

# **(Not) all is fair in love and war: Norbert Elias's theory of civilisation, military violence, and the protection of the environment in war**

## **Abstract**

Military force has historically shaped human societies and their environments, often leaving profound and lasting ecological impacts. The environmental consequences of military activities – even in peacetime – can endure for generations. This paper examines the environmental dimensions of warfare in relation to the development of rules and regulations under international humanitarian law that constrain violence against the natural environment during war and armed conflict. We situate military practices and legal constraints within Norbert Elias's framework of the civilising process and explore the intertwined processes of de-civilisation and civilisation inherent in modern warfare. We argue that acts of *ecocide* represent, on one hand, a regression into unrestrained, primal destruction that de-civilises humanity's relationship with extra-human nature. On the other hand, particularly since the Second World War, humankind has been engaged in a process that establishes boundaries rendering environmental destruction by the military both definable and recognisable as a transgression. In this way, such destruction is neither ignored nor left unacknowledged; it is no longer regarded as self-evident or inevitable, nor defined as a necessary evil or mere 'collateral damage' but rather understood and treated as a 'wrongful act'. This evolution signals an expansion of ethical and legal boundaries consistent with Elias's insights into the codification of restraint in human behaviour.

**Keywords:** International humanitarian law, environmental protection, *ecocide*, Norbert Elias, human-environment nexus

## **Acknowledgments**

We want to thank Bernd Sommer and two anonymous reviewers for their valuable comments and helpful suggestions. This research was supported by funding from the Volkswagen Foundation.

## **1. Introduction**

"All wars are destructive – to people, to countries and to the environment", said UN Secretary-General Kofi Annan on the International Day for Preventing Exploitation of the Environment in War and Armed Conflict in 2003 (United Nations, 2003; Jensen, 2005, 180). To minimise this destruction and restrain the violence associated with war, nearly all societies from antiquity to today have established rules and norms regulating warfare. These norms, rules and customs can be interpreted as expressions of societal development towards increased indi-

\* *Kerrin Langer* ([kerrin2.langer@tu-dortmund.de](mailto:kerrin2.langer@tu-dortmund.de)), TU Dortmund University, Germany  
*Frank Reichherzer* ([FrankReichherzer@bundeswehr.org](mailto:FrankReichherzer@bundeswehr.org)), Bundeswehr Centre of Military History and Social Sciences, Germany

vidual self-restraint and are thus aspects of a civilising process as defined by Norbert Elias. On the other hand, warfare often results in transgressive uses of military force, excesses of individual and collective violence, and ruptures in existing norms (Elias, 1989 [2013], 231). However, such ruptures can nevertheless lead to (re-)negotiations concerning legitimate and illegitimate as well as legal and illegal forms of violence in warfare; these may culminate in some form of conventional or customary international humanitarian law (hereafter IHL) (Kalshoven & Zegveld, 2011, 4). IHL can be defined as “a set of rules which seek, for humanitarian reasons, *to limit the effects of armed conflict* [emphasis in original]” (ICRC, 2004). Examples include the codification of the ban on the use of chemical and biological weapons after the First World War, the acknowledgement and criminalisation of genocide as a crime against humanity following the Second World War, or debates about ecocide and subsequent provisions against environmental destruction during and after the Vietnam War (Kalshoven & Zegveld, 2004). These developments within IHL illustrate that evolution of societal self-restraint – together with broadening moral concern and mutual identification, which Elias identified as essential components of civilising processes – expanded significantly during the twentieth century.

In general, IHL in the nineteenth century was primarily concerned with humans – non-combatants, wounded soldiers and, later, prisoners of war. However, within the context of racialised thinking, regulations under IHL did not apply to all humans or all states but only to those perceived as ‘civilised’ by European and other Western powers. During colonial conquest and rule, many peoples were exempt from the norms and laws of war that the West had established for itself. This changed only with the 1949 *Geneva Conventions* (Rockel, 2009, 3–4). Just as states extended the scope of IHL to encompass all humanity, they also broadened its scope to include artefacts through protection of cultural heritage in 1907 (Charlier & Mustafayev, 2022) and eventually expanded it further to encompass the natural environment beginning in the 1970s.

In this paper we focus on this latter aspect. Our aim is to explore how dialectics between civilising and de-civilising processes in wars and violent conflicts interact with military engagements with the natural environment and how these processes shape ideas about legitimate and illegitimate uses of military force against nature. We argue that the integration of environmental protection into customary and codified IHL becomes explicable through Norbert Elias’s theory of civilising processes and constitutes in itself an aspect of civilising processes of societies generally and the military-environment nexus specifically.

Five key elements of Norbert Elias’s theory of civilisation form the basis for our analysis.

- 1) The first element concerns the understanding of “civilisation as internalization of restraints” at both societal and individual levels. At the individual level, societal

constraints and external controls give rise to increasingly prevalent patterns of self-constraint (Quilley, 2004, 49–51, quote p. 49; Elias, 1939 [2012], 403–417, 484–488).

- 2) The second element is the broadening of moral concern and mutual identification, which is interlinked with growing interdependence within societies (Elias, 1987 [2001]). In the context of the human-environment nexus, this entails a renewed recognition of mutual interdependence (Quilley, 2009, 128).
- 3) The third element relates to control over nature, which Elias identifies – alongside social and psychological control – as one of three “basic controls” integral to every civilising process (Elias, 1970 [2012], 156–157). However, the pacification of nature (Elias, 1939 [2012], 461), together with its objectification and the perception of humans as distinct from it as part of the Western civilising process, has led to domination over nature and the “shap[ing of] the major part of the earth according to their [humans’, KL & FR] own needs” (Elias, 1986 [2009], 59–60, quote p. 59).
- 4) The fourth element recognises that wars are an integral part of civilising processes. Historically, the formation of larger survival units and higher levels of integration were linked to warfare. Although increasing global interdependence in the twentieth century prompted efforts to find new ways to resolve interstate rivalry (Elias, 1939 [2012], 488–489) and despite recognising that violence is not an adequate means for resolving conflict within societies, this stage in the civilisation process has not yet been achieved at the interstate level (Elias, 1989 [2013], chapter 4).
- 5) Finally, civilising processes are never linear; they do not tell a story of continuous progress or achievement but remain susceptible to reversal. Processes of de-civilisation – triggered by factors such as widening power differentials, uncertainty, competition, the threat of war or war itself – are inherent within civilising processes (Elias, 1989 [2013], chapter 5; Bucholc et al., 2024, 13–17). For instance, wars were essential to the European civilising process while simultaneously demonstrating that “every war, obviously, was a regression to barbarism” (Elias, 1989 [2013], 231).

This dialectical process of civilisation and de-civilisation is equally observable in the development of IHL. At a certain stage of the global civilising process – and in conjunction with normative and structural changes within twentieth-century societies – the transgression or even dissolution of legal, moral and ethical restraints on wartime violence led to negotiations over what was perceived as legitimate or illegitimate acts of violence during warfare, thereby opening the door for new forms of regulation and definition of boundaries. At the same time – and without implying linear causality – these rules and norms of international law can function as a “gentle civilizer of nations” (Koskeniemi, 2001; van Krieken, 2019, 281), because they contribute to the development of societal and individual self-restraint regard-

ing violence both during war and in preparation for it. With respect to this paper's specific focus, the framing of ecocide as a crime, and therefore labelling the destruction of the natural environment as criminal, establishes a normative framework that delegitimises such actions by reframing them not as inevitable damage but as violations of fundamental ethical and legal principles. Consequently, "the latest cosmopolitan stage of the global civilizing offensive" is not, as van Krieken argued, "the organized pursuit of human rights through a variety of international legal and political instruments" (2019, 81) but rather the establishment of international environmental law and the incorporation of the natural environment into the ethics and laws governing warfare.

