Environmental destruction during armed conflict, anthropocentrism-ecocentrism divide and defining ecocide

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The anti-ecocide movement emerged as an initiative to use international criminal law to prohibit large scale destruction of the natural environment. The legal definition of ecocide published by the Independent Expert Panel appointed by Stop Ecocide Foundation (SEF) (2021) is a landmark moment in the ongoing campaign of criminalizing ecocide. This article analyzes the strengths and limitations of the SEF ecocide definition from an eco-centrist ecological perspective, on the ground that anthropocentric approaches to environmental protection in armed conflict situations are inadequate. The article identifies the definition as a progressive step forward from an eco-centric viewpoint as it represents several advances compared to article 8 (2) b iv which is the only provision that currently refers to the environment during armed conflict in the Rome Statute framework. Initiating a normative shift through bringing crimes against environment to the center of the Rome Statute regime, introducing a moderate and innovative actus reus criteria that relaxes the cumulative 'widespread, long-term and severe damage' requirement of article 8 (2) b iv, offering a dynamic interpretation to the constitutive elements of the actus reus criteria, advancing a flexible mens rea requirement through introducing the dolus eventualis standard and extending environmental protection to non-international conflicts represent progressive advances. However, linking the crime with a proportionality assessment as a second threshold impedes the effectiveness of the provision since it introduces an anthropocentric dimension that has resulted in diluting the eco-centric foundations of the ecocide conception. Refusing to treat the anthropocentric / eco-centric divide as binary oppositions, the article suggests considering them as two ends of a spectrum. Thus, it is argued that the proposed definition should be understood as a soft eco-centric scheme — a formula that remains within the ambit of eco-centrism but with an anthropocentric leaning.

Keywords – ecocide, Rome Statute, eco-centrism, international criminal law

1. Introduction

The impending climate crisis signified by long-term shifts in temperatures and weather patterns resulting in global warming, and associated repercussions of global warming such as environmental degradation, natural disasters, extremities in weather conditions, rising sea levels, acidifying of oceans etc. has posed an existentialist threat not only to humanity, but to the entire planet. As United Nations General Secretary Antonio Guterres remarked at the Climate Summit held in 2019, overcoming the climate crisis requires fundamental transformations in all aspects of society — in agriculture, land use, use of energy and models of development[1]. The threat of climate emergency has compelled academic disciplines — including international law — to rethink about their focus, and to consider the seriousness of the climate crisis in their respective fields[2]. The law of armed conflict cannot be exempted from this shift because environmental degradation that can contribute to the climate crisis has been integral to conflict situations[3]. As evident from the recently adopted Guidelines on the Protection of the Natural Environment in Armed Conflict (2020), it appears that the international humanitarian

[1] Antonio Guterres, 'Remarks at 2019 Climate Action Summit' (UN.org, 23 September 2019) <https://www.un.org/sg/en/content/sg/speeches/2019-09-23/remarks-2019-climate-action-summit>

[2] Jason Hickel, *Less Is More: How Degrowth Will Save the World* (Penguin Random House, 2020); Ian Gough, *Heat, Greed and Human Need: Climate Change, Capitalism and Sustainable Wellbeing* (Edward Elgar Publishing, 2017); Eduardo Kohn, *How Forests Think: Toward an Anthropology Beyond the Human* (University of California Press, 2013); Manuel Arias-Maldonado and Zev Trachtenberg (eds.), *Rethinking the Environment for the Anthropocene: Political Theory and Socionatural Relations in the New Geological Epoch* (Routledge, 2018); Zygmunt Bauman, *Wasted Lives: Modernity and Its Outcasts* (Polity,2003); Fritjof Capra and Ugo Mattei, *The Ecology of Law: Towards a Legal System in Tune with Nature and Community* (Berrett-Koehler Publishers, 2015); Richard O. Brooks and Ross Jones, *Law and Ecology: The Rise of the Ecosystem Regime* (Routledge, 2002); Prue Taylor, *An Ecological Approach to International Law: Responding to the Challenges of Climate Change* (Routledge, 1998)

[3] James R. Lee, *Climate Change and Armed Conflict: Hot and Cold Wars* (Routledge,2009); Halvard Buhauga, Nils Petter Gleditscha and Ole Magnus Theisena, 'Implications of Climate Change for Armed Conflict'('Social Dimensions of Climate Change' workshop, The World Bank Group,25 February, 2008); Asmeret Asefaw Berhe, 'On the relationship of armed conflicts with climate change' PLOS Clim 1(6):e0000038.<https://doi.org/10.1371/journal.pclm.0000038>

community has also taken the matter of environmental impact of armed conflict as a serious concern[4].

The scheme to recognize 'ecocide' as the fifth international crime under the Rome Statute regime is another proposition that has been advanced in this context of growing ecological awareness. The term ecocide indicates serious destruction caused to the natural environment. Though the idea of criminalizing ecocide was mooted decades before[5], the recent interest on the subject stems largely due to the campaigning of environmental activists to amend the Rome Statute to identify ecocide as a core international crime. The most recent development of this campaign is represented in the definition of ecocide by an independent expert panel appointed by the campaign organization Stop Ecocide Foundation (SEF) in 2021. Since its publication, the SEF definition has resulted in a rigorous academic debate. While some commentators are skeptical about the proposition, others have endorsed the definition albeit with criticism[6]. The present article chooses the SEF definition

[4] Also see ICRC, 'When Rain Turns to Dust: Understanding and Responding to the Combined Impact of Armed Conflicts and The Climate and Environmental Crisis on People's Lives' (International Committee of The Red Cross, 2022)

[5] Anja Gauger, Mai Pouye Rabatel-Fernel, Louise Kulbicki, Damien Short and Polly Higgins, 'The Ecocide Project: Ecocide is the missing 5th Crime Against Peace' (Human Rights Consortium, School of Advanced Study, University of London, 2012)

[6] see : Emma O'Biren, 'An international crime of "ecocide": what's the story?' (EJIL:Talk, 11-06-2021) <https://www.ejiltalk.org/an-international-crime-of-ecocide-whats-the-story/>; Donna Minha, 'The Proposed Definition of the Crime of Ecocide: An Important Step Forward, but Can Our Planet Wait?' (EJIL: Talk, 01-07-2021); Natascha Kersting, 'On Symbolism and Beyond: Defining Ecocide' (Volkerrechtsblog, 08.07.2021) <https://voelkerrechtsblog.org/on-symbolism-and-beyond/> [general supporting views]; Kai Ambos, 'Protecting the Environment through International Criminal Law?' (Ejil:Talk, 29-06-2021) <https://www.ejiltalk.org/protecting-the-environment-through-international-criminal-law/?utm_source=mailpoet&utm_medium=email&utm_campaign=ejil-talk-newsletter-post-title_2> [questioning the need for a new provision];Anastacia Greene, 'Mens Rea and the Proposed Legal Definition of Ecocide' (Volkerrechtsblog, 07-07-2021) <https://voelkerrechtsblog.org/mens-rea-and-the-proposed-legal-definition-of-ecocide/>; [analyzing the difference between mens-rea elements of the definition and the Rome Statute regime]; Jelena Aparac, 'A Missed Opportunity for Accountability?'(Volkerrechtsblog,09-07-2021) <https://voelkerrechtsblog.org/a-missed-opportunity-for-accountability/> [criticizing for not addressing corporate responsibility]; Fin-Jasper Langmack, 'Repairing Ecocide: A Worthwhile Challenge to the ICC Reparation System'(Volkerrechtsblog, 08-07-2021) <https://voelkerrechtsblog.org/repairing-ecocide/> [discussing reparations as a remedy]; Kevin Jon Heller, 'Skeptical Thoughts on the Proposed Crime of "Ecocide" (That Isn't)' (OpinioJuris, 23-06-2021); <https://opiniojuris.org/2021/06/23/skeptical-thoughts-on-the-

as the point of analysis because this has been the most authoritative definition so far advanced by the anti-ecocide movement campaigning to amend the Rome Statute. The definition is well publicized — and has been subjected to widespread discussion as mentioned above.

