I. Introduction

Nuclear weapons, the “ultimate evil,” destabilize humanitarian law, the law of the lesser evil. They inflict damage seemingly in violation of every norm in humanitarian law, from the laws of proportionality and distinction to the principle of neutrality. Even the negotiations around disarmament seem to violate international law’s essential principle, that of sovereign equality. And yet, their legality is somehow still uncertain. It is possible to imagine a legal use of nuclear weapons, in an extreme case of individual or collective self-defense as the last resort of a victim of an attack threatening the very existence of the state, according to the International Court of Justice. Yet all other use would presumably be illegal.

In both legal and illegal use, nuclear weapons are unlike conventional weapons in the scale of immediate destruction they cause and the long-lasting and deadly effects on the environment and human life. The risks inherent to the use of nuclear weapons are all horrendous. Nuclear weapons have caused death and destruction; induced cancers; caused gastrointestinal, cardiovascular and related afflictions; caused congenital deformations, mental retardation, and genetic damage. The inflictions they cause continue for decades after their use, and they continue to cause new health problems in future generations. In addition to health issues, nuclear weapons damage the environment for generations, contaminating and destroying the

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1 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (July 8) (separate opinion by Bedjaoui, J.).
2 Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. at ¶ 35-36.
3 Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. (July 8) (separate opinion by Shi, J.).
4 Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. at ¶ 105.
5 Id. at ¶ 35.
6 Id.
food chain. They produce lethal levels of heat and blast, produce radiation and radioactive fallout; produce a disruptive electromagnetic pulse; and threaten nuclear winter. No other weapons have these effects.

With such devastating effects, naturally the question arises of whom to hold responsible, how to seek justice. As crimes against international law are committed by people, not abstract entities, only by punishing individuals who commit crimes can the provisions of international law be enforced. This paper addresses what level of mens rea would be necessary to hold liable under international law people who design, manufacture, maintain, support and potentially direct the use of nuclear weapons. There is much discussion about which level of criminal culpability is necessary, be it knowledge or recklessness. While this debate focuses on precedent for war crimes under international law, it is complicated by two factors unique to nuclear weapons whose impact on mens rea has not been sufficiently discussed. These factors are the vast scale of destruction nuclear weapons cause, resulting in many more potential war crimes in a single attack than observed in international law precedent, and the principle of deterrence, which both complicate what is the ordinary course of the use of nuclear weapons.

This paper hopes to add to the debate by further developing these two factors and their relationship to mens rea. First, it provides factual background to understand the risks to the use

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7 Id.
8 See id. at ¶ 91.
10 See Charles J. Moxley, Jr., Nuclear Weapons and International Law in the Post Cold War World 537-592 (2d ed. forthcoming ____).
11 Mens rea for the use of nuclear weapons is further complicated by the fact that some nuclear technology is used for peaceful purposes. Indeed, the Treaty on the Non-Proliferation of Nuclear Weapons provides in Article IV, “Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.” Articles I and II prohibit the development and acquisition of nuclear weapons and nuclear explosive devices. The drafters of the treaty did not provide a definition of what exactly constitutes a “peaceful purposes,” and to complicate the question even further, there are many nuclear materials and technologies that are neither weapons or exclusive devices nor strictly peaceful. Two examples are
of nuclear weapons. Second, it discusses the legality of the threat and use of nuclear weapons, as this open question bears on the question of criminal culpability for use. Third, it analyzes the necessary circumstances and level of mens rea for criminal liability under international law for corporate and military leadership. Finally, it proposes case studies to elucidate complications of the mens rea necessary for criminal liability under international law for the use of nuclear weapons.

II. Factual Background

This section provides the factual background necessary to discuss criminal responsibility for the use of nuclear weapons. It discusses the destruction they cause immediately and over time, as well as the policy of deterrence. While the highly destructive nature of nuclear weapons is not in controversy, what is considered the “ordinary course” use can vary, and yet it is an essential element of mental culpability under Article 30 of the Rome Statute of the International Criminal Court (“Rome Statute”), which will be discussed in detail in this paper. Proponents of nuclear weapons argue the possibility of a “clean” strike that would destroy a military target with depleted uranium and naval reactor fuel, both of which are used for military purposes. David S. Jonas & Ariel E. Brauenstein, What’s Intent Got to Do With It? Interpreting “Peaceful Purposes in Article IV.1 of the NPT, 32 EMORY INT’L L. REV. 351, 352-56 (2018).