In this paper we apply Norbert Elias's theory of civilisation and several other of his concepts, such as the *We-I-Balance* or *involvement and detachment* (Elias, 1939 [2012]; Elias, 1987 [2001]; Elias, 1986 [2009]). Although Elias did not elaborate on IHL or international environmental law – indeed, he said little about law at all (van Krieken, 2019, 268) – his reflections on the development of human rights and international law are helpful for explaining both the dual processes of civilising and de-civilising of the military-environment nexus and the shortcomings of IHL. Regarding Elias's theories and international law, we draw on recent research by Marta Bucholc et al. (2024) and Robert van Krieken (2019). Concerning Elias's theories and the natural environment, we refer to work by Stephen Quilley (2004, 2009, 2011) and Linda Williams (2011). To date, no research has examined Elias's theories in relation to international law and the natural environment (Bucholc et al., 2024, 28).

Our paper proceeds in four steps. First, we outline different forms of wartime environmental destruction and environmental warfare. Second, using the Vietnam War as a case study, we demonstrate how civilising and de-civilising processes of restraint towards environmental destruction intersect. Third, we trace developments in environmental protection under IHL arising from increasing interdependencies between humanity and extra-human nature. Fourth, we examine the dialectics between civilising and de-civilising processes evident in the evolution of IHL, drawing on insights from Norbert Elias's theories to explain the inclusion of the natural environment within norms and rules governing warfare, transgressions against these norms during war as well as shortcomings of IHL and obstacles hindering its enforcement.

When referring to the *natural environment* within this paper we follow Emmanuel Kreike (2021) and Anna Feuer (2023), understanding it to encompass cultural landscapes (such as fields, crops or orchards) as well as environmental infrastructure (such as canals, dams or oil installations).

## 2. Environmental destruction in war – from ‘collateral damage’ to environmental warfare and excesses of violence

There are elements of warfare that change, such as geography or weapons, but “one of the constant elements of warfare is its degrading effects on the environment” (Jensen, 2005, 146–147). Therefore, war always harms the ecosphere – and, more precisely, not only does war harm the ecosphere; the organisation and (re)production of collective violence within an institution called the military during peacetime also has detrimental effects on the environment. War is usually fought *within* the natural environment, and even cyberwar – which appears to be waged apart from it – can be used for environmental warfare through attacks on environmental infrastructure (Feuer, 2023, 536) or can significantly impact the ecosphere through resource use. It is therefore necessary to distinguish between “passive”/not intended but accepted and “active”/intended and planned environmental destruction (Jensen, 2005).

In the first case, environmental destruction during armed conflict falls under what John McNeill (2004, 401) categorises as “accidental impact of combat”. This form of environmental damage is often termed *collateral damage* (Dienelt, 2022, 2). The history of this term shows that in its original usage during the Vietnam War it functioned as a euphemism for civilian casualties thereby framing illegitimate harm as acceptable or necessary. Hence, the term is at least problematic and its use should be discussed if not avoided altogether. However, it draws attention to one specific fact: the acceptance of harm to uninvolved persons and to the environment in order to achieve an objective (Rockel, 2009). Furthermore, terms such as *passive*, *accidental*, or *collateral* should not obscure the severity or longevity of environmental impacts. The twentieth century in particular witnessed massive environmental destruction in war due to changes in weapons technology (McNeill, 2004, 401). Moreover, long-term environmental damage and human health consequences caused by nuclear weapons tests conducted in peacetime provide a striking example (van Munster, 2021).

In the second case, environmental destruction is *active* in the sense that actors deliberately choose to weaponise nature (e.g., Jensen, 2005, 153–154; McNeill, 2004, 401). In this instance, war is fought *with* the environment to harm the enemy – a practice commonly known as *environmental warfare*. One of the first to use this term was the NATO Von Karman Committee (VKC) in the early 1960s (Hamblin, 2013, 138). There are several definitions of environmental warfare. The VKC defined it as “a change in either Man’s or Earth’s environment for a military purpose” (VKC, 1962). As environmental warfare was discussed by the VKC as a means to an end – the end being “maximizing human death” and winning a war (Hamblin, 2013, 135–148, quote p. 144) – and even possibly circumventing international humanitarian law (Leebaw, 2014, 776), this definition appears rather harmless. Another definition by scientist Arthur Westing who worked extensively

on environmental warfare during the 1970s and 1980s, shows that environmental warfare involves “harness[ing] the forces of nature” and manipulating the environment “for hostile military purposes” (Westing, 1985, 645–646). This can be done in two ways: by “target[ing] the natural landscape directly”, or by “us[ing] elements of the natural landscape – including nonhuman animals – as a means of harming enemy combatants or civilians” (Feuer, 2023, 534). Practices such as destroying forests and cultural landscapes – including strategies referred to as scorched earth – the poisoning of wells or diversion of rivers have been employed in military operations since ancient times (e.g., McNeill, 2004, 401; Mayor, 2009, 104–106). More or less sophisticated technologies of weather modification that had their heyday in the 1950s and 1960s (Hamblin, 2013, 130–131, 137) or the use of animals such as military dolphins or bees as bomb detectors (Leebaw, 2014, 775–776) are other forms of the weaponisation of nature (for a broad overview of environmental warfare tactics see Westing, 1985).

While some of these tactics directly aim to kill enemy forces, others employ more indirect forms of violence intended to deny adversaries access to energy resources – energy understood in a broad sense to include food, fuel, water, plants, raw materials, and so forth (Muscolino, 2009, 5) – tactics which we term *energy denial*. By inflicting damage on the natural environment, these measures seek to disrupt the essential inputs required for an adversary’s military operations, thereby limiting the operational capabilities of its armed forces (e.g., Feuer, 2023, 538–539; Kreike, 2021, 3, 14–15). Examples include the actions of the Union armies during the American Civil War (Brady, 2005), the environmental destruction by the Wehrmacht on the Eastern Front during the Second World War (Stein, 2025), the destruction of crops in the Vietnam War (e.g., Oatsvall, 2013, 444) and the burning of oil fields during the Gulf War in 1990–1991 (Jensen, 2005, 170).

The common understanding of active environmental warfare is that it aims to harm and terrorise civilians (Feuer, 2023, 534), “to disrupt enemy movements or to destroy enemy forces” (Jensen, 2005, 154). However, we also include military actions against the environment when it is perceived as an enemy within our definition. This is relevant because from an IHL perspective nature can become a combatant (Leebaw, 2014, 774–776). It is also significant because it indicates that militaries frequently perceive nature as something that can be controlled or pacified (Martini, 2012, 265–271). Framing the environment as ‘wilderness’, thereby emphasising a need to domesticate or civilise the ‘wild’, has long been a subtext in military culture (Brady, 2005; Gosh, 2021).

Examples of war against nature include combating disease – the most common cause of soldier deaths until the late nineteenth century (Cirillo, 2008) – such as malaria during the Vietnam War in the 1960s (Martini, 2012, 271); pests such as lice during the First World War (Altenstaedt, 2006); or large-scale forest destruction during the Vietnam War (*see below*). The war against nature is, in a strict sense, not

restricted to wartime. For instance, campaigns for herbicides and insecticides conducted by the U.S. Chemical Warfare Service in the 1920s and 1930s demonstrate a “militarization of the human response to nature during peace time” (Leebaw, 2014, 776). One consequence of this militarisation was framing chemical warfare as more ‘humane’ (ibid., 775–776). This perception strongly influenced U.S. use of environmental warfare tactics during the Vietnam War which we will address in more detail in the next section.