This article aims to contribute to this discussion by critically analyzing the SEF definition of ecocide from an eco-centric ecological perspective. Eco-centric ecologism refers to the critical intellectual tradition that considers the traditional anthropocentric — or 'narrow' environmentalism as inadequate to formulate a sustainable response to the climate crisis and environmental destruction caused due to human activities. Anthropological ecologism regarding the environment from a human centric angle [because humans are benefitted through sustainable environmental practices] is definitely a step in the right direction compared to having no concern about the environment at all. But this paradigm, which approaches the matter of ecology through a human lens, is constrained because of its tendency to tolerate certain harmful environmental practices which might be seen as beneficial for humans.

To ensure long-term environmental coherence, it is necessary to move beyond the human centric point of view, and to consider environmental harm as destructive because of the damage done to the environment alone. The effect on human welfare should be a secondary matter in assessing environmental damage. The prohibition of serious destruction of the ecosystem should be absolute, and no human-benefit analysis could be invoked to justify such serious destruction. Informed by this theoretical approach, the present paper analyses the SEF definition on ecocide with the view that law of armed conflict requires a shift towards a more eco-centric arrangement from its current anthropocentric orientation to provide effective

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proposed-crime-of-ecocide-that-isnt/>; Kevin Jon Heller, 'Ecocide and Anthropocentric Cost-Benefit Analysis' (OpinioJuris, 26-06-21) <http://opiniojuris.org/2021/06/26/ecocide-and-anthropocentric-cost-benefit-analysis/>; Jérôme de Hemptinne, 'Ecocide: an Ambiguous Crime?, https://www.ejiltalk.org/ecocide-an-ambiguous-crime/' (Ejil:Talk:29-08-2021) <https://www.ejiltalk.org/ecocide-an-ambiguous-crime/>; Danuta Palarczyk, 'Ecocide Before the International Criminal Court: Simplicity is Better Than an Elaborate Embellishment' (2023) Criminal Law Forum' https://doi.org/10.1007/s10609-023-09453-z> [critical remarks on conceptual ambiguities]

protection to the non-human environment in conflict situations. The analysis attempts to identify the strengths and limitations of the SEF definition and suggest alternatives for further improvement.

To avoid confusion, it should be mentioned at the onset that the article does not wish to discuss policy implications of recognizing ecocide as the fifth international crime. Issues such as whether ICC resources are sufficient to accommodate the inclusion of the crime, how to prioritize crimes in prosecution or whether state parties would consent to an amendment are not addressed in the article. These are indeed important questions, but the scope of the article does not allow space to discuss them in detail. Further, the SEF definition covers environmental destruction during both conflict and non-conflict scenarios. However, the present article does not intend to address issues concerning environmental destruction during peace times. This again is a matter of crucial importance, but the article focuses on the strengths and limitations of the SEF definition with reference to environmental harm during armed conflict contexts.

The article is structured as follows: the second section explains why an eco-centric shift is needed in the areas of international humanitarian law and international criminal law which regulates warfare. Drawing from the theoretical literature on eco-centric ecologism, the section demonstrates that the traditional anthropocentric orientation of these legal regimes is insufficient in affording protection to the environment in conflict contexts. The third section provides an overview of the notion of ecocide with the aim of placing the SEF definition on ecocide in its historical context. The fourth section offers an analysis of the SEF definition identifying both its strengths and limitations. The concluding section summarizes the argument of the article.

2. The case for an eco-centric shift in the law of armed conflict

Limits of anthropocentrism

The increased attention on the relationship between mankind and the natural environment led to the emergence of the academic discipline 'environmental ethics' in the 1970s. In the context of growing awareness of environmental

degradation and its impact on human lives, scholars belonging to different disciplines attempted to theorize the preferred relationship between humans and the natural environment and envisage strategies to combat the ecological question. The earliest manifestation of this tendency was work concerning the importance of preserving natural systems like rivers and forests[7], and issues like the impact the use of pesticides having on the ecological balance[8]. At the same time, especially with reports coming from Vietnam about largescale environmental destruction during military operations, concerns were raised about the impact warfare has on the natural environment[9]. This awareness about how human conduct could destroy entire ecosystems encouraged scholars, thinkers and academics to focus seriously about the matter of human-nature interaction[10].

There has been a complex debate since 1970s in the field of environmental ethics about the optimum paradigm that can ensure an ecologically sustainable future. These positions range from the focus on encouraging participation of under-privileged groups in environmental decision making (participation), seeing the environmental problem as something serious than participation and viewing it as an issue of survival (survivalism), to the approach of understanding the ecological crisis as a crisis of culture and character — and thus, treating engaging with the crisis as an opportunity for emancipation[11]. Regardless of these differences, the intellectual inquiry about the ecological crisis broadly comprises of two distinct traditions; one approaching ecological sustainability from a human angle *i.e.,* concerning about the natural environment because of the benefit sustainability brings to the mankind [and its future generations] —and the other tradition tending to defend the integrity of the environment for the sake of the environment's own value. Different categories of ecologism introduced by various scholars — Arne Naess (shallow and 'deep' ecology)[12], Timothy

[7] Aldo Liopold, *A Sand County Almanac* (Ballentine Books, 1986)
[8] Rachel Carson, *Silent Spring* (Penguin Classics, 2000)
[9] David Zierler, *The Invention of Ecocide: Agent Orange, Vietnam, and the Scientists Who Changed the Way We Think About the Environment* (University of Georgia Press, 2011)
[10] Robin Attfield, *Environmental Ethics: A Very Short Introduction* (Oxford University Press, 2018)
[11] Robyn Eckersley, *Environmentalism and Political Theory* (UCL press, 1993) 8-17
[12] George Sessions (ed), *Deep Ecology for the Twenty-First Century: Readings on the Philosophy and Practice of the New Environmentalism* (Shambala Press, 1995)

O'Riordan (techno centrism and ecocentrism)[13], Murray Bookchin (environmentalism and social ecology)[14], Donald Worster (imperialist and arcadian traditions of ecological thought)[15] among others in a more or less sense reflect the distinction between anthropocentric and eco-centric approaches to ecologism[16].

Eco-centric ecologism stems from the critique of anthropocentric approaches. Anthropocentric thought is interested in protecting the natural environment from the standpoint of human interest[17]. The dominant tradition of modern international environmental law, characterized by instruments such as the Stockholm Declaration (1972), Rio Declaration (1992) and United Nations sustainable development goals largely reflects an anthropocentric logic[18]. Further, environmentalist streams such as resource conservatism (conserve resources for human survival) and human welfare ecology (protect the environment to ensure the right to a healthy environment) are manifestations of this strand of thought[19]. The mainstream idea of environmentalism is built on the acknowledgement of the environmental rights of humans rather than concern towards any intrinsic value of nature[20].

Anthropocentrism in its different forms tends to separate the human from the ecological totality, assuming superiority of humans over the non-human environment[21]. From this sense of superiority stems the belief that the man has the right to control the earth[22] . This belief underlies the modern industrial society defined by endless drive towards consumerism and accumulation[23]. Instead of seeing humans as a part of a greater ecological

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[13] Timothy O'Riordan, *Environmentalism* (Pion, 1976)
[14] Murray Bookchin, *Toward and Ecological Society* (Black Rose Books, 1980)
[15] Donald Worster, *Nature's Economy: A History of Ecological Ideas* (2nd.ed., Cambridge University Press, 1994)
[16] Eckersley (n12)
[17] Roderick Frazier Nash, *The Rights of Nature: A History of Environmental Ethics* (The Universoty of Wisconsin Press, 1980)
[18] Luis J. Kotzé and Duncan French, 'The Anthropocentric Ontology of International Environmental Law and the Sustainable Development Goals: Towards an Ecocentric Rule of Law in the Anthropocene' (2018) vol.7 Global Journal of Comparative Law 18
[19] Eckersley (n12)
[20] Rob White, *Climate Change Criminology* (Bristol University Press, 2020)
[21] Eckersley (n12)
[22] Carson (n9)
[23] David Pepper, *Eco-socialism: From deep ecology to social justice* (Routledge, 1993)

community, and therefore the need for a harmonious relationship between humans and the non-human environment, anthropocentrism tends to subordinate ecological considerations to human interests.

