness”²⁴³, over “[...] desire or knowledge with substantial certainty”²⁴⁴ to strict liability.²⁴⁵

²³⁷ Dinstein, *supra* note 60, 536; Arnold & Wehrenberg, *supra* note 58, Art. 8, para. 253.

²³⁸ With view to Art. 8(2)(b)(iv), see *supra* notes 61-64. See also Pereira, *supra* note 10, 197-198.

²³⁹ Cf. McLaughlin, *supra* note 144, 398, fn. 117.

²⁴⁰ Gray, *supra* note 142, 217; Cornelius, *supra* note 94, 29-30. This is illustrated by the proposed formulation of “widespread or long-term and severe” damage.

²⁴¹ Again, this holds particularly true with regard to the evidentiary hurdles linked to that criteria, *supra* note 235.

²⁴² Werle & Jessberger, *supra* note 68, paras 438, 447.

²⁴³ Rauxloh, *supra* note 119, 449.

²⁴⁴ Berat, *supra* note 155, 343.

²⁴⁵ Higgins, *Eradicating ecocide*, *supra* note 153, 68-69; in detail Mwanza, *supra* note 33, 609-612.

A perpetrator would in any event be criminally liable for ecocide when committed with intent and knowledge in the sense of Article 30. While scenarios of targeted damage of the environment are rare,²⁴⁶ the crime's main field of application presumably is a different one; that is to say environmental damage is a side-effect of an action that aimed at different, for instance, economic purposes.²⁴⁷

For that reason, in order to provide for criminal liability for the outlined scenarios, it is proposed to introduce a broader *mens rea* requirement for the ecocide crime (b) as well as adequate rules for the provision of evidence (c) than the standard set out by Article 30 (a). It is however suggested to decline more moderate *mens rea* standards than *dolus eventualis* (d).

a) Existing *Mens Rea* Standards Under the Rome Statute

Article 30 is the general provision addressing the mental element required to be criminally responsible under the Rome Statute.²⁴⁸ This default rule applies to all crimes²⁴⁹ and would extend to the crime of ecocide. The provisions' interpretation has been subject to a vivid debate.²⁵⁰ The ICC itself had occasion to elaborate on the provision.²⁵¹ The PTC I proclaimed in the *Lubanga Case* that the provision first and foremost accommodates intent in the form of *dolus directus* of the first degree,²⁵² but additionally, *dolus directus* of the second degree and *dolus eventualis*.²⁵³ This broad interpretation accommodating *dolus eventualis* had however been convincingly turned down in the subsequent jurisprudence of

²⁴⁶ Pereira, *supra* note 10, 195.

²⁴⁷ Ibid, 195; Crasson, *supra* note 24, 39-40; Mwanza, *supra* note 33, 605.

²⁴⁸ M. E. Badar & S. Porro, in Klamberg (ed.), *supra* note 77, 314; Werle & Jessberger, *supra* note 68, para. 473.

²⁴⁹ Werle & Jessberger, *supra* note 68, para. 467.

²⁵⁰ Badar & Porro, *supra* note 248, 316-320.

²⁵¹ *The Prosecutor v. Thomas Lubanga Dyilo*, Decision on the confirmation of the Charges, ICC-01/04-01/06 (Pre-Trial Chamber I), 29 January 2007, 119, para. 351 [Prosecutor v. Lubanga]; *The Prosecutor v. Jean-Pierre Bemba Gombo*, Decision Pursuant to Article 61(7)(a) and (b) on the Charges, ICC-01/05-01/08 (Pre-Trial Chamber II), 15 June 2009, 122, para. 360 [Prosecutor v. Bemba]; *The Prosecutor v. Germain Katanga and Mathieu Ngudjolo Chui*, Decision on the confirmation of the Charges, ICC-01/04-01/07 (Pre-Trial Chamber I), 30 September 2008, 77, para. 251, fn. 329 [Prosecutor v. Katanga].

²⁵² *Prosecutor v. Lubanga*, *supra* note 251, 119, para. 351.

²⁵³ *Prosecutor v. Lubanga*, *supra* note 251, 119, para. 352; endorsed by *Prosecutor v. Katanga*, *supra* note 251, 77, para. 251, fn. 329.

the Court,²⁵⁴ a view that is shared by most commentators.²⁵⁵ The common thread of the Chambers' decisions is that Article 30 does not cover more moderate *mens rea* standards than *dolus directus* of the first and second degree. Consequently, ecocide may in any event be committed with these two types of intent.