### 3. Processes of civilisation and de-civilisation in warfare – the Vietnam War

One recurring feature of war is regression of military force into unrestrained violence. However, at a certain stage of the civilising process, such regression can lead to debates about legitimate and illegitimate violence in war as well as re-negotiations of the norms and rules governing warfare. In other words, de-civilising processes do not necessarily progress automatically but can instead serve as starting points for debates on the legitimate use and regulation of violence. Similarly, Ulrich Beck (2016) argued in *Metamorphosis* that the catastrophe of the Second World War and the Shoah were formative events leading to the establishment of the United Nations (UN) and the Universal Declaration of Human Rights. Beck (ibid.) described this development as “emancipatory catastrophism”. We understand regression into unrestrained violence – resulting in primal destruction that erodes humanity’s relationship with extra-human nature – as processes of de-civilisation. The pivotal case illustrating intersecting civilising and de-civilising processes within the military-environment nexus is the Vietnam War. On one hand, the Vietnam War exemplified regression into unrestrained violence against both people (Rockel, 2009) and the environment. For the U.S. military, Vietnam became a testing ground for environmental warfare tactics discussed within U.S. and NATO circles during the 1950s and 1960s (Martini, 2012, 272–278; Hamblin, 2013, 180). While it remains debated whether the U.S. military perceived Vietnamese nature as an enemy combatant or merely as something that could and should be controlled (Martini, 2012, 265–266), scholars unanimously agree that environmental warfare tactics employed by U.S. troops between 1962 and 1971 constituted a declaration of war “on nature itself” (Oatsvall, 2013, 427).

In the battle against and with nature, the U.S. employed weather modification (Westing, 1985, 649), napalm (Frey, 2013, 4) and fire (Martini, 2012). However, its most destructive weapons were the six so-called rainbow herbicides used to destroy vegetation, forests and crops on an unprecedented scale with short- and long-term consequences for ecosystems and human health even after cessation of *Operation Ranch Hand* (Frey, 2013, 3–6; Westing, 1983). For the U.S., herbicidal warfare was a means to address the problem of excessive vegetation that provided cover for enemy forces (Oatsvall, 2013, 431; Jensen, 2005, 171). In the trade-off



between “trees versus lives”, they justified using herbicides by arguing it would save the lives of American soldiers (Oatsvall, 2013). In general, the destruction of the environment was justified as legitimate violence despite the violation of the principle of proportionality or property rights as outlined under IHL (Leebaw, 2014, 776; Droege & Tougas, 2013, 29–33 on the principle of proportionality). However, decision-makers recognised that they needed to convince domestic and international publics of the legitimacy of environmental warfare. They portrayed it as a more ‘humane’ form of warfare in relation to non-combatants (Leebaw, 2014, 776).

Terms such as *weed killers* and *defoliants* were used to obscure the true extent of environmental warfare tactics and to avoid criticism or accountability under the 1925 *Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare* (hereafter 1925 *Geneva Protocol*), which the U.S. acknowledged as customary law (Martin, 2016, 347–349; Hamblin, 2013, 183 on use of the term *defoliant*). Both Kennedy’s and Nixon’s administrations weighed public opinion in their decision-making processes. Regarding dam destruction for example, this led to the rejection of weaponising water as a legitimate tactic of environmental warfare. In contrast, when considering herbicides, military advantage was deemed more important than international norms. Only when reports published in 1969 revealed that Agent Orange could cause significant harm to people was *Operation Ranch Hand* immediately stopped (Feuer, 2023, 543–544).

While concern for humans was the main driver behind U.S. decisions for or against certain environmental warfare tactics, public, scientific and political debates emerged in which both, U.S. actions in particular and “military assaults on the environment as a strategy of war” in general, were increasingly perceived as an illegitimate form of violence against nature (Westing, 1983, 388). Scientists who opposed U.S. environmental warfare tactics criticised the use of herbicides, taking advantage of the momentum President Nixon created with his plan to reintroduce the 1925 *Geneva Protocol* to the Senate for ratification (Zierler, 2011, 2–4, 138–158). In both cases – the criticism of herbicidal warfare and support for ratifying the protocol – they used “environmental arguments” emphasising humanity’s dependence on and interconnectedness with the natural environment (Hamblin, 2013, 189). For these scientists, war’s consequences for nature could no longer be considered a military necessity or mere ‘collateral damage’. They invented a new term: *ecocide*. The term *ecocide* and its similarity with *genocide* was intentional. The goal of Arthur M. Galston, chair of Yale University’s Department of Botany, was to frame *Operation Ranch Hand* as contrary to international law and advance his argument that U.S. actions in Vietnam and herbicide use more generally could be banned as environmental war crimes under IHL in the future (Zierler, 2011, 15, 19). It was Richard Falk, Milbank Professor of International Law at Princeton University, who drafted a convention on ecocide, describing “Agent Orange as an Auschwitz for environmental values” (quoted in Zierler, 2011, 25; on the draft convention 24–25). His proposed convention sought to criminalise long-term destruction of ecosystems.



For Falk it was possible that ecocide might occur “unconsciously”; however, intention remained crucial if a state were to be held accountable for committing ecocide (Leebaw, 2014, 778–779).

Since then, scientists, civil society actors and lawyers have advocated for a convention condemning and banning ecocide as the deliberate destruction of ecosystems as a means of warfare. While the original context of this movement was environmental warfare, the environmental movement quickly adopted the term *ecocide* in 1970, broadening its meaning to encompass environmental harm inflicted by humans on the non-human natural world during peacetime – or, as one activist put it, defining it as “the environment murdered by mankind” (quoted in Zierler, 2011, 27).

The regression into unrestrained violence during the Vietnam War not only prompted a re-negotiation of what was perceived as legitimate violence against nature but also led to the first international treaties that directly protected the natural environment during armed conflict (see below). This development cannot be explained solely by those events themselves; rather, it was embedded within broader historical and societal processes – specifically, an expanding mutual identification and network of interdependence among humans as well as between humans and extra-human nature. These developments made it possible to address ecocide as a concern for humanity. In the following section we provide a brief overview of key developments within international (humanitarian) law regarding the protection of the natural environment during armed conflict and how these were embedded within evolving human-nature relations.

#### **4. International (humanitarian) law and the protection of the environment in war and armed conflict**

While legal instruments explicitly protecting the environment during war are a relatively recent development, norms and rules to protect the environment, are, like the practice of destruction itself, much older (Kreike, 2021, 8). Demands not to destroy crops and fruit trees in wartime can be traced back to ancient times (Grotius, 1646 [1925], 745–756). Drawing on these ancient traditions, in *De iure belli ac pacis* (*On the law of war and peace*), Hugo Grotius elaborated on the question of environmental destruction during war. Grotius distinguished between aspects of nature that could constitute possessions (such as rivers, lakes, mountains or forests) and elements of nature that could not be possessed by anyone (such as oceans or the atmosphere). For him it was generally legitimate to destroy enemy property – including those parts of nature within enemy possession – as long as such acts were justified by military necessity rather than driven by “hatred” (Grotius, 1646 [1925], 746; Leebaw, 2014, 772–773). However, he considered destroying crops to weaken an enemy legitimate; a view that Norbert Elias later explained through the structure of medieval agrarian society (Elias, 1939 [2012], 189).