Anthropological ecologism — even in its most sophisticated form like in human welfare ecology — functions within the parameters of human centrism. If humans fail to recognize that nature has its own intrinsic value regardless of its use for human welfare, destruction of ecosystems, species and life forms would be 'tolerated' if they are not conceived as of having direct relevance for human welfare. For example, destruction of African wildlife caused by periodic slaughters by poachers and military troops; or tigers, rhinos, bears facing extinction due to human activities are persistent environmental concerns[24]. These matters will bother us only if we adopt a non-anthropocentric view considering the inherent value of all types of species and environmental systems.

Furthermore, when human wellbeing is the standpoint, human necessity invariably becomes a justification for environmentally harmful activities committed on behalf of human interests. The notion of cost-benefit analysis of contemporary international environmental law that assess environmental harm in relation to human benefit reflects the overriding influence of the human necessity imperative. This privileged status accorded to human interests obstructs any meaningful answer to the ecological crisis. The talk about sustainable development has been criticized in this context as a human-centered developmental discourse co-opting the ecological discourse, and ensuring business is done as usual without substantive change[25].

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[24] Sessions (n 13) *xix*

[25] For a critique of international environmental law and sustainable development see Julie Davidson, 'Sustainable Development: Business as Usual or New Way of Living?' (2000) 22(1) Environmental Ethics 25; Beatriz Santamarina, Ismael Vaccaro and Oriol Betran, 'The Sterilization of Eco-Criticism: From Sustainable Development to Green Capitalism' (2015) 14 Articulos 13; Thomas Wanner, 'The New "Passive Revolution" of the Green Economy and Growth Discourse: Maintaining the "Sustainable Development" of Neoliberal Capitalism' (2015) 20 New Political Economy 21; Lynley Tulloch, 'The neo liberalisation of sustainability' (2014) 13 Citizenship, social and economics, education 26; M.Shamsul Haque, 'The Fate of Sustainable Development under neo-liberal regimes in developing countries' (1999) 20:2 International Political Science Review 197

Thus, the need for a shift towards a non-anthropocentric understanding of the relationship between humans and non-human environment premised on the intrinsic value of the natural ecosystems has been raised by many scholars.

Eco-centrism and international law

Eco-centrist approach to ecology refutes the dualistic thinking in the anthropocentric tradition. Thus, eco-centrism is a '[…] worldview that recognizes intrinsic value in ecosystems and the biological and physical elements that they comprise, as well as in the ecological processes that spatially and temporally connect them[26]'. While the protection of the environment is conditional on utility for humans in the anthropocentric paradigm, the eco-centric approach tends to treat ecological sustainability as an *end in itself* rather than an instrument for human wellbeing. They ought to be protected for the sake of this inherent value. The eco-centric view has led to the emergence of 'earth jurisprudence' which affords moral weight on the worth of non-human entities[27]; and treats the non-human environment as deserving greater respect and formal recognition by humans[28].

Robyn Eckersley identifies the following traits in explaining the significance of an eco-centric worldview: (a) recognizing the full range of human interests in the non-human world; (b) recognizing the interests of the non-human community; (c) recognizing the interests of future generations of human and non-humans and (d) adopting a holistic rather than an atomistic approach since it values populations, species, ecosystems etc. as inter-related entities[29]. The idea of inter-relatedness of all phenomena i.e., seeing the world as an '[…] intrinsically dynamic, interconnected web of relations in which there are no absolutely discrete entities and no absolute dividing lines between the living and the nonliving[30]' — and the inclusiveness demonstrated by recognizing the intrinsic worth of both human and non-human environment

[26] Joe Gray, Ian Whyte and Patrick Curry, 'Eco-centrism: What it means and it implies' (2018) 1:2 The Ecological Citizen 130
[27] Judith E. Koons, 'What Is Earth Jurisprudence?: Key Principles to Transform Law for the Health of the Planet' (2009)18 Penn State Environmental Law Review 47
[28] David Schlosberg, Defining Environmental Justice: Theories, Movements and Nature (Oxford University Press, 2007) 9
[29] Eckersley (n12) 46
[30] Ibid, 49

makes the eco-centric approach more protective of the ecological system than an anthropocentric perspective[31]. In other words, eco-centrism provides a more profound ontological premise that induces humans to think beyond their immediate self-interest, and to locate the position of humans within the larger ecological matrix.

The emergence of earth jurisprudence as mentioned before denotes the influence eco-centric thought is having on legal thinking. Environmental jurisprudence of non-western countries is increasingly contributing towards the legal recognition of the nature for its intrinsic value[32]. In the area of international law, though the dominant logic has been anthropocentrism, expressions of the eco-centric logic also persist as a non-dominant tradition[33]. The lineage of this alternative tradition can be sought back to the United Nations World Charter for Nature (1982) which proclaimed five principles for ecological sustainability on the understanding that '[…] every form of life is unique, warranting respect regardless of its worth to man'[34]. The United Nations General Assembly has adopted a series of resolutions stressing the need for human and nature co-existence[35]. While initiatives like the Earth Charter (2000) have demonstrated the need for an eco-centric approach, the dominant logic that informs international law addressing environmental matters has so far been the anthropocentric imperative. Thus, the quest to strengthen the eco-centric logic in international law still continues[36].

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[31] Ibid

[32] see *T.N. Godavarman Thirumulpad* v. *Union of India* [WP (Civil) No. 202 of 1995], *Centre for Environmental Law v Union of India* (IA No.3452 in WP(C) No.202 of 1995) [Indian jurisprudence]; The Law of the Rights of Mother Earth (Law 071 of the Bolivian Plurinational State); Article 10 constitution of Ecuador ([…]Nature shall be the subject of those rights that the Constitution recognizes for it), article 71-74 on the rights of nature

[33] Sara De Vido, 'A Quest for an Eco-centric Approach to International Law: the COVID-19 Pandemic as Game Changer' (2021) 3 (2) Jus Cogens 105

[34] Preamble, World Charter for Nature

[35] UNGA Resolution No. 74/224 'Harmony with Nature' (A/Res/74/224, 2019-12-19). Also see Resolutions under the same theme: 73/235 (2018); 72/223 (2017); 71/232 (2016);70/208 (2015); 69/224 (2014);68/216 (2013); 67/214 (2012); 66/204 (2011); 65/164 (2010); 64/ 196 (2009)

[36] De Vido (n 34)

Eco-centrism and law of armed conflict

Similar to other areas of international law, the law of armed conflict remains to be a largely anthropocentric regime[37]. Areas of international law that intertwine with armed conflict situations — International Humanitarian Law (IHL), International Criminal Law (ICL) and International Human Rights Law are deeply anthropocentric in their orientation. Though armed conflict situations cause enormous harm to the natural environment, and belligerent parties tend to treat environment as a secondary consideration or a mere object in warfare[38] — the natural environment has been a marginal consideration under the aforementioned legal regimes. As the term itself indicates, 'Humanitarian law' is more interested in ensuring human welfare rather than environmental integrity in an armed conflict context.