Some officials have made statements about what purposes are not peaceful. For example, U.S. officials have disclosed a list of warning signs that indicate non-peaceful nuclear activities. These warning signs include “(a) the presence of undeclared nuclear facilities; (b) procurement patterns inconsistent with a civil nuclear program (e.g., clandestine procurement networks, possibly including the use of front companies, false end-use information, and fraudulent documentation); (c) security measures beyond what would be appropriate for peaceful, civil nuclear installations; (d) a pattern of Article III safeguards violations suggestive not of mere mistake or incompetence, but of willful violation and/or systematic deception and denial efforts aimed at concealing nuclear activities from the International Atomic Energy Agency (IAEA); (e) a nuclear program with little (or no) coherence for peaceful purposes, but great coherence for weapons purposes (e.g., heavy water production in a country the civil nuclear facilities of which use only light water as a moderator, or pursuit of enrichment facilities when other, cheaper energy-producing resources or an outside source of enriched uranium are available, or the pursuit of a full fuel cycle for a civil reactor program too small to provide economic justification for such an effort).” Id. (quoting U.S. DEP’T OF STATE, ADHERENCE TO AND COMPLIANCE WITH ARMS CONTROL, NONPROLIFERATION AND DISARMAMENT AGREEMENTS AND COMMITMENTS 64 (2005)).
little effect elsewhere, but as of yet, such a strike is purely hypothetical. This paper thus focuses on the effects of nuclear weapons generally rather than of a more fringe situation.

The destruction caused by nuclear weapons is quantitatively different from that caused by conventional weapons. The blast and heat damage caused by nuclear weapons is thousands of times greater than that caused by individual conventional weapons. The destruction caused by nuclear weapons is also qualitatively different from that caused by conventional weapons in that the nuclear radiation they release is extremely harmful to all life. Nuclear radiation directly kills and injures both those near the detonation and also those further away through radioactive fallout, the electromagnetic pulse, and the broader spread of radioactive materials. Further, it is not possible to limit the consequences of a nuclear exchange to territories of the States included in the exchange.

In addition to spreading widely over great distances, the effects of nuclear weapons spread over time. Radioactive materials have extraordinarily long after lives, and their impacts are also carried on from one generation to the next genetically through successive generations of humans, animals, and plants. These effects can pervade the food chain and environmental conditions for life, including water, soil, and air. In humans, for those not killed directly by a blast, radiation exposure causes, depending on strength of exposure, short-term effects including

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12 Moxley, supra note 10 at 668.
13 Id.
14 Id. at 669.
15 Id.
17 Moxley, supra note 10 at 669.
18 Id.
19 Id. at 669-670.
moderate vomiting, diarrhea and fatigue, or death if the dosage is high enough, and long-term
effects including birth defects and fatal cancers.\textsuperscript{20}

There are different categories of nuclear weapons with different destructive strengths.
Strategic nuclear weapons are larger and more destructive than tactical weapons.\textsuperscript{21} There is
speculation that one day there will be nuclear weapons which emit no radiation, but presently, all
nuclear weapons emit radiation.\textsuperscript{22} Numerous studies show the devastating effects of the
detonation of high yield nuclear weapons, intermediate yield nuclear weapons, and even low
yield nuclear weapons.\textsuperscript{23} Nuclear weapons States argue that low yield weapons can satisfy the
legal requirements of the law of armed conflict which are discussed below, however, the
radiation effects of even low yield weapons are open to substantial technical uncertainties and
variables.\textsuperscript{24}

Since 1945, the primary “use” of nuclear weapons has been non-use, in support of the
policy of deterrence. The theory behind deterrence is that when one country has nuclear
weapons, it tempers the activities of potential adversaries around the world and also contributes
to non-proliferation goals by limiting the incentive for allies of that country to have their own
nuclear weapons.\textsuperscript{25} The U.S. military has cited nuclear deterrence as a top priority, the bedrock
of U.S. national security, and its singular, most important mission.\textsuperscript{26} This enthusiasm for
deterrence is shared around the world including, for example, by the North Atlantic Treaty