When applied to ecocide, the crime would be committed with *dolus directus* of the first degree, if the perpetrator knows and intends to cause widespread or long-term and severe damage to the environment.²⁵⁶ With regard to the standard of *dolus directus* of the second degree, the voluntary element is attenuated. Irrespective of whether the perpetrators have the intention to cause the required damage to the environment, it would suffice if they, whilst undertaking an act or omission, knew that such damage would result.²⁵⁷

b) Proposed *Mens Rea* Requirement for the Crime of Ecocide

The general provision on the mental element of a crime “[...] is based on a rule-exception dynamic”²⁵⁸, with Article 30(1) allowing exceptions to the general rule.²⁵⁹ Since there is no indication that the provision intends to set out a *minimum* standard of intent, the phrase “*unless otherwise provided*” permits the introduction of a form of intent in the crime of ecocide that is less strict than the general rule of Article 30(1).²⁶⁰

It is proposed to incorporate a new, more moderate mental element for the crime of ecocide that is below the standard set out in Article 30.²⁶¹ Since environmental damage is ordinarily not an action's first and primary purpose but rather the consequence or a side effect of acts whose primary aim

²⁵⁴ *Prosecutor v. Bemba*, *supra* note 251, 122, para. 360.

²⁵⁵ A. Cassese *et al.*, *International Criminal Law*, 3rd ed. (2013), 56; Ambos, *supra* note 185, 21-22; S. Finnin, ‘Mental Elements under Article 30 of the Rome Statute of the International Criminal Court: A Comparative Analysis’, 61 *International and Comparative Law Quarterly* (2012) 2, 325, 349; For the opposing view, see M. E. Badar, ‘The Mental Element in the Rome Statute of the International Criminal Court’, 19 *Criminal Law Forum* (2008) 3-4, 473, 494.

²⁵⁶ Cf. *Prosecutor v. Lubanga*, *supra* note 251, 119, para. 351.

²⁵⁷ *Prosecutor v. Lubanga*, *supra* note 251, 119, para. 352(i).

²⁵⁸ Badar & Porro, *supra* note 248, 314 (emphasis added); see also Pigaroff & Robinson, *supra* note 85, Art. 30, para. 14; W. A. Schabas, *The International Criminal Court, A Commentary on the Rome Statute*, 2nd ed. (2016), 628.

²⁵⁹ Badar & Porro, *supra* note 248, 314-315; Finnin, *supra* note 255, 351.

²⁶⁰ Finnin, *supra* note 255, 354; A. Eser, ‘Mental Elements – Mistake of Fact and Law’, in A. Cassese, P. Gaeta & J. R.W.D. Jones (eds), *The Rome Statute of the International Criminal Court, Vol. I* (2002), 889, 933, 946.

²⁶¹ See on the opposing view Cornelius, *supra* note 94, 33.

is a different one,²⁶² the crime of ecocide must be tailored to these respective circumstances. Therefore, the new crime should contain the following paragraph that incorporates the standard of *dolus eventualis*.

In addition to Article 30, a person is criminally responsible and liable for punishment if the person considers it possible that the act or omission may be expected to cause widespread or long-term and severe damage to the environment and accepts such outcome.

Generally, *dolus eventualis* is evident in scenarios in which the person considers it possible or not entirely excluded that their acts or omissions may bring about the objective elements of a crime, but the person accepts such outcome by reconciliation or consent.²⁶³ Compared to *dolus directus* of the first and second degree, both the cognitive and the volitional elements are attenuated. Whereas regarding the cognitive element, awareness of the possibility of a certain consequence is perfectly sufficient, for the volitional element a conscious risk-taking suffices.²⁶⁴

Applied to ecocide, *dolus eventualis* is given if the perpetrator considers it possible to cause widespread or long-term and severe damage to the environment but accepts this outcome. Therefore, it is not necessary for the perpetrator to be aware of the exact details or the exact causal link between the conduct and its consequences; it is sufficient to knowingly take the risk that these consequences occur in the ordinary cause of events. Other than for *dolus directus* of first or second degree, the person neither needs to know nor to intend that environmental damage is the necessary outcome.

c) *Dolus Eventualis* and the Provision of Evidence

The incorporation of a new form of intent would present a challenge to the international criminal system. The concrete criteria of *dolus eventualis* and principles on its proof would need to be developed, since this form of intent is, so far, foreign to the Rome Statute. The burden of proof regarding the mental element is generally a heavy burden²⁶⁵ and will, in relation to ecocide, be brought

²⁶² Pereira, *supra* note 10, 195; Crasson, *supra* note 24, 39-40; Mwanza, *supra* note 33, 605.