Traditional IHL rules were largely ignorant on environmental issues. Only with the adoption of Additional Protocol 1 (Add. Prot. 1) to the Geneva Convention in 1976 that an explicit reference was made to the natural environment. Out of the two articles of Add. Prot. 1 referring to the environment, only one treats destruction of the environment alone as a breach of law[39]. As it will be explained later in this article, this sole provision also has proven to be inadequate. The blind spot towards the environment is replicated in International Criminal Law too where only a single provision of the Rome Statute — accompanied with a complex, rigid threshold — refers to environmental destruction[40].

However, in light of rapid environmental deterioration in contemporary times, the need for the humanitarian community to take the matter of natural

[37] Matilda Advidsson and Britta Sjöstedt, 'Ordering Human-Other Relationships' in Vincent Chapaux, Fredric Megret and Usha Natarajan (eds), *The Routledge Handbook on International Humanitarian Law and Ecologies of Armed Conflicts in the Anthropocene* (Taylor and Francis, 2023) 122; Carsten Stahn, Jens Iverson and Jennifer S. Easterday, 'Introduction: Protection of the Environment and Jus Post Bellum: Some Preliminary Reflections' in Carsten Stahn (ed), Environmental Protection and Transitions from Conflict to Peace (Oxford University Press, 2017) 1

[38] Susi Snyder (ed), 'Witnessing the Environmental Impacts of War - Environmental case studies from conflict zones around the world' (Amnesty International et al., 6 Nov. 2020)

[39] Add. Prot. 1 articles 35 (3) and 55

[40] Rome Statute, article 8 (2) b iv

environment seriously has been stressed in many forums[41]. More eco-centric thinking is needed in this area of law in order to develop the norm that humans should refrain from certain types of activities that are grossly detrimental to the environment even in an armed conflict situation. The idea to criminalize large scale environmental damage — and to treat such action as a grave crime similar to genocide has to be assessed in this context where the inadequacy of law of armed conflict has become apparent in terms of providing protection to the natural environment.

3. The crime of ecocide

Concept of ecocide – a brief history

The concept of ecocide was first framed by American bioethicist Arthur Galston at the 1970 Conference on War and National Responsibility. This idea was proposed in the context where the adverse impact of warfare on the natural environment was becoming increasingly apparent in the post-second world war scenario, especially due to the harm taking place in Vietnamese battlefields due to the widespread use of the herbicide known as agent orange and excessive use of Napalms[42]. Taking the lead from the term genocide, Galston proposed an international convention banning systematic destruction of the environment[43]. The draft International Convention on the Crime of Ecocide, drafted by Richard Falk in 1973 — a document that addressed environmental damage in the context of warfare recognized a range of military actions that 'disrupt or destroy, in whole or in part, a human ecosystem' as constituting ecocide[44]. It should be noted that Falk's definition, which is one of the earliest manifestations of framing ecocide as a crime treats

[41] Karl Mathiesen, 'What's the environmental impact of modern war?; (The Guardian, 6 Nov 2014); 'Joint statement on the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict' (November 6 2018) <https://www.savethetigris.org/joint-statement-on-the-international-day-for-preventing-the-exploitation-of-the-environment-in-war-and-armed-conflict/>

[42] Giovanni Chiarini, Ecocide: from the Vietnam war to international criminal jurisdiction? procedural issues in-between environmental science, climate change and law (2022) 21 COLR 1

[43] Gauger et al. (n6)

[44] Richard A Falk, 'Environmental Warfare and Ecocide – Facts, Appraisal, and Proposals' (1973) 4(1) Bulletin of Peace Proposals 80 9

the prohibition of ecocide as absolute. Similar to genocide, no justification could be invoked to argue for its necessity[45].

The idea of crime of ecocide entered the United Nations discourse with bodies like the Sub-Commission on Prevention of Discrimination and Protection of Minorities, the Legal Committee of the General Assembly and the International Law Commission time to time considering and debating about making a law that prohibits systematic environmental destruction. Although the International Law Commission considered identifying ecocide as an international crime at the drafting stage of the Rome Statute, the idea was later abandoned[46]. Recognizing 'widespread, long-term and severe damage' to the natural environment excessive to the military advantage was the only reference Rome Statute made to the environment[47].

At the aftermath of the adoption of the Rome Statute, certain environmental activists — particularly Scottish activist Polly Higgins initiated the campaign to include ecocide as the fifth international crime in the Rome Statute alongside with genocide, war crimes, crimes against humanity and crime of aggression. Though some national legislations had declared ecocide as a crime[48], the transboundary nature of the ecological question was seen by

[45] The full definition reads as follows: 'In the present Convention, ecocide means any of the following acts committed with intent to disrupt or destroy, in whole or in part, a human ecosystem: The use of weapons of mass destruction, whether nuclear, bacteriological, chemical, or other; The use of chemical herbicides to defoliate and deforest natural forests for military purposes; The use of bombs and artillery in such quantity, density, or size as to impair the quality of soil or to enhance the prospects of diseases dangerous to human beings, animals or crops; The use of bulldozing equipment to destroy large tracts of forest or cropland for military purposes; The use of techniques designed to increase or decrease rainfall or otherwise modify weather as a weapon of war; The forcible removal of human beings or animals from their habitual places of habitation to expedite the pursuit of military or industrial objectives.'

[46] For a history of legal debate on ecocide see Gauger et. al (n 6)

[47] Rome Statute, article 8 (2) b 4

[48] For example see Ecuador: "crimes against the environment and nature or Pacha Mama and crimes against biodiversity" (Penal code, Article 98); Vietnam: "ecocide, destroying the natural environment" (Penal Code, article 278); Russia 'Massive destruction of the animal or plant kingdoms, contamination of the atmosphere or water resources, and also commission of other actions capable of causing an ecological catastrophe' (Penal code article 358) ; Kazakhstan: 'Mass destruction of flora or fauna, poisoning the atmosphere, land or water resources, as well as the commission of other acts which caused or a [sic] capable of causation of an ecological catastrophe,' (Penal code) article 161 ; Ukraine: 'Mass destruction of flora and fauna, poisoning of air or water resources, and also any other actions that may cause an environmental disaster'(Penal code article 441)

activists as requiring a response at the international level. In 2010, Higgins submitted the following definition to the UN International Law Commission on the crime of ecocide:

> 'The 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 that territory has been or will be severely diminished[49]'

Two observations about Higgin's intervention should be highlighted. First, unlike Falk and early generation theorists, Higgins expands the definition of ecocide into peace times too. Thus, warfare is only one human action that can cause ecocide among many other practices such as business conduct that happen outside an armed conflict context. Second, Higgins argues to make ecocide a crime of strict liability where *mens rea* is not required to establish the crime[50]. She offers several arguments to justify that proposal which includes the following propositions: a) the gravity of the crime requires attributing responsibility disregarding the criminal mind; b) strict liability helps in preventing the crime because human actors would be more diligent about environmental consequences (duty of care) once the prohibition of ecocide is in place[51].

SEF ecocide definition

The current debate on criminalizing ecocide is largely centered around the definition published in 2021 by the Independent Expert Panel appointed by the 'Stop Ecocide Foundation' — the campaign organization founded by Higgins. The SEF engages in further lobbying to trigger the process to amend the ICC Statute to recognize the crime of ecocide[52].

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[49] Polly Higgings, *Dare to be Great: Unlock Your Power to Create a Better World* (Flint, updated edition, 2020) 164

[50] Polly Higgins, *Eradicating Ecocide: Laws and governance to prevent the destruction of our planet* (Shepheard-walwyn publishers, 2010)

[51] Ibid, ch. 5

[52] For activities of the SEF see the campaign website https://ecocidelaw.com/

The SEF proposes to add a new international crime — the crime of ecocide to the Rome Statute (proposed article 8ter). Ecocide is defined as follows:

> 'Unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts[53]'

Following the structure of article 7 of the Rome Statute on crimes against humanity, the proposed article 8ter defines the elements of the crime after defining what ecocide is. Thus, definitions to the terms wanton[54], severe[55], widespread[56], long-term[57] and environment[58] are mentioned in the article.