\textsuperscript{20} Id. at 686-93.
\textsuperscript{21} Id. at 680-81.
\textsuperscript{22} Id. at 705-12.
\textsuperscript{23} Id. at 713-34.
\textsuperscript{24} Id. at 735.
\textsuperscript{25} C. Todd Lopez, \textit{4 Things to Know about the U.S. Nuclear Deterrence Strategy}, U.S. DEP’T OF DEFENSE (Apr. 1,
2019), https://www.defense.gov/Explore/News/Article/Article/1801797/4-things-to-know-about-the-us-nuclear-deterrence-strategy/. Through their policies of deterrence, states announce a readiness to use nuclear weapons as reprisal for first use by another state, or even as first use themselves, given the proper circumstances.
\textsuperscript{26} Id.
Organization ("NATO") which cites the fundamental purpose of NATO’s nuclear capability as to preserve peace, prevent coercion and deter aggression.\textsuperscript{27} NATO maintains a “credible” deterrence and defense, based on an “appropriate” mix of nuclear, conventional and missile defense capabilities with the overall strategy of preventing conflict and war.\textsuperscript{28} In the face of calls for reduction in the nuclear arsenal, NATO claims to still have nuclear weapons because nuclear deterrence is still necessary and its principles still work.\textsuperscript{29} This emphasis on deterrence, and not on active use, contributes to the definition of what will occur in the “ordinary course of events” of the use of nuclear weapons.

\textbf{III. Legality of the Threat and Use of Nuclear Weapons}

In 1996, the International Court of Justice ("ICJ") issued an advisory opinion on the legality of the threat or use of nuclear weapons.\textsuperscript{30} The court unanimously concluded that there is neither customary nor conventional international law which specifically authorizes the threat or use of nuclear weapons.\textsuperscript{31} By eleven votes to three, the court concluded there is also neither customary nor conventional international law that comprehensively and universally prohibits the threat or use of nuclear weapons as such.\textsuperscript{32} Yet, the ICJ also concluded that a threat or use of force by means of nuclear weapons would be unlawful if it is contrary to Article 2, paragraph 4 of the U.N. Charter and fails to meet all the requirements of Article 51 of the U.N. Charter.\textsuperscript{33}

\textsuperscript{28} \textit{Id.}
\textsuperscript{29} Jessica Cox, \textit{Nuclear Deterrence Today}, NATO REV. (June 8, 2020), https://www.nato.int/docu/review/articles/2020/06/08/nuclear-deterrence-today/index.html. It is the necessity of credibility of this mix that could serve to excuse corporate leadership from criminal liability. One could argue that even though nuclear weapons deter on their own, new technology is required to appear continually ready to employ nuclear weapons in self-defense. That way, the development of new technology could defend against accusations of plans for actual use, which could lead more clearly to criminal liability for corporate leadership.
\textsuperscript{30} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. at ¶ 226.
\textsuperscript{31} \textit{Id.} at ¶ 105.
\textsuperscript{32} \textit{Id.}
\textsuperscript{33} \textit{Id.} The Art. 2, ¶ 4 prohibition of the threat or use of force provides, “[a]ll Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any
Finally, the court also unanimously concluded that the threat or use of nuclear weapons should also “be compatible with the requirements of the international law applicable in armed conflict, particularly those of the principles and rules of international humanitarian law, as well as with specific obligations under treaties and other undertakings which expressly deal with nuclear weapons.”

On the most important question of the legality of the threat or use of nuclear weapons, the ICJ was unable to reach a conclusion and tied in a vote of seven to seven. The court stated “it follows from the above-mentioned requirements that the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law.” However, “in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake.”

These conclusions impact potential criminal liability for the use of nuclear weapons and the analysis thereof, as because it is not determined that the use of nuclear weapons is *per se* illegal, criminal liability for the use of nuclear weapons will be highly factually dependent.

The conclusion most important for the present discussion is that the use of nuclear weapons must be compatible with the requirements of the international law applicable in armed conflict, or in any other manner inconsistent with the Purposes of the United Nations.” Art. 51 provides, “[n]othing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.”

34 Id.
35 Id.
36 Id.
37 Id.
conflict, for such a conclusion is not immediately evident. Nuclear weapons are so much more destructive than conventional weapons, it is difficult to even conceive of a use which could be analyzed under the same legal framework and be judged legal. Yet, as such frameworks are indeed applicable to the use of nuclear weapons, it follows that criminal liability for the use of nuclear weapons can be analyzed under the precedent established for the use of conventional weapons despite the extreme difference in scale of destruction.\textsuperscript{38}