Norms and ethics of war that restrain environmental destruction – based on a view of nature as an object that can be possessed by humans – subsequently entered IHL through the regulations of the *Hague Conventions* of 1899 and 1907. By the nineteenth century, a growing consensus had already emerged among legal scholars regarding the environment's victimhood in war (Jensen, 2005, 155). Likewise, the so-called Lieber Code (*Instructions for the Government of Armies of the United States in the Field*, 1863) introduced national regulation prohibiting “wanton devastation of a district” (Art. 16). Both developments influenced the *Hague Conventions*, which established limits on permissible wartime actions, including those affecting the environment (Jensen, 2005, 157–158; Leebaw, 2014, 773). The *Hague Convention* of 1907, for example, contains rules concerning occupied territory (Arts 42, 55, 56), including provisions on protecting and administering forests and agricultural areas (Leebaw, 2014, 773; Droege & Tougas, 2013, 37). A further step in codifying IHL to protect the environment was the 1925 *Geneva Protocol*, which prohibited the use of chemical and biological weapons. Like the *Hague Conventions*, it primarily sought to protect humans; however, it also indirectly safeguarded the environment because such weapons cause environmental harm with potentially long-term effects (ICRC, 2020; Droege & Tougas, 2013, 41). Another crucial moment in developing environmental protection under IHL were the Nuremberg Trials of 1945–49 (Jensen, 2005, 160). There, military personnel were charged with environmental warfare for the first time (ibid.) – for example German General Lothar Rendulic, who faced charges for employing scorched-earth tactics in Norway (Leebaw, 2014, 773–774).

As we have discussed above, the 1925 *Geneva Protocol* played an important role in U.S. considerations regarding herbicidal warfare. While the U.S. administration argued that substances toxic to the environment were not subject to the 1925 *Geneva Protocol*, customary international law indicates that this was no longer the case by the 1960s. As UN General Assembly Resolution 2603 (XXV) of 16 December 1969 shows, the distinction between substances toxic to humans and those posing a threat to the environment was no longer adequate for discerning the legality of herbicidal warfare (Zierler, 2011, 145–146). This reflected a broader shift in human-environment relations that also influenced international law. After centuries of the conviction that humankind could dominate and tame nature through technological progress, increasing numbers of people – including Arthur M. Galston and Richard Falk – came to regard this belief as a fallacy and recognised the need for renewed awareness of humanity's interdependence with extra-human nature (Leebaw, 2014, 777–779).

This new awareness not only led to the “invention of ecocide” (Zierler, 2011) but also, for the first time, to codifying limits on the weaponisation of nature as well as establishing explicit rules for environmental protection under I(H)L that are not tied to property protection during armed conflict (Jensen, 2005, 161–172). The *ENMOD Convention (Convention on the Prohibition of Military or Any Other Hostile*

*Use of Environmental Modification Techniques*) of 1977 banned active environmental warfare “having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State” (Art. 1). The 1977 *Additional Protocol I* to the *Geneva Conventions* of 1949 (hereafter API), adopted in the same year as ENMOD, contains two articles addressing environmental destruction during international armed conflict. Like ENMOD, API restricted active environmental warfare but also set limits to passive forms (Jensen, 2005, 161–172). States committed themselves both to “protect the natural environment against widespread, long-term and severe damage” (Art. 55(1)) and to refrain from using “methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment” (Art. 35(3)). Two further articles indirectly protect the environment: Article 54 prohibits destruction of environmental infrastructure providing sustenance to civilians, while Article 56 safeguards environmental infrastructure such as dams, nuclear power plants and dykes. Even though environmental warfare has always been part of intrastate conflict as well (Feuer, 2023), only Articles 54 and 56 were incorporated into *Additional Protocol II* to the *Geneva Conventions* of 1949 which applies to intrastate war (Droege & Tougas, 2013, 39).

On the one hand, the regulations introduced in the 1970s represented a major step forward in protecting the natural environment during armed conflict and regulating environmental warfare. On the other hand, they fell short of what Galston and Falk had sought to achieve in establishing ecocide as a war crime; particularly since the threshold set by “widespread, long-term and severe” was both too high and too imprecise to serve as an effective legal instrument (Leebaw, 2014, 778). Despite humanity’s recognised interdependence with nature, IHL remained anthropocentric – something Falk himself acknowledged as the main obstacle to any “meaningful ecocentric reform” (ibid.).

It took another decade and a further evolution in human-environment relations to influence the interpretation and formulation of I(H)L towards re-conceptualising nature’s status from being an *object* to being a *subject* of international law. At the Rio Earth Summit in 1992, states emphasised that nature possesses intrinsic value, independent of its utility for humans (Leebaw, 2014, 779–780). The *Rio Declaration on Environment and Development* “urged states to cooperate in the further development of international law pertaining to wartime environmental protections” (United Nations, 1992). This call was realised through the adoption of the *Rome Statute* for the International Criminal Court (Leebaw, 2014, 779). Article 8(b)(iv) of the *Rome Statute* (1998) defines “intentionally launching an attack in the knowledge that such attack will cause [...] widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated” as a war crime. The provisions of the *Rome Statute* formally express the criminalisation of environmental destruction during armed conflict and signify a significant step forward in broadening norms

and rules governing military activities affecting the environment in both war and peace. This process began with the adoption of the *ENMOD Convention* and *Additional Protocol I* in 1977.

At present, 32 rules under international humanitarian law directly or indirectly – through customary or conventional law – protect the natural environment during armed conflict, as outlined by the *International Committee of the Red Cross* in its *Guidelines on the Protection of the Natural Environment in Armed Conflict* (ICRC, 2020). Among these is, for example, the rule of “[d]ue regard for the natural environment in military operations” (ICRC, 2020, Rule 1), which specifically includes measures “undertaken as a matter of policy rather than law. Such actions could include, for example, introducing measures to reduce the carbon footprint of warfare” (ICRC, 2020, 30). Ecocide is addressed under customary law – primarily derived from provisions within national penal codes (e.g. those of Ukraine, Russia or Belarus) – through Rule 3, which establishes the “[p]rohibition of using the destruction of the natural environment as a weapon”. To date, no convention explicitly addresses or prohibits ecocide either as a crime in war or in peace, despite continued efforts by lawyers and civil society actors (e.g., Killean & Newton, 2024).

## 5. Dialectic interdependencies – or: the civilising and de-civilising processes of the military-environment nexus

The shift towards perceiving environmental destruction as an illegitimate act of warfare – and eventually criminalising it – was, as we have shown above, inseparably interwoven with a broader transformation in human perceptions of nature arising from interdependence within more-than-human figurations. This later implied a change in perception from viewing nature as an object to recognising it as a subject as well as the conception of the natural environment as a victim under IHL. These developments align with one of the core elements of civilising processes: the expansion of mutual identification among humans which results from growing interdependencies (Elias, 1987 [2001]).

The interdependencies between humans and the natural environment – and increasing acknowledgement thereof – in other words, the development of an “ecological conscience” (Quilley, 2009, 117), contribute to changes in human behaviour generally and to curtailing human violence towards the environment in particular. These changes resemble what Elias described regarding restraint on human violence (or “Kampfeslust”, as he put it) towards other humans “by innumerable rules and prohibitions that have become self-constraints” (Elias, 1939 [2012], 187). The “rules and prohibitions” governing behaviour toward the environment – together with increasing regulation of military actions against it during war and extension of what is perceived as legitimate violence – signal an expansion of ethical and legal boundaries consistent with Elias’s insights into the progressive codification of restraint in human conduct. At the same time, humanity not only continues

to destroy the very world on which it depends in war and peace but also faces a backlash in climate and environmental policy (e.g., Nuccitelli, 2025) and weakening or disregard for international law by great and small powers alike (The Guardian, 2025).