²⁶³ Werle & Jessberger, *supra* note 68, para. 477; see also *Prosecutor v. Lubanga*, *supra* note 251, 119, para. 352; see also *Prosecutor v. Tadic*, Judgment, IT-94-1-A, 15 July 1999, para. 220.

²⁶⁴ *Prosecutor v. Tadic*, *supra* note 263, para. 220; Badar, *supra* note 255, 489; Ambos, *supra* note 185, 21.

²⁶⁵ *Proposal by Tomuschat*, *supra* note 39, para. 37.

about with *dolus eventualis*. Whereas the degree of likelihood of environmental damage may be determined based on objective criteria, the prosecution might face great challenges to prove the perpetrator's acceptance of the outcome. The underlying rationale of the *runaway decision* in the *Lubanga* Case may and should be used as helpful guidance when addressing this issue. Therein, the ICC proposed to distinguish between two different scenarios that differ in regard of the degree of certainty that the objective criteria of a crime are brought about.²⁶⁶ If there is a substantial risk that an act or omission realizes the objective criteria of a crime, the acceptance of this outcome may be inferred from the mere fact that the person carries out said act or omission despite the awareness of that substantial risk.²⁶⁷ If there exists however a mere likelihood, it is required that the person clearly accepts that their acts or omissions may bring about the objective elements of a crime.²⁶⁸

In line with this approach, the degree of likelihood of an outcome should affect the provision of evidence. One should however part from the two rigid scenarios of substantial certainty and mere likelihood. Instead, the requirements put on the prosecution for proving the *acceptance of an outcome* should decrease linearly to the extent that the degree of certainty of the realization of these outcomes increases. In other words, the likelier it is that the objective criteria of the crime of ecocide are brought about, the less strict the requirements for proving the acceptance of the outcome are.

d) Declined *Mens Rea* Standards

Even though there is consensus to lower the *mens rea* threshold, the potential standards vary distinctively in the different proposals.²⁶⁹ The most extensive proposal even pleads for ecocide as a crime of strict liability.²⁷⁰

However, this paper suggests that there should be no broader standard than *dolus eventualis*. An observation of the existing crimes suggests that the accumulation of objective criteria and a special misanthropic intent seems to qualify these crimes as the "[...] most serious crimes of concern to the international community [...]".²⁷¹ Negligence or strict liability would however only take into

²⁶⁶ *Prosecutor v. Lubanga*, *supra* note 251, 120, paras 353-354; see also Badar, *supra* note 255, 491.

²⁶⁷ *Prosecutor v. Lubanga*, *supra* note 251, 120, para. 353.

²⁶⁸ *Ibid.*, 120, para. 354.

²⁶⁹ See also *supra* note 243-245.

²⁷⁰ Higgins, *Eradicating ecocide*, *supra* note 153, 68-69.

²⁷¹ *Rome Statute*, Preamble.

account the consequence of an act or omission, i.e. the environmental damage, without considering the intentions of the perpetrators National criminal law could certainly provide for criminal liability for environmental damage caused by negligence or a strict liability ecocide crime.²⁷² However, the international criminal system as set out by the Rome Statute adheres to a subjective understanding of the *mens rea* element.²⁷³ Standards of criminal liability that do not require a volitional element at all do not seem to fit within this conception.

Additionally, it is intended to present a realistic proposal of the ecocide crime. The *travaux préparatoires* of Article 30 reveal that there was originally no consensus to integrate *dolus eventualis* or negligence into the Statute's general provision on the mental elements of a crime.²⁷⁴ If ecocide is considered to become a fifth international crime alongside the four capital crimes, its mental element must also amount to a comparable level to the existing crimes. Since Article 30 certainly leaves room for less strict standards of intent,²⁷⁵ an integration of *dolus eventualis* does not seem impossible since it does not entirely waive any form of volitional element. It is however improbable that there will be considerable support for an incorporation of standards of culpability that do not require any voluntary element and are to be determined according to purely objective criteria.²⁷⁶

III. Summarizing Remarks and Application to the Situation in Ecuador

If one applies the foregoing observations to the oil spill in Ecuador, the discharge of several million gallons of formation water, drilling waste and produced water into the environment by Chevron²⁷⁷ would fit into one or more of the enumerated acts of a new crime of ecocide. Further, criminal prosecution would be directed against any superior of Texaco who was sufficiently aware

²⁷² Strict liability crimes are already recognized by many Anglo-American legal systems, see A. Ashworth, 'Criminal Law, Human Rights and Preventative Justice', in B. McSherry, A. Norrie & S. Bronitt (eds), *Regulating Deviance: The Redirection of Criminalisation and the Futures of Criminal Law* (2009), 87.

²⁷³ Eser, *supra* note 260, 902. See also Mistura, *supra* note 8, 223-224.