According to the definition, to establish the crime of ecocide, two thresholds should be met: First, *the act should entail a substantial likelihood to cause severe and either widespread or long-term damage to the environment.* As the drafting panel thinks that this threshold alone would be over-inclusive since legally permitted and socially beneficial certain activities during the peacetimes [such as certain business activities] would be counted as ecocide

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[53] Independent Expert Panel for the Legal Definition of Ecocide: Commentary and core text (Stop Ecocide Foundation, June 2021)

[54] Wanton: 'reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated'

[55] Severe: 'damage which involves very serious adverse changes, disruption or harm to any element of the environment, including grave impacts on human life or natural, cultural or economic resources'

[56] Widespread: 'damage which extends beyond a limited geographic area, crosses state boundaries, or is suffered by an entire ecosystem or species or a large number of human beings'

[57] Longterm: 'damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time'

[58] Environment: 'the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space'

under such a situation, a second threshold is also introduced[59]. Thus, *the conduct in question should be of an unlawful or wanton nature.*

Under this formulation, apart from proving an act or an omission has caused severe and either widespread or long-term damage, the article also requires establishing that the act at the same time was either unlawful or wanton. The definition of the term 'wanton' introduces a proportionality assessment. Thus, reckless damage caused should be 'clearly excessive to the social and economic benefits anticipated'. During peace times, this means the exemption of 'socio-economically beneficial' activities that brings more benefits than the damage caused such as development of housing, railroads etc.[60]. The panel states that in a wartime context, this definition reaffirms the position expressed in article 8 (2) b 4 of the Rome Statute which balances the element of severe, widespread and long-term environmental damage with the concern of anticipated military advantage[61].

4. Proposed article 8ter – an eco-centric analysis

When looking from an eco-centric standpoint, the SEF definition of ecocide represents a mixed picture. The main strength of the definition lies in its potential in strengthening the eco-centric logic within the law of armed conflict. As explained before, environmental concerns have been a peripheral consideration in IHL and ICL frameworks. However, being marginal is different from having no presence at all. The eco-centric logic co-exists as a non-dominant, minor rationale alongside the dominant anthropocentric logic. To understand the contribution proposed article 8ter can offer, first it's imperative to have a closer look at the existing legal framework and to what extent the eco-centric logic persists within the law.

IHL and ICL: eco-centric tendencies

Article 35 (3) of the Add. Prot. 1, which represents a basic rule with reference to means and methods of warfare states as follows:

[59] (n 54)
[60] ibid
[61] ibid

> It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.

This article reflects an eco-centric leaning since the unlawful act i.e., damage to the natural environment is defined independent of its consequences to the human beings[62]. This can be differentiated from Add. Prot. 1 article 55 which also refers to the natural environment. The latter necessitates duty of care to protect the environment against widespread, long term and severe damage to the environment and lays down a prohibition on methods and means of warfare which are intended or may be expected to cause damage to the environment and '[…] thereby to prejudice the health or survival of the population[63]'. In the case of article 55, environment damage is deemed undesirable due to the harmful impact it has on human population. Article 35 (3), together with basic IHL principles such as the principle of distinction and precaution offers protection to the natural environment independent of human concerns.

The ICRC identifies the prohibition laid down in article 35(3) as a rule of customary international law[64]. The prohibition is understood as an absolute prohibition, cannot be justified by the overriding concern of military necessity[65]. Due to this absolute nature, the threshold of the prohibition has been set at a higher standard. Thus, for a violation to occur, the destruction of the natural environment should meet the cumulative criteria of having a 'widespread, long-term and severe' effect. This can be contrasted with the provisions of the Convention on the Prohibition of Military or any Hostile use of Environmental Modification Techniques (1976) (ENMOD). ENMOD also refers to the elements of 'widespread, long-lasting or severe' damage in prohibiting the development of techniques that modify the functioning of the environment[66]. ENMOD refers to the three terms in a disjunctive manner. Thus, *widespread or long-lasting or severe* damage amounts to a violation of the

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[62] ICRC, Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949 (Martinus Nijhoff, 1987) 410
[63] Add. Prot. 1, Article 55
[64] Rule 45, International Committee of the Red Cross (ICRC), *Customary International Humanitarian Law: Volume I: Rules* (Cambridge University Press, 2005) 151
[65] Ibid, 157
[66] ENMOD, Article 1

convention. In contrast, Add. Prot. I adopts a cumulative criterion. The problem with this high threshold is the difficulty in establishing a violation of all three elements at the same time. As the Committee established to review the NATO bombing campaign against Yugoslavia has also observed: '[…] the threshold was so high as to make it difficult to find a violation[67]'.

Furthermore, compared to the ENMOD, Add. Prot. 1 defines the constitutive elements of the cumulative criteria in a rigid manner. The term 'widespread' is defined by the Add. Prot. 1 as 'thousands of square kilo meters' as opposed to 'hundreds of square kilo meters' in the ENMOD framework. While the ENMOD defines 'long-lasting' as a period of several months or a season, Add. Prot. 1 defines 'long term' as a period of decades[68]. This comparison shows that the Add. Prot. 1 tends to adopt a strict criterion compared to ENMOD in defining the scope of unlawful environmental harm. The customary status of ENMOD is disputed[69], and it only abides parties to the convention. Further, in terms of scope of application, the ENMOD is applicable to both wartime and peacetime situations and covers geo-physical warfare in which techniques are used to alter environmental patterns[70]. On the other hand, Add. Prot. 1 is specific to armed conflict situations, a part of the *lex specialis* applicable to such contexts and covers ecological warfare[71]. Also, article 35 (3) reflects a customary international law rule. Thus, in a wartime scenario, the rigid formula reflected in article 35 (3) is likely to be applied.

The next provision deserving our attention is the Rome Statute article 8 (2) b iv. The article which comes under the provision of war crimes reads as follows:

> 'Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be

[67] Commentary Customary IHL, (n 65) 157
[68] Commentary Add. Prot. (n 63) 416
[69] (n 65) 157
[70] (n 63) 420
[71] Ibid

clearly excessive in relation to the concrete and direct overall military advantage anticipated'.

This provision has been described as an 'non-anthropocentric war crime' since the subject matter of the latter part of the provision concerns about the damage to the environment itself[72]. Article 8 (2) b iv is a secondary rule which is derived from the primary rules concerning the destruction of the natural environment embedded in IHL[73]. The threshold 'widespread, long-term and severe' damage reflects the cumulative criteria adopted in Add. Prot. 1 article 35 (3).

However, the Rome Statute does not specify the meaning of these terms. This raises the question about the definition ought to be followed[74]. The International Criminal Court (ICC) has never adjudicated on this provision, and therefore it is yet to be seen which definition the court would prefer. However, there is general scholarly agreement on the likelihood of adopting the strict IHL definition; not of the ENMOD because ICL rule is likely to be seen as derived from the provisions of the Add. Prot. I [75]. Similar to Add. Prot. Article 35 (3) the strict actus reus criteria Rome Statute article 8 (2) b iv encompasses has been explained as '[…] nearly impossible to meet in all but the most egregious circumstances[76]'.