While this recent development may appear puzzling at first glance, it becomes explicable when viewed through an Eliasian lens. To elaborate this further, we examine three issues evident in the ongoing military destruction of the environment on the one hand and in the development of IHL aimed at protecting the environment from such violence on the other: the dialectics of civilising and de-civilising processes in war, the shortcomings of IHL, and continued environmental destruction despite existing interdependencies and expanding mutual identification.

### 5.1 The dialectics of civilising and de-civilising processes

Within the nexus of war, environment and society, it becomes clear that civilising processes do not unfold linearly along a chronological timeline as posited by progress-oriented models. Rather, within the discourse surrounding ecocide, it is evident that de-civilising and civilising forces coexist in dynamic tension, revealing that the temporality of civilisation's progression is multifaceted. Drawing upon a model reminiscent of historian Fernand Braudel's classical stratification of time (Braudel, 1960), it becomes apparent that civilising processes are fiercely contested at the surface, exposing recurrent regressive and de-civilising elements. Moreover, the civilising process itself remains fraught with significant constraints. However, over the *long durée*, there also emerges an attempt to contain the destructive effects of military violence and the use of force. Consequently, the consideration of both, the intended and unintended negative impacts of warfare and the persistence of military violence become a pivotal first step for the discourse on ecocide. This further underscores the shifting boundaries between what is considered exceptional (and therefore illegitimate) and what constitutes the norm. The rules of IHL and discourses surrounding ecocide allow environmental destruction to be addressed as crime – signifying a shift from the acceptance of such environmental destruction as 'collateral damage' to its recognition as an illegitimate act of warfare.

### 5.2 The shortcomings of IHL

In one of the few instances where Elias himself elaborated on law, he addressed an important problem concerning international law and the regulation of relations between states: "There is [as yet] no [body of [law] governing the relations between states of the kind that is valid within them. There is no all-embracing power apparatus that could back up such an international law" (Elias, 1939 [2012], 267). Therefore, power remains decisive in international relations, with powerful states holding advantage over weaker ones (ibid.).

These observations, written in 1939, remain valid today – despite existing conventional and customary law and the ICC’s capacity to prosecute individuals for committing war crimes. So far, “no state has ever been held accountable for environmental destruction conducted during warfare and no individual has ever been convicted for environmental war crimes” (Leebaw, 2014, 771). There are at least two reasons for this. First, aligning with Elias’s arguments, humanity has yet to reach the next level of integration that would establish a supranational institution truly capable of enforcing existing law (e.g., Elias, 1939 [2012], 488–490). Second – and scholars as well as international organisations such as the UN or ICRC are unanimous on this point (e.g., Jensen, 2005; Feuer, 2023; Westing, 1985) – the broad wording of existing rules combined with the requirement to prove intent makes it difficult to establish cases against state actions (Leebaw, 2014). In the wake of Russia’s war against Ukraine, there have been attempts by the ICC to broaden options for prosecuting environmental destruction through new interpretative guidelines and investigative strategies, but the aforementioned difficulties persist (Villalobos, 2025).

Therefore, one might object to the argument that IHL not only reflects civilising processes but also contributes to them by serving as an external force of coercion that eventually leads to internalised societal and individual self-restraint. Indeed, as Bucholc et al. (2024, 28) have argued regarding the recognition of environmental crimes and their punishment, “they are primarily a ‘reflection’ of social transformations and struggles [...]. They are the legal arm, not the sword, of a process of civilisation.” Marta Bucholc (2024) has further shown that despite framing abortion as a global human right, the existing legal framework fails to support a broadening of identification capable of overcoming regional, religious or gender divides.

However, this should not obscure the importance of the small steps from which civilising processes are composed. As Quilley (2004, 55) argues, “civilizing processes at a supranational level – i.e. in relation to pacification and the internalization of psychological restraint against violence” are imperative for a general ecological civilising process. While international climate and environmental governance – such as the *Kyoto Protocol* – serve both as enablers and indicators of a supranational ecological civilising process in general (ibid.), developments within IHL demonstrate a civilising process within the military-environment nexus at the supranational level. First, codification since the 1970s distinguishing legal from illegal actions against the environment – and later the criminalisation of environmental destruction through the *Rome Statute* – means that decision-makers at the national level as well as commanders planning specific operations must consider whether their actions comply with existing norms and rules (Jensen, 2005, 164, 177–178). This signifies a step towards internalisation of norms and rules within the civilising process which are essential in restraining violence against others. In general terms, greater internalisation of these norms at organisational and individual levels increases the likelihood that at least active environmental destruction will be avoided. Certain

forms of environmental destruction now constitute transgressions beyond accepted boundaries of military violence – boundaries defined both legally and through societal discourse.

Second, customary IHL and the perception and framing of military destruction of the environment during war as contrary to existing norms and rules demonstrate that states and civil society constantly condemn such wartime environmental destruction, categorising it alongside other war crimes. For example, in 1993, UN General Assembly Resolution 47/37 on the *Protection of the Environment in Times of Armed Conflict* explicitly referred to the destruction of oil wells by Iraqi forces and raised “deep concern” about the environmental consequences. In 1999, environmental destruction caused by NATO’s aerial bombing in Kosovo was condemned by several members of the UN Security Council on normative (Russian Federation, 1999b) and moral (Namibia, 1999; Russian Federation, 1999a) grounds. Recently, Ukraine has actively undermined the legitimacy of Russia’s war of aggression by meticulously documenting environmental destruction (Ukraine, 2025). Poland condemned the destruction of the Nova Kakhovka dam as “a grave violation of basic norms of humanitarian and environmental protection law and an apparent war crime” during a session of the UN Security Council (Poland, 2023). The ICC has been called upon to include environmental destruction in Ukraine within its investigations (Chin, 2024), while environmental damage – including harm to the climate system – has been listed as a claim category in the *Register of Damage* (Council of Europe, 2024), which is the first step towards a compensation mechanism enabling Ukraine to claim reparations from Russia (Council of Europe, 2025).

This indicates that despite the lack of a powerful supranational organisation capable of enforcing these rules, IHL influences the civilising process of military-environment relations because it defines illegal wartime actions against the environment. It thereby shifts boundaries of moral behaviour with consequences for states failing to abide by established rules and norms of war. This can be explained through a general “increase in conduct regarded as criminal” (van Krieken, 2019, 277). Van Krieken shows that this is linked to developments in social relationships towards greater equality and higher expectations regarding moral standards and self-restraint. Failure to meet these standards results in social repercussions (van Krieken, 2019, 277–278). This observation holds equally true for relations between states and likewise for relationships between humans and extra-human nature.