²⁷⁴ Pigaroff & Robinson, *supra* note 85, Art. 30, para. 3.

²⁷⁵ Finnin, *supra* note 255, 354; Eser, *supra* note 260, 946.

²⁷⁶ Eser, *supra* note 260, 902-903.

²⁷⁷ Kimerling, *supra* note 24, 204-205; Crasson, *supra* note 24, 30-32; S. Patel, *supra* note 24, 78-79.

of the committed acts at that time.²⁷⁸ Turning to the elaborated threshold of seriousness, the damage caused by the pollution would have to be severe as well as being either widespread or long-term. The consequences of the pollution included the contamination of rivers and streams, the pollution of soils and sources of drinking water, negative impacts on flora and fauna, as well as the release of noxious gases into the atmosphere.²⁷⁹ The impacts on the local population were similarly intense, including increased rates of deadly diseases, and miscarriages, as well as the extinction of at least two indigenous communities in the affected region.²⁸⁰ Since the suggested crime of ecocide is not understood in a strictly anthropocentric sense, these direct impacts on the ecosystem and biodiversity as such would already be of a sufficient scale to meet the criteria of *severe* damage to the environment. Moreover, the enormous impacts on the local human population even trigger this criterion in an anthropocentric understanding.²⁸¹

Beyond this, the situation in Ecuador easily reaches the conditions for being widespread as well as long-term, although only one of these criteria would have to be met according to the present suggestion. The geographical area affected by the pollution covers 1.235.000 acres of rainforest,²⁸² thereby clearly exceeding the threshold of “[...] several hundred square kilometers [...]”²⁸³. Lastly, the long-term damage of Chevron’s activities in the region is beyond doubt: Most of the punishable acts occurred between the 1970s and the 1990s. Since the impact of the pollution are still suffered today by the local population and the ecosystem,²⁸⁴ they lasted more than a few months, but indeed decades, as required by the proposed crime of ecocide. Further, the impossibility to return the ecosystem in the region to its natural state renders the damage irreversible in great parts,²⁸⁵ thereby adding to its long-lasting character. Consequently, the repercussions of Chevron’s activities in Ecuador would meet the threshold of seriousness of a new crime of ecocide.²⁸⁶

²⁷⁸ Crasson, *supra* note 24, 47.

²⁷⁹ *Ibid*, 31; Amazon Defense Coalition, *supra* note 27; Environmental Justice Organizations, Liabilities and Trade, *supra* note 27.

²⁸⁰ Crasson, *supra* note 24, 31-32; see also Kimerling, *supra* note 24, 206-207.

²⁸¹ With regard to crimes against humanity, see also Lambert, *supra* note 32, 724.

²⁸² Request to the OTP of the ICC from the Legal Representatives of the Victims, *supra* note 16, 20; Lambert, *supra* note 32, 724.

²⁸³ E.g. Lawrence & Heller, *supra* note 33, 73.

²⁸⁴ Crasson, *supra* note 24, 31-32.

²⁸⁵ *Ibid*, 31.

²⁸⁶ For a comparable analysis, see also K. Martin-Chenut & C. Perruso, ‘L’affaire Chevron-Texaco et l’apport des projets de conventions écocrimes et écocide à la responsabilisation pénale des entreprises transnationales’, in Neyret (ed.), *supra* note 177, 67, 84.

Further, the *mens rea* requirement would have to be proven with regard to the actions of Chevron executives. The prosecution would most certainly succeed in proving at least *dolus eventualis* in committing the crime of ecocide. Regarding the cognitive element, it is not necessary that Chevron's superiors were aware of the exact causal link between the disposal of waste waters and the specific environmental damage caused, but it would be sufficient that they considered the possibility of negative impacts on the environment. In respect of the volitional element, the superiors' practice would have to qualify as *acceptance of an outcome*, thus, as a conscious risk-taking despite the awareness of the risk.

While the exact collection and consideration of evidence would be on the prosecution, and cannot be anticipated in this paper, there are strong indicators pointing to the existence of all requirements. For more than two decades huge amounts of toxic waste had been disposed in pits that were not lined by any material able to prevent or minimize the waste to find its way into the soils. The existence of a high risk of large-scale environmental damage could without doubt be proven by expert opinions.²⁸⁷ Witness statements could serve as proof for the fact that the relevant superiors at least did not entirely exclude these risks. Due to the immense amounts of waste and the considerable time it had been discharged in the region, the likelihood of the widespread or long-term and severe environmental damage is that high that the prosecution would further be held to less strict requirements in proving the acceptance of this outcome. Therefore, the proof that the relevant superiors consciously took the risk of environmental degradation could be easily deduced from the fact that the toxic waste was disposed despite the awareness of the likely environmental degradations.