Despite these similarities, article 8 (2) b iv differs from Add. Prot. 1 article 35 (3) in the crucial aspect of the former's association with a proportionality assessment. Widespread, long-term and severe damage would amount to a war crime only if the damage is 'clearly excessive in relation to the concrete and direct overall military advantage anticipated'. Thus, even if an incident of environmental damage meets the strict cumulative criteria, it

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[72] Jessica C. Lawrence and Kevin Jon Heller, 'The limits of article 8(2)B (IV) of the Rome Statute, The First eco-centric environmental war crime (2007) 20 Geo. Int'l. L. Rev. 61

[73] Micheal Bothe, 'War crimes' in Antonio Cassese, Paola Gaeta and John R.W.D. Jones (eds) The Rome Statute of the International Criminal Court: A Commentary, volume1 (Oxford University Press, 2002) 379

[74] Kai Ambos (ed), The Rome Statute of the International Criminal Court: A Commentary (3rd ed, Beck, Hart, Nomos, 2015) 375

[75] Mark Drumbl, 'Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes'(1998) 22 FORDHAM INTíL L.J. 122, 145; Lawrence and Heller (n 73)

[76] Lawrence and Heller (n 73) 68

would not be considered as a war crime if the prosecution fails to establish that the damage was clearly excessive to the anticipated military advantage. The prohibition is not absolute, and a commanding officer can order the destruction of the natural environment if there is imperative military necessity. The adjective 'clearly' used before the term 'excessive' denotes that criminal responsibility would be invoked only in cases where the excessiveness of the damage was obvious[77].

Linking article 8 (2) b iv with a proportionality test raises a serious question about to what extent the provision can be considered as 'non-anthropocentric'. In the last instance, if military (human) advantage can be invoked as a justification for serious environmental destruction, it seems that the intrinsic worth of the environment has been subordinated to human concerns. The present article will address this point in detail later in the next section when discussing the limitations of the ecocide definition.

In addition, the *mens rea* element of Article 8 (2) b iv also poses difficulties to the prosecution. Article 8 (2) b iv requires to establish that the accused person intentionally launched an attack with the knowledge that the attack would result in widespread, long term and severe environmental destruction. Thus, the prosecutor has to prove that: a) the attacker knew the attack would cause serious environmental destruction; b) also was aware that the damage clearly exceeds the anticipated military advantage and c) still intentionally decides to launch the attack. The prosecutor has to prove there was both knowledge and intent in carrying on the attack. And also, that the commander has concluded through a value judgement that the environmental harm was clearly excessive to the anticipated military advantage. The subjective formulation of the proportionality assessment poses an onerous task for the prosecutor. As Lawrence and Keller have observed '[…] it is difficult to imagine a situation in which a commander would launch an attack even though she consciously concluded that it would inflict a clearly excessive amount of environmental damage[78]'.

The above discussion shows that despite the overall anthropocentric orientation of IHL and ICL, the presence of eco-centric elements in the form

[77] Ambos, Commentary (n 75)
[78] Lawrence and Heller (n 73) 25

of Add. Prot. 1 article 35 (3) and Rome Statute article 8 (2) b iv can also be observed in those areas of law. Thus, we can locate a marginal existence of the eco-centric logic. However, this logic exists in a non-dominant form subjected to a number of limitations. The high *actus reus* threshold consisting of a rigid cumulative test, linking the actus reus standard with a proportionality assessment and the high *mens rea* standard undermines the effectiveness of article 8 (2) b iv. The very fact that no single charge has been brought under this provision before the ICC even after twenty-years of its existence arguably testifies to this ineffectiveness.

SEF ecocide definition: potentials

The proposed article 8ter represents an advance in several aspects from the current position of the law of armed conflict. This advance can be summarized in five points.

First, the elevation of crimes against the environment to the status of a core-international crime will indicate the willingness of international criminal law to view damage to the environment as a serious concern. As it stands now, the environment is a marginal consideration of the Rome Statute regime. Article 8 (2) b iv is yet another war crime among numerous other crimes. Furthermore, even article 8 (2) b iv is also not solely about the environment — the reference to the environment comes at the latter half of the provision whereas the former half addresses injury to civilians. Thus, the current position is that there is no provision that *exclusively* refers to crimes against the environment.

Recognizing ecocide as a standalone crime will indicate that International Criminal Law would treat the protection of environment as an utmost concern. The significance of this elevation is twofold: in symbolic terms, ecocide criminalization would signify a shift in values by giving an indication that environmental protection due to its intrinsic worth is considered as a core value in international law of armed conflict. This would not alter the overall anthropocentric nature of the legal framework. International criminal law would still be a system that is more interested in crimes against humanity. But insertion of article 8ter will lead to the strengthening of the eco-centric logic which hitherto remained as a marginal,

non-dominant logic. This will bring the eco-centrist reasoning to the center of international criminal law and reshape the balance between anthropocentric and eco-centric logics.

In practical terms, the deterrent effect created by criminalizing ecocide — along with the attribution of individual criminal responsibility — is likely to compel parties involved in warfare to think seriously about environmental matters. In a world that treats serious environmental damage as something horrible as genocide, decision-makers have to be careful and exercise due diligence when their decisions interact with the natural environment. Similar to genocide, large-scale environmental destruction and destruction of ecosystems would result in a massive uproar in the international public opinion. As it was famously declared at the Nuremberg trials, atrocities are committed by actual individuals, not by abstract entities[79]. Deterrence on individuals in positions of power is the main strength of using criminal law to combat harmful environmental practices[80]. The problem is not the inability or inappropriateness of employing criminal law to ensure environmental protection, but the marginal status of environmental provisions in the existing body of law. Proposed article 8ter would remedy this deficit by recognizing harm against the environment as a fundamental crime.

The second strength of the proposed ecocide scheme lies in its scope, which transcends some of the limits of article 8 (2) b iv. The *actus reus* standard in the proposed article [severe and either widespread or long-term damage] reflects a more liberal position than the cumulative severe, widespread and long-term damage criteria in article 8 (2) b iv. Thus, the establishment of severe damage either widespread or long-term is sufficient to meet the threshold. As explained before, establishing all the three elements cumulatively is a difficult task. Proving the damage was serious and grave is not sufficient; it has to be damage that has an effect covering a significant geographical area (several thousand kilo meters) and having a long-lasting effect (for several decades). Needless to say, many historic incidents involving significant damage to the natural environment would not qualify as

[79] 'Judicial Decisions "International Military Tribunal (Nuremberg), Judgment and Sentences' (1947) 41 American Journal of International Law 172 221
[80] Lawrence and Heller (n 73)

environmental damage under this criterion. For instance, the Israeli bombardment of Lebanese storage tanks at the Jiyeh thermal power plant during the 2006 Israel-Lebanon conflict had a serious pollution effect on the Mediterranean Sea. Though the harm was substantial to the oceanic ecosystem, such an incident would not fall within the ambit of article 8 (2) b iv because it did not spread to several thousand square kilo meters[81].

However, the drafters of the proposed ecocide definition have also avoided adopting the disjunctive criteria of the ENMOD convention.

Add. Prot. 1 / Rome Statute	ENMOD	SEF ecocide definition
widespread, long-term and severe damage to the natural environment (cumulative)	widespread, long-lasting or severe (disjunctive)	severe *and* either widespread or long-term

Definitions of environmental destruction: a comparison

The SEF definition takes an intermediate position between the more liberal ENMOD standard, and the strict cumulative standard. The risk of adopting the ENMOD standard would be the possible inclusion of environmental damage that is not warranted to be called ecocide into the category. If the term ecocide is to have any meaning, the term should be reserved to refer to serious and grave acts of destruction. Unnecessarily lowering the threshold would risk characterization of less destructive acts as ecocide. The intermediate position represents an optimum stance which would make prosecution more realistic by relaxing the rigid cumulative criteria while preventing the risk of over criminalization.

[81] For a report on the incident see United Nations, 'Environmental Emergency Response to the Lebanon Crisis : Consolidated Report on Activities Undertaken Through the Joint UNEP / OCHA Environment Unit' (United Nations, November 2006)

Third, the relaxation of the cumulative criteria is associated with giving a nuanced and a dynamic definition to the constitutive elements of the formula. The term 'widespread' is defined as 'damage which extends beyond a limited geographic area, crosses state boundaries or is suffered by an entire ecosystem or species or a large number of human beings.' The problem with defining what is widespread with reference to a specified number of square kilo meters as the Add. Prot. 1 and ENMOD does is that it might not capture certain grave destructions which may not spread along a vast geographical area, but still the destruction affects an entire ecosystem. Think of a hypothetical example where an entire population of some endangered species concentrated in a limited geo graphical area are destroyed. Neither the Add. Prot. 1 or the ENMOD would cover such a situation.