At present, the consequences for states or other actors failing to abide by environmental norms and rules of war consist mainly of political costs – meaning that these actors lose domestic or international support (Feuer, 2023, 540–541) and international prestige. However, these political costs should not be underestimated. During the Vietnam War, the weighing of such costs influenced U.S. decision-making regarding certain forms of environmental warfare. While concern for civilians proved more decisive than concern for the environment – a point emphasised by



Anna Feuer (*ibid.*) to argue that norms and rules protecting the environment in war and armed conflict are only as strong as the protection of humans entailed within it – the U.S. decision-making process in the 1960s highlights two important aspects. First, there were considerations about environmental impacts even though no laws existed at that time prohibiting environmental warfare. Second, the U.S. military approach to both the environment and environmental warfare in Vietnam remained rooted in a perception of nature as an object and something one could and should control and “impose order” upon (Martini, 2012, 265–269, quote on p. 269). This perspective was therefore grounded in the centuries-old “ecogenesis” (Quilley, 2011), which had influenced the European civilising process. The necessary steps within this civilising process – changed patterns of interdependence between humans and nature, acknowledgement of this interdependence, and expansion of mutual identification – were, as the debate on ecocide demonstrated, already underway; yet common perceptions of nature had not evolved to an extent sufficient for the U.S. to incorporate environmental concerns into its decision-making.

### 5.3 The ongoing destruction of the environment

Humanity has a strange relationship with nature. On the one hand, there exists an all-encompassing interdependence – and, perhaps more importantly, an increasing acknowledgement by many people of this interdependency – together with an expanding we-identity encompassing the non-human natural world (Quilley, 2009, 128). On the other hand, there is an ongoing destruction of the natural environment in peace and war that appears to contradict this broadening of mutual identification and expanding network of interdependence.

Before we examine reasons for this contradiction, a few words should be said about the correlation between the human-environment nexus and the military-environment nexus. Soldiers as well as civilian military personnel bring their life experiences, norms, beliefs and moral restraint concerning the natural environment into their professional sphere. Therefore, individual self-restraint regarding the environment, shaped through civilising processes, also influences the military-environment nexus. At the same time, it is plausible to assume that civilising processes of the military-environment nexus, for example through norms and rules established under IHL, also promotes greater self-restraint among soldiers and other military personnel, as they are equally shaped by moral and legal restraints embedded within the military.

Regarding the tension between a broadening of mutual identification on the one hand and the ongoing destruction on the other, we can observe precisely what Elias himself remarked as one of the “curious features” of the mutual identification of humans within a single humanity. Writing during the Cold War and under the latent threat of nuclear war, he observed that “the we-identity of most people, lags behind

the reality of the integration actually achieved; the we-image trails far behind the reality of global interdependence" (Elias, 1987 [2001], 203). Not only "[is] the sense of responsibility for imperilled humanity minimal" (Elias, 1987 [2001], 203), but so too is concern for the planet, its biodiversity, its rivers and mountains and oceans, minimal. Elias explained this latter phenomenon as stemming from a lack of awareness of the former: as long as humanity remains unconscious of its obligation to take responsibility for its own survival, it will find it even more difficult to take responsibility for the survival of the extra-human world (Elias, 1986 [2009], 65). Thirty years on, humanity appears to have recognised both – the whole of humankind as an identification level and its role in destroying the very planet upon which it depends (Quilley, 2011, 83). However, such recognition does not automatically translate into meaningful action to protect that planet.

There are at least two explanations for this lacking "sense of responsibility" and the absence of an all-encompassing identification with the natural environment from an Eliasian perspective. First, the process of detachment from extra-human nature over past centuries has been a consequence of humanity's mastery over nature and its "scientific objectification" (Williams, 2011, 91–92, quote on p. 92). The creation of the dualism between humanity and nature, the objectification of nature, its construction as 'other', and the belief that it can be controlled fostered a view of nature as an object to be exploited in order to sustain and suit humanity's needs (Elias, 1986 [2009]). Michelle Williams identifies these developments as the cause of "the immediate crisis in the deterioration of the nonhuman world" (Williams, 2011, 91–92, quote on p. 92).

The second reason are persistent power differentials and inequalities within human-nature relations. This mirrors what van Krieken (2019, 275) described regarding violence of those states who perceived themselves as 'civilised' against those deemed 'uncivilised', which he attributes to a missing "identification with the different humanity of others" and "the threat they pose to the achievements of civilization" in the perception of the 'civilised' state. As long as humanity's we-identity does not include more-than-human figurations, human violence against extra-human nature will likely persist.

Therefore, as a precondition for continuing civilising processes, humanity needs to acknowledge its involvement in and interdependence with nature (Williams, 2011, 92, 94). The notion that humanity is independent from nature is a fallacy. Despite all the technology available today "modern society remains embedded in and dependent on ecosystem earth, just as the future of ecosystem earth depends on humanity" (Kreike, 2021, 6). Elias himself acknowledged that while detachment from nature was an important step for humanity, "nothing is more justified and even more necessary" than an "'involved' interest in 'nature'" and concern about its destruction, enabling humanity to take the responsibility for protecting the natural environment on which it ultimately depends (Elias, 1986 [2009], 64–

65, quote on p. 64). Humanity requires an “ecological civilizing process” characterised by a new level of integration termed the “Anthro-ecosphere” by Stephen Quilley (2011, 85–86). This implies that humanity’s we-identity includes the natural environment (Quilley, 2009) if humans are to take responsibility for the world they inhabit.

The paradox lies in the fact that control over nature and detachment from it were integral components of the European civilising process and that it is interdependent with the two other “basic controls”: psychological and social control (Elias, 1970 [2012], 156–157; Quilley, 2011, 73–74). Furthermore, social and psychological developments associated with this civilising process were intertwined with transformations of “socio-ecological and energy regimes”, fostering forms of control and exploitation of nature that have had and continue to have a profoundly destructive impact on the ecosphere (Quilley, 2011, 74).

Consequently, the way of life produced by the European civilising process appears incompatible with the consequences attached to humanity’s next level of integration – one encompassing both the human and the non-human world: namely, behavioural change alongside increasing societal and individual self-restraint concerning interaction with nature (Quilley, 2011). In relation to the we-identity, it is already challenging for humans to broaden their we-identity to other humans for example on religious, gender or regional divides (Bucholc, 2024), let alone achieve mutual identification with the more-than-human world given its very distinct nature (Quilley, 2009, 132–133).

However, humanity – having evolved as the dominant species – is the only species both capable of and obliged to take responsibility for the survival of Earth (Elias, 1986 [2009]), because “it is possible that the species with the greatest capacity for destabilizing impacts on extra-human nature, may yet prove to be the only species capable of exercising evolutionary self-restraint – the semi-political and semi-conscious internalization of restraints in relation to nature and environment” (Quilley, 2004, 54–55). Quilley (2011, 85) was quite pessimistic about the prospects for “an ecological civilising process”. For him, “the inculcation of much more demanding standards of habitual self-restraint, though possible, seems unlikely”. The backlash currently observable regarding environmental and climate policies, for example under the second Trump administration (Nuccitelli, 2025), appears to support Quilley’s pessimistic view. Rather than signalling an ecological civilising process, this trend instead suggests a renewed cycle of an ecological de-civilising process accompanied by setbacks in the broadening of mutual identification.

## 6. Conclusion

The dual processes of civilisation and de-civilisation inherent in warfare are evident both in the destruction of the environment and transgressive violence towards

extra-human nature during armed conflict on the one hand, and in efforts to regulate and outlaw environmental destruction through IHL on the other. This further highlights shifting boundaries between what is considered exceptional (and therefore illegitimate) and what constitutes the norm. Not only do the rules of IHL but also the discourses surrounding ecocide enable environmental destruction to be addressed as a crime – signifying a shift from the acceptance of such destruction as ‘collateral damage’ to its recognition as an illegitimate act of warfare.