E. Conclusion

With regard to the insufficiencies of current international criminal law under the Rome Statute for the protection of the environment, the merits of a new crime of ecocide are apparent.²⁸⁸ Recent decades have shown that the contemporary regime of international criminal law is not able to sufficiently contribute to the protection of the environment. Whereas Article 8(2)(b)(iv) sets such strict requirements that can barely be achieved, the other war- and peacetime provisions of the Rome Statute either contain a *mens rea* element

²⁸⁷ The Rome Statute does not limit the potential types of evidence, expert opinions may thus serve as evidence, see *Rome Statute*, Art. 69; *ICC Rules of Procedure and Evidence*, ICC-ASP/1/3 and Corr. 1, 3-10 September 2002, Rules 63-75.

²⁸⁸ Martin-Chenut & Perruso, *supra* note 286, 82-86

which is unrealistic for the commission of environmental crimes; or they are too anthropocentric and therefore disregard the complex interrelations between human beings and the surrounding ecosystems. The comparison of the existing regime with the proposed crime of ecocide in the context of the oil spill example in Ecuador illustrates the difficulties of the current system, on the one hand, and the merits of a new crime of ecocide, on the other. The aforementioned lack of impacts of the 2016 OTP Policy Paper on the prosecution of environmental destructions gives further proof of the insufficiency of the actual framework.²⁸⁹

Consequently, there can be no doubt that the time has come to counter current environmental atrocities by all possible means, including the effective blade of international criminalization. Objections of States or commentators regarding the crime's potentially excessive application as well as a fear of overcriminalization should be responded with the proposal of a clear-cut definition of ecocide. Such a delimitation of the crime's scope is necessary with view to the principle of legality as well as the justification to add it to the existing core crimes on an equal footing.

However, inevitably the question of the practical implementation of the new crime arises. While sometimes an alone-standing convention on ecocide is suggested,²⁹⁰ the introduction of the proposed crime into the Rome Statute by amendment seems preferable.²⁹¹ An amendment would admittedly not be easy to achieve and the proposed ecocide crime would be prone to discussions and objections by States,²⁹² as can be seen by the developments surrounding the removal of Article 26 from the Draft Code of Crimes.²⁹³ Nonetheless, at least two reasons support seeking an amendment. First, the incorporation into the pre-existing system of the Rome Statute would profit from an already established institution that gained noteworthy experience in the field of international criminal prosecution and additionally achieved a certain status in the international legal system.²⁹⁴ One would therefore not only create the

²⁸⁹ For a detailed analysis, see *supra* notes 12-16.

²⁹⁰ Berat, *supra* note 155, 343-348.

²⁹¹ Mwanza, *supra* note 33, 612-613; Cornelius, *supra* note 94, 33-36; G. Kemp, 'Climate Change, Global Governance and International Criminal Justice', in O. C. Ruppel, C. Roschmann & K. Ruppel-Schlichting (eds), *Climate Change: International Law and Global Governance* (2013), 711, 737-738. With regard to *crimes against future generations*: Jodoin & Saito, *supra* note 129, 148-150. E.g. End Ecocide on Earth Initiative, *supra* note 153.

²⁹² Smith, *supra* note 33, 62.

²⁹³ For a detailed analysis, see *supra* notes 39-41.

²⁹⁴ Rauxloh, *supra* note 119, 445.

fifth core crime but simultaneously equip it with a well-developed enforcement machinery. Second, the new crime of ecocide would automatically be put on equal footing with the existing international crimes.

Overall, it is reassuring that there is increasing public awareness of the endangerment of the environment. International social movements like *Fridays for Future* and the increased amount of environmental litigation²⁹⁵ prove that there is awareness and a refusal to accept the reckless destruction of the natural environment, especially on the part of the younger generation. The *zeitgeist* is in flux; and an emerging consensus not to condone environmental degradation may soon crystalize. In order to acknowledge this changing *zeitgeist* and most importantly, to preserve the natural environment, it is required that all possible protective measures be adopted, including the introduction of an ecocide crime in the Rome Statute. After all, the Rome Statute aims at punishing “[...] grave crimes [that] threaten the peace, security and well-being of the world [...]”.²⁹⁶ Twenty years after its entry into force, the time might have come to reconsider the extent that environmental atrocities are part of these grave crimes.

²⁹⁵ See Climate Change Litigation Databases, available at <http://climatecasechart.com/> (last visited 21 February 2021).

²⁹⁶ *Rome Statute*, Preamble.