The innovative idea of linking the reference to a geographical area disjunctively with the notion of 'ecosystems or species' would allow to bring in such destructions into the purview of ecocide. Further, whether destruction is widespread or not is a relative question, depending on the context and facts of the scenario. Rather than artificially stipulating a number of square kilometers to define what widespread is, the approach taken by the SEF — adopting a flexible criterion ('extending beyond a limited geographical area with a cross border effect') would enable a dynamic use of the concept taking specific circumstances of the case into consideration.

This dynamic approach can also be seen in the definition given to the term 'long-term'. Rather than defining what is long term in terms of months or decades, the SEF adopts the following interpretation:

> 'Long-term' means damage which is irreversible or which cannot be redressed through natural recovery within a *reasonable period of time*.

Similar to the definition of the term 'widespread', the fluid nature of the phrase 'irreversible or cannot be redressed through natural recovery within a reasonable period of time' would allow for the construction of the article sensitive to the particularity of the destruction in question.

The fourth consideration is the expansive manner the article has defined the *mens rea* element of the crime of ecocide. In the Rome Statute, the default *mens rea* standard is provided in article 30 which refers to the categories of intent and knowledge. If the specific crimes do not specify their *mens rea* standard, article 30 applies as the default standard. The proposed article 8ter introduces 'reckless disregard' or *dolus eventualis* as the *mens rea* standard since the SEF panel considers categories embedded in article 30 are too narrow to capture the specificity of the crime of ecocide[82]. Criminal intent assumes three forms: *dolus directus* (perpetrator foresees the illegality of the consequences of his act, and desired the consequences); *dolus indirectus* (perpetrator foresees that illegal consequences *will* arise as a necessary corollary, but still decides to commit the act) and *dolus eventualis* (perpetrator foresees that illegal consequences *may* arise from the act, but continues to commit the act disregarding them)[83]. The difference between *dolus indirectus* and *dolus eventualis* is that in the former case it is certain that an illegal consequence will arise due to the action in question. In the latter scenario, the illegal consequence is only a possibility — not a certainty.

The strength of this approach lies in the lowering of the *mens rea* threshold. As explained before, the subjective nature of the *mens rea* element in Rome Statute article 8 (2) b iv makes prosecution a difficult task. The introduction of *dolus eventualis* as a standard of *mens rea* indicates that the law demands a high standard of due diligence from the part of the commanding officers in planning an attack. The commander should be concerned not only about environmental damage that will definitely arise as a consequence of the attack, but also of the damage that might occur due to the attack. Recklessness slightly differs from negligence. In negligence, the perpetrator foresees the consequences that might occur but is negligent to them. Recklessness introduces a more objective standard — the perpetrator 'should have known' that illegal consequences might occur but has disregarded them in action.

The SEF definition has been criticized for not using the term 'reckless' directly — and trying to introduce it in a disguised form by linking the concept

[82] Independent Expert Panel (n 54)
[83] Johan D. Van der Vyver, 'The International Criminal Court and The Concept of Mens Rea in International Criminal Law' (2004) 1:12 University of Miami International and Comparative Law Review 57

with the term 'knowledge'[84]. The *mens rea* standard has been a controversial aspect of the proposed definition because it significantly deviates from the default Rome Statute standard. Under the current arrangement, only in exceptional circumstances like the employment of child soldiers and superior responsibility that the *dolus eventualis* standard is applied[85]. Thus, commentators have raised doubts whether state parties would accept the proposed *mens rea* standard because ultimately, the question of amending the Rome Statute is a question of consensus among state parties. This article does not seek to address this *political* aspect of the issue. Even whether the very concept of ecocide would be accepted by a majority of state parties to the Rome Statute is still uncertain. If we leave aside the fact whether the definition is politically acceptable or not, the lower *mens rea* standard represents a legal innovation, inviting state parties to see the matter of environmental damage as an exceptional situation similar to recruitment of child soldiers.

Fifth, the crime of ecocide is proposed to be applied to both international and non-international armed conflict situations. This entails a significant transformational potential since most of the armed conflicts today occur within a non-international context. Rome Statute article 8 (2) b 4 is applied only to international armed conflicts. Not addressing the impact of non-international conflicts to the natural environment is a major defect of the existing Rome statute arrangement[86]. The broader scope of application the SEF definition offers is another aspect where the proposal reflects progress.

Limitation: incomplete eco-centrism

[84] Heller (n 7), Michael Karnavas, 'Ecocide: Environmental Crime of Crimes or ill-Conceived Concept?' (OpinioJuris,29-07-2021) <http://opiniojuris.org/2021/07/29/ecocide-environmental-crime-of-crimes-or-ill-conceived-concept/>
[85] Greene (n 7)
[86] Heller (n 73).

The discussion so far highlighted the strengths and potentialities the SEF definition of ecocide offers. To that extent, the definition would contribute to strengthening the eco-centric logic in the law concerning armed conflict.

However, from an eco-centric view, the SEF ecocide definition suffers from a crucial limitation, which it inherits from Rome statute article 8 (2) b iv. This defect lies in the fact of coupling the threshold of severe and either widespread or long-term damage with a second threshold requiring a proportionality assessment. The second threshold necessitates the action to be either 'unlawful' or 'wanton'. The term wanton is defined in following terms:

> "Wanton" means with reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated[87]

Jurisprudence indicates that the meaning of wanton is intending or recklessly disregarding prohibited consequences[88]. The SEF expert panel justifies the proportionality assessment on the following grounds: a) balancing environmental damage against social and economic benefits is an established principle in international environmental law; and b) war crimes in the Rome Statute, including article 8 (2) b iv already encompasses such proportionality assessment where the destruction is weighed against military advantage or necessity[89]. Since the SEF definition also covers activities during peace times, it seems that the panel of experts have been careful to exclude development activities which might cause environmental harm, but still produce greater socio-economic advantage from being labelled as acts of ecocide. In an armed conflict context, this indicates that the SEF has resolved to retain the proportionality requirement of article 8 (2) b iv.

The introduction of a proportionality assessment undermines the eco-centric character of the crime of ecocide. The very essence of criminalizing ecocide is that severe and large-scale damage to the non-human environment should be treated as a serious crime akin to genocide. The vantage point is the

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[87] n (54)
[88] ICTY, Kordic and Cerkez case (IT-95-14/2) (Trial Chamber Judgement, 2001)
[89] n (54)

intrinsic value of the environment. No overriding human concern can justify such severe, large-scale destruction of ecosystems. But once the law allows to balance the destruction with military advantage (or socio-economic benefits), that inevitably will lead to recognize human concerns as overriding considerations. In a hypothetical situation where a military commander foresees a greater military advantage in destroying a natural ecosystem, carrying on such destruction would not be unlawful according to article 8ter as long as the destruction turns out to be of a lesser degree than the advantage anticipated. In the way of proportionality assessment, anthropocentric reasoning has creeped into the ecocide definition.

If the idea of ecocide is to be meaningful, the prohibition should be absolute similar to genocide. In the case of genocide, no military necessity can be invoked to justify the annihilation of a population or a part of that population. Ecocide does not refer to each and every environmental harm. It refers to serious and severe types of damage that result in irreversible loss of entire ecosystems. This should be an exceptional crime. Allowing military necessity or socio-economic concerns to justify such destruction entails the risk of eroding the originality of the proposed innovation. Responding to the question whether the proposed definition is eco-centric or not, SEF expert panel member Cristina Voigt has claimed that the panel did not anticipate formulating a purely eco-centric definition of ecocide as they had to work within the parameters of established international law[90]. However, if that is the case, it would have been better to name the crime otherwise because the originality of the idea of ecocide lies in treating destruction of environment as a crime regardless of its consequences to human beings.