We are in the midst of drawing a boundary that renders military-induced environmental destruction both definable and recognisable as a transgression. The present moment makes this especially clear: nature has become a topic of concern. Ukraine actively delegitimises Russia’s war of aggression through meticulous documentation of environmental destruction, placing it alongside other war crimes. At the same time, the war in Ukraine – and other contemporary conflicts – illustrate how civilising and de-civilising processes remain entangled within warfare. When military conflict is examined through Elias’s figurational and process-sociological lens, the emergence of new patterns of interdependence becomes particularly salient. A crucial dimension of this dialectic between processes of civilisation and de-civilisation lies precisely in forming new discursive and figurational spaces where certain practices cease to appear naturalised or beyond scrutiny, instead becoming subjects of negotiation and contestation.

In other words, there is a civilising process of military-environment relations which is not linear and undoubtedly still at its beginning but from a historical perspective currently stronger than de-civilising processes and, in some sense, a reaction to de-civilising processes in warfare. Certainly, severe shortcomings and challenges remain evident in the implementation of IHL and in the (still missing) codification of ecocide as a criminal offence under international law. Unresolved problems of accountability and legal thresholds (Leebaw, 2014, 781), the absence of powerful supranational institutions to enforce IHL and the anthropocentrism inherent within IHL (ibid., 778) continue to obstruct civilising processes of human-environment relations generally and military-environment relations specifically.

Nevertheless, an expanding identification and emerging we-identity among certain groups with the more-than-human world (Quilley, 2009, 133) already influences the military, shaping its efforts to protect ecosystems or mitigate climate impacts (Depledge, 2023). Not least, the very existence of rules and norms regulating military action towards the environment under IHL not only mirrors civilising processes but further supports them through defining appropriate on the one, and unacceptable behaviour on the other hand.

The absence of a powerful supranational institution capable of enforcing IHL – and criticism stemming from this fact – should not lead to conclusions that IHL is wholly impotent. In 1987, Elias criticised those who condemned the United Nations as powerless, arguing that humanity was still at an early stage of the

process towards a higher level of integration which might take centuries to complete (Elias, 1987 [2001], 202–203). The same certainly applies to the civilisation of the military-environment nexus: it remains only at its beginning and is, as demonstrated in current wars, in the danger of being reversed. As Elias reminds us, how long this process will take and whether it will ever be completed only history can tell.

## References

- All treaties and regulations of IHL retrieved from: <https://ihl-databases.icrc.org/en/ihl-treaties> (last accessed: 2025, September 9).
- Altenstaedt, R. L. (2006). Trench fever: The British medical response in the Great War. *Journal of the Royal Society of Medicine*, 99(11), 564–586.
- Beck, U. (2016). *The metamorphosis of the world*. Cambridge & Malden, MA: Polity Press.
- Brady, L. M. (2005). The wilderness of war: Nature and strategy in the American Civil War. *Environmental History* 1(3), 421–447.
- Braudel, F. (1960). History and the social sciences: The long duration. *American Behavioral Scientist*, 3(6), 3–13.
- Bucholc, M., Canihac, H., Delmotte, F., & van Krieken, R. (2024). Law and (de)civilization: An introduction. *Historical Social Research*, 49(2), 7–33.
- Bucholc, M. (2024). Legal governance of abortion: Interdependencies and centrifugal forces in the global figuration of human rights. *Historical Social Research*, 49(2), 133–155.
- Charlier, B. & Mustafayev, T. (2022). International humanitarian law and the protection of cultural property. In J. Cuno & T. G. Weiss (Eds.), *Cultural Heritage and Mass Atrocities* (381–395). Los Angeles, CA: Getty Publications.
- Chin, S. (2024). *Powerful call to action by Ukraine and members of civil society for the International Criminal Court to address 'ecocide'*. Retrieved from <https://www.envirosecurity.org/top-stories/powerful-call-to-action-by-ukraine-and-members-of-civil-society-for-the-international-criminal-court-to-address-ecocide> (last accessed: 2025, September 6).
- Cirillo, V. J. (2008). Two faces of death: Fatalities from disease and combat in America's principal wars, 1775 to present. *Perspectives in Biology and Medicine*, 51(1), 121–133.
- Council of Europe (2024). *Register of damage caused by the aggression of the Russian Federation against Ukraine*. Categories of claims eligible for recording. Retrieved from: <https://www.rd4u.coe.int/documents/358068/424646/RD4U-Board%282024%2907-Rev1-EN+-+Categories+of+Claims+eligible+for+recording.pdf/74037c42-4c7e-c197-a06f-47673f2659bb?t=1743593800002> (last accessed: 2025, December 8).
- Council of Europe (2025, December 8). *Council of Europe conference to launch International Claims Commission for Ukraine*. Retrieved from: <https://www.coe.int/de/web/portal/-/council-of-europe-conference-to-launch-international-claims-commission-for-ukraine> (last accessed: 2025, December 8).
- Depledge, D. (2023). Low carbon warfare: Climate change, net zero and military operations. *International Affairs*, 99(2), 667–685.
- Dienelt, A. (2022). *Armed conflicts and the environment: Complementing the laws of armed conflict with human rights law and international environmental law*. Cham: Springer International Publishing.

- Droege, C. & Tougas, M.-L. (2013). The protection of the natural environment in armed conflict: Existing rules and need for further legal protection. *Nordic Journal of International Law*, 82(1), 21–52.
- Elias, N. (1939 [2012]). *On the process of civilization: Sociogenetic and psychogenetic investigations*. Transl. by E. Jephcott. Dublin: University College Dublin Press (Collected works of Norbert Elias, Vol. 3).
- Elias, N. (1970 [2012]). *What is sociology?* Transl. by G. Morrissey, S. Menell & E. Jephcott. Dublin: University College Dublin Press (Collected works of Norbert Elias, Vol. 5).
- Elias, N. (1986 [2009]). On Nature. In R. Kilminster & S. Menell (Eds.), Norbert Elias. *Essays I: On the sociology of knowledge and the sciences* (53–65). Dublin: University College Dublin Press (Collected works of Norbert Elias, Vol. 14).
- Elias, N. (1987 [2001]). *The Society of Individuals*. Transl. by E. Jephcott. Dublin: University College Dublin Press (Collected works of Norbert Elias, Vol. 10).
- Elias, N. (1989 [2013]). *Studies on the Germans: Power struggles and the development of habitus in the nineteenth and twentieth centuries*. Transl. by E. Dunning & S. Menell. Dublin: University College Dublin Press (Collected works of Norbert Elias, Vol. 11).
- Feuer, A. (2023). Environmental warfare tactics in irregular conflicts. *Perspectives on Politics*, 21(2), 533–549.
- Frey, S. R. (2013). Agent Orange and America at war in Vietnam and Southeast Asia. *Human Ecology Review*, 20(1), 1–10.
- Ghosh, Amitav (2021). *The nutmeg's curse: Parables for a planet in crisis*. London: John Murray.
- Grotius, H. (1646 [1925]). *De Jure Belli Ac Pacis Libri Tres. Volume Two. The translation*. Transl. by F. W. Kelsey, ed. by J. B. Scott. Oxford & London: Clarendon Press.
- Hamblin, J. D. (2013). *Arming mother nature: The birth of catastrophic environmentalism*. Oxford: Oxford University Press.
- ICRC (2004). *What is International Humanitarian Law?* By: International Committee of the Red Cross, Advisory Service on International Humanitarian Law. Retrieved from: [https://www.icrc.org/sites/default/files/external/doc/en/assets/files/other/what\\_is\\_ihl.pdf](https://www.icrc.org/sites/default/files/external/doc/en/assets/files/other/what_is_ihl.pdf) (last accessed: 2025, July 22).
- ICRC (2020). *Guidelines on the protection of the natural environment in armed conflicts: Rules and recommendations relating to the protection of the natural environment under international humanitarian law, with commentary*. Retrieved from <https://www.icrc.org/en/publication/4382-guidelines-protection-natural-environment-armed-conflict> (last accessed: 2025, September 6).
- Jensen, E. T. (2005). The international law of environmental warfare: Active and passive damage during armed conflict. *Vanderbilt Journal of Transnational Law*, 38 (1), 145–185.
- Kalshoven, F. & Zegveld, L. (2011). *Constraints on the waging of war: An introduction to international humanitarian law*. Fourth edition. Cambridge: Cambridge University Press.
- Killean, R. & Newton, E. (2024). From ecocide to ecocentrism: Conceptualising environmental victimhood at the International Criminal Court. *International Review of Victimology*, 31(2), 238–264.
- Koskenniemi, M. (2001). *The gentle civilizer of nations: The rise and fall of international law 1870–1960*. Cambridge: Cambridge University Press.

- Kreike, E. (2021). *Scorched earth: Environmental warfare as a crime against humanity and nature*. Princeton, NJ & Oxford: Princeton University Press (Human rights and crimes against humanity, 30).
- Leebaw, B. (2014). Scorched earth: Environmental war crimes and international justice. *Perspectives on Politics*, 12(4), 770–788.
- Martin, S. B. (2016). Norms, military utility, and the use/non-use of weapons: The case of anti-plant and irritant agents in the Vietnam war. *Journal of Strategic Studies*, 39(3), 321–364.
- Martini, E. (2012). Even we can't prevent forests: The chemical war in Vietnam and the illusion of control. *War & Society*, 31(3), 264–279.
- Mayor, A. (2022). *Greek fire, poison arrows, and scorpion bombs: Unconventional warfare in the ancient world*. Princeton, NJ: Princeton University Press.
- McNeill, J. R. (2004). Woods and warfare in world history. *Environmental History*, 9(3), 388–410.
- Muscolino, M. S. (2015). *The ecology of war in China: Henan Province, the Yellow River, and beyond, 1938–1959*. Cambridge: Cambridge University Press (Studies in environment and history).
- Namibia (1999, May 14). UN Security Council, 4003<sup>rd</sup> Meeting (United Nations, S/PV.4003). Retrieved from: <https://research.un.org/en/docs/sc/quick/meetings/1999> (last accessed: 2025, September 6).
- Nuccitelli, D. (2025). *The Republican campaign to stop the U.S. EPA from protecting the climate*. Retrieved from: <https://yaleclimateconnections.org/2025/08/the-republican-campaign-to-stop-the-u-s-epa-from-protecting-the-climate/> (last accessed: 2025, September 6).
- Oatsvall, N. S. (2013). Trees versus lives: Reckoning military success and the ecological effects of chemical defoliation during the Vietnam war. *Environment and History*, 19(4), 427–458.
- Poland (2023, June 6). UN Security Council, 9340<sup>th</sup> Meeting (United Nations, S/PV.9340). Retrieved from: <https://research.un.org/en/docs/sc/quick/meetings/2023> (last accessed: 2025, September 6).
- Quilley, S. (2004). Ecology, 'human nature' and civilizing processes: Biology and sociology in the work of Norbert Elias. In S. Loyal & S. Quilley (Eds.), *The Sociology of Norbert Elias* (42–58). Cambridge: Cambridge University Press.
- Quilley, S. (2009). The land ethic as an ecological civilizing process: Aldo Leopold, Norbert Elias, and environmental philosophy. *Environmental Ethics*, 31(2), 115–134.
- Quilley, S. (2011). Entropy, the anthroposphere and the ecology of civilization: An essay on the problem of 'liberalism in one village' in the long view. *The Sociological Review*, 59(1), 65–90.
- Rockel, S. J. (2009). Collateral damage: a comparative history. In S. J. Rockel & R. Halpern (Eds.), *Inventing Collateral Damage: Civilian Casualties, War, and Empire* (1–93). Toronto: Between the Lines.
- Russian Federation (1999a, May 14). UN Security Council, 4003<sup>rd</sup> Meeting (United Nations, S/PV.4003). Retrieved from: <https://research.un.org/en/docs/sc/quick/meetings/1999> (last accessed: 2025, September 6).
- Russian Federation (1999b, June 6). UN Security Council, 4011<sup>th</sup> Meeting (United Nations, S/PV.4011). Retrieved from: <https://research.un.org/en/docs/sc/quick/meetings/1999> (last accessed: 2025, September 6).



- Stein, C. (2025). *Armee des Rückzugs: Die Wehrmacht an der Ostfront 1941–1945*. Göttingen: Wallstein Verlag (Moderne Zeit. Neue Forschungen zur Gesellschafts- und Kulturgeschichte des 19. und 20. Jahrhunderts, 39).
- The Guardian* (2025, June 26). Are we witnessing the death of international law? By Kinstler, L. Retrieved from: <https://www.theguardian.com/law/2025/jun/26/are-we-witnessing-the-death-of-international-law> (last accessed: 2025, September 6).
- Ukraine (2025). *EcoZagroza*. Retrieved from: <https://ecozagroza.gov.ua/en> (last accessed: 2025, September 6).
- United Nations (1992). *Rio declaration on environment and development*. Retrieved from: <https://www.un.org/en/conferences/environment/rio1992> (last accessed: 2025, September 8).
- United Nations (2003, November 6). *Existing laws not sufficient to address danger posed to environment by conflict, secretary-general says in international day message* (Press release SG/SM/8988-OBV/390). Retrieved from: <https://press.un.org/en/2003/sgsm8988.doc.htm> (last accessed: 2025, July 17).
- van Krieken, R. (2019). Law and civilization: Norbert Elias as a regulation theorist. *Annual Review of Law and Social Sciences*, 15, 267–288.
- van Munster, R. (2021). The nuclear origins of the Anthropocene. In D. Chandler, F. Müller & D. Rothe (Eds.), *International Relations in the Anthropocene* (59–75). Cham: Springer International Publishing.
- Villalobos, B. (2025). *Prosecuting ecocide in Ukraine: The role of the International Criminal Court (ICC) amidst the war*. Retrieved from: <https://unitedrisingassociation.com/prosecuting-ecocide-in-ukraine-the-role-of-the-international-criminal-court-icc-amidst-the-war/> (last accessed: 2025, September 6).
- VKC (1962). *Working Group 2 of Phase I (Third Exercise) on environmental warfare of the von Karman Committee* (VKC-EX 3 GP 2/PH 1). Retrieved from: <https://docs.google.com/viewerng/viewer?url=https://declassified.library.utoronto.ca/files/original/7479183c2c1f63c2ae45f6515ac7d26a.pdf> (last accessed: 2025, September 6).
- Westing, A. H. (1983). The environmental aftermath of warfare in Viet Nam. *Natural Resources Journal*, 23(2), 365–389.
- Westing, A. H. (1985). Environmental warfare. *Environmental Law*, 15(4), 645–666.
- Williams, L. (2011). The social theory of Norbert Elias and the question of the nonhuman world. In A. Goodbody & K. Rigby (Eds.), *Ecocritical Theory: New European Approaches* (84–97). Charlottesville, VA & London: University of Virginia Press.
- Zierler, D. (2011). *Invention of ecocide: Agent Orange, Vietnam, and the scientists who changed the way we think about the environment*. Athens, GA: University of Georgia Press.