At this point, the question arises where does the proposed article 8ter fit in in terms of the anthropocentric / eco-centric divide. Does the linking of the crime with a proportionality assessment negate the eco-centric character of the concept? One view, expressed by Kevin Jon Heller treats the SEF definition as an act that would amount to international law 'greenwashing' — avoiding criminalizing the acts that cause climate change while praising

[90] 'Defining Ecocide – An Interview with Christina Voigt' (Völkerrechtsblog, 09-07-2021) < https://voelkerrechtsblog.org/defining-ecocide-an-interview-with-christina-voigt/>

yourself for tackling the ecological question. Responding to a claim that the SEF definition signifies a legal revolution[91], Heller states:

> '[…] There is nothing revolutionary about the definition. On the contrary, if adopted by states, it would inscribe into the Rome Statute, the most important document in international criminal law, the idea that the environment is worth protecting only when humans don't have a good enough reason to destroy it[92]'.

However, the present author prefers to take an intermediate position on the issue. The present author also argues that ecocide has to be an eco-centric crime, if we are to respect the integrity of the concept and the intellectual tradition from which the concept emerged. For instance, Polly Higgin's original definition of ecocide (which describes ecocide as '[..] the 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 that territory has been or will be severely diminished') is devoid of any sign of anthropocentrism. Extensive destruction or the loss of ecosystems itself is identified as a crime. The destruction is not balanced with human interests. Therefore, it is reasonable to conclude that the insertion of a proportionality assessment contravenes the logic of ecocentrism.

But does that lead to the conclusion that the proposed SEF definition lacks eco-centrist leanings and amounts to 'little more than international law greenwashing?[93]'. If the adoption of the proportionality element totally nullifies any eco-centric merit, it would be difficult to call Rome Statute article 8 (2) b iv as a non-anthropocentric crime as scholars (including Heller)[94] have previously done so. Despite the element of imperative military necessity, article 8 (2) b iv has been identified as non-anthropocentric because the

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[91] Romina Pezzot and Jan-Phillip Graf, 'Ecocide – Legal Revolution or Symbolism?' (Völkerrechtsblog, 03.02.2022) <https://voelkerrechtsblog.org/ecocide-legal-revolution-or-symbolism/>

[92] Kevin Jon Heller, 'Fiddling (With Ecocide) While Rome (and Everywhere Else) Burns' (Völkerrechtsblog, 18.02.2022)

[93] ibid

[94] See (n 73)

damage to the natural environment is treated as a crime independent of its repercussions to humanity. There is no reason to differentiate the proposed article 8ter from Rome Statute article 8 (2) b iv in this regard because the proportionality component remains the same.

Instead of considering the anthropocentrism / eco-centrism division as binary opposites, it is preferable to conceptualize the categories in terms of a spectrum. Then through an analysis, it can be assessed how different formulations are positioned within the spectrum. Thus, there can be anthropocentric concepts with a leaning towards eco-centrism, or eco-centric concepts having a leaning towards anthropocentrism. This approach will be useful to determine the character of schemes that might entail both eco-centric and anthropocentric logics. Thus, the indicator is to determine the relative weight of a particular logic within that scheme. The mainstream discourse of sustainable development can be an example for a anthropocentric scheme with an eco-centric leaning , where the main attention is on protecting the environment for human well-being — while you also find peripheral references to endeavors like wildlife preservation which do not have a direct relevance to human welfare.

Present author suggests conceptualizing the proposed article 8ter as a combination of two elements. The premise of the article (the principle element) is to treat actions carrying a likelihood to cause severe and either widespread or long-term damage to the natural environment as a crime. There is no trace of anthropocentrism in this element since it strives to protect the environment for the sake of its intrinsic value. It is the second element which couples the premise with the notion of proportionality that introduces an anthropocentric aspect. As long as the main premise of the crime treats environmental harm as a crime independent of its consequences to humans, the definition remains within the ambit of eco-centrism. Thus, the better formulation will be to consider the definition as an eco-centric concept, with an anthropocentric leaning. This can be called a soft variant of eco-centrism. Though it might not constitute a legal revolution, bringing crimes against the environment to the center of the Rome Statute architecture by designating it as a core crime definitely amounts to a significant reform.

But this does not mean that those who are interested in an eco-centric shift in the law of armed conflict should be content with the soft eco-centrism the SEF definition offers. Delinking the ecocide definition from the proportionality assessment would remove the shadow of anthropocentrism and make the definition more consistent with a solid eco-centric approach. Article 35 (3) of the Add. Prot. I that considers severe, widespread and long-term damage to the environment as a violation but does not link the provision with a proportionality test offers a precedent to this approach. In such a scheme, the prohibition of severe and either widespread or long-term destruction of the natural environment would be absolute. Revising the definition given to 'wanton' acts by removing the reference to proportionality assessment would lead towards this de-linking.

5. Conclusion

Anthropocentrism has been at the center of human thinking, at least since the rise of industrial civilization. Reckless disregard towards the environment that arises from the anthropocentric worldview has its imprint in all human activities — from industrial development to warfare where humans are insensitive to the environmental consequences of their actions. However, the ecological crisis that is looming does not allow mankind to continue on the same path. Thus, eco-centric thinking should be encouraged in diverse fields of thought, including the law of armed conflict.

International Humanitarian Law and International Criminal Law are not entirely devoid of any eco-centric element. Article 35(3) of the Add. Prot. 1 and Rome Statute article 8 (2) b iv reflect a non-anthropocentric approach as these provisions identify environmental harm independent of its human impact as a violation. However, these provisions are peripheral to the overall landscape of IHL and ICL which mainly concerns about human welfare during conflict situations. Furthermore, Rome statute article 8 (2) b iv entails several limitations: the rigid cumulative criteria to establish the *actus reus* element, the requirement of a proportionality assessment and the high *mens rea* threshold poses a difficult task to the prosecution and has rendered the provision largely ineffective.

The proposed article 8ter entails the potential of enhancing eco-centric thinking in the law of armed conflict through surpassing the inhibited limits of the existing Rome Statute provisions on the natural environment. The strengths of the definition are fivefold, which can be summed up in the following manner:

a) recognizing crimes against environment as a core-international crime would bring the matter of environment protection to the heart of the Rome Statute framework, and can contribute to engineering a normative shift;

b) relaxing the cumulative *actus reus* criteria (widespread, long term and severe damage) through adopting a moderate innovative criterion (severe or either widespread on long term damage) will make prosecution realistic while also avoiding the risk of overcriminalization;

c) defining the constituent elements of the cumulative criteria in a dynamic style without confining into rigid formulas (based on a number of square kilo meters or months / decades) in identifying environmental harm would facilitate context sensitive application;

d) introducing a more objective *dolus eventualis* standard would relax the *mens rea* requirement in crimes against the environment;

e) extending the protection of the environment to non-international conflicts would broaden the scope of application.

However, linking the establishment of the crime with a proportionality assessment — balancing the damage against military necessity (or socio-economic benefits) poses a difficult question. Through this requirement, article 8ter brings in an anthropocentric dimension to what is supposed to be an eco-centric crime. Proposed article 8ter inherits this defect from Rome Statute article 8 (2) b iv, and this status can be contrasted with the position of Add. Prot. 1 article 35 (3) which recognizes an absolute prohibition. The introduction of an anthropocentric proportionality test undermines the eco-centric foundations of the proposed definition, dilutes its originality and amounts to a soft form of eco-centrism — an eco-centric concept with an anthropocentric leaning. Delinking the eco-centric premise

of the crime from the secondary proportionality criteria would make the definition compatible with a solid eco-centric approach.