The Court came to several other conclusions which are relevant to the debate around the \textit{mens rea} of the use of nuclear weapons. For instance, the court determined that a finding of illegality requires due account of the circumstances specific to each case as an arbitrary deprivation of life contrary to article 6 of the International Covenant on Civil and Political Rights, as genocide under article II of the Convention on the Prevention and Punishment of the Crime of Genocide, and as environmental damage under the international law relating to the protection and safeguarding of the environment.\textsuperscript{39}

This section continues by discussing the Court’s application of the laws of armed conflict to the threat and use of nuclear weapons. To apply these provisions correctly, the ICJ noted it is imperative to take account of the unique characteristics of nuclear weapons, in particular their destructive capacity, capacity to cause “untold human suffering,” and their ability to cause damage to generations to come.\textsuperscript{40}

\textbf{A. Provisions of the U.N. Charter Relating to the Threat or Use of Force}

The provisions on the use of force in the U.N. Charter do not refer to any specific weapon. Article 2, paragraph 4 prohibits “the use of force against the territorial integrity or

\textsuperscript{38} This international precedent will be examined more closely on the question of \textit{mens rea} in Part IV.
\textsuperscript{39} Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. at ¶ 22-34.
\textsuperscript{40} \textit{Id.} at ¶ 35-36.
Nuclear Weapons and *Mens Rea*: Unclear Criminality and Elusive Liability, Morin

political independence of another State or in any other manner inconsistent with the purposes of the United Nations." Article 51 recognizes the inherent right of individual or collective self-defense in the event of an armed attack. The ICJ determined that the entitlement to resort to self-defense is subject to the conditions of necessity and proportionality. However, the rule of proportionality does not on its own exclude the use of nuclear weapons in self-defense situations, although the ICJ emphasizes that the nature of nuclear weapons is a further consideration to be born in mind by States believing they can use them in self-defense while respecting the requirements of proportionality.

**B. Rules on the Lawfulness or Unlawfulness of Nuclear Weapons as Such**

In addressing the question of whether there are any specific rules in international law regulating the legality or illegality of the use of nuclear weapons per se, the ICJ determined that customary international law and treaty law do not contain any specific authorization of the threat or use of nuclear weapons or any other weapon generally or in specific circumstances. However, State practice shows that the prohibition of a weapon comes from a specific prohibition, not the lack of an authorization. The many treaties dealing with acquisition, manufacture, possession, deployment and testing of nuclear weapons show an increasing concern in the international community with nuclear weapons and could foreshadow a future general prohibition of the use of nuclear weapons, but they do not prohibit the use themselves. The ICJ notes the profound divide in the international community on whether the non-use of nuclear

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42 U.N. Charter art 51.
43 Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. at ¶ 41.
44 *Id.* at ¶ 42-43.
45 *Id.* at ¶ 52.
46 *Id.*
47 *Id.* at ¶ 63.
weapons since 1945 constitutes the expression of an opinion juris and finds that it does not.\textsuperscript{48} Furthermore, the Court specifically does not pronounce on the policy of deterrence.\textsuperscript{49}

C. International Humanitarian Law

To analyze whether the use of nuclear weapons falls under international humanitarian law, the ICJ lays out and applies the cardinal principles of international humanitarian law.\textsuperscript{50} These principles are the principle of distinction and the prohibition on causing unnecessary suffering to combatants. The principle of distinction aims at protecting civilian populations and objects and requires distinction between combatants and non-combatants.\textsuperscript{51} The prohibition on causing unnecessary suffering to combatants prohibits using weapons that cause combatants such harm or uselessly aggravate their suffering.\textsuperscript{52} The ICJ notes that nuclear weapons were developed after most of the principles and rules of international humanitarian law had already come into existence, and these rules “indicate the normal conduct and behavior expected of States.”\textsuperscript{53} The qualificative and quantitative differences between nuclear weapons and conventional weapons are not sufficient to determine that the established principles and rules of international humanitarian law do not apply to nuclear weapons.\textsuperscript{54} The Court found, as indeed advocated by many States, that international humanitarian law applies to the use and threat of nuclear weapons as it applies to the use of other weapons.\textsuperscript{55}

D. The Principle of Neutrality

\begin{itemize}
  \item \textsuperscript{48} Id. at ¶ 71.
  \item \textsuperscript{49} Id. at ¶ 66.
  \item \textsuperscript{50} Id. at ¶ 74-87.
  \item \textsuperscript{51} Id. at ¶ 78. Under this principle, “States must never make civilians the object of attack and must consequently never use weapons that are incapable of distinguishing between civilian and military targets.”
  \item \textsuperscript{52} Id. The application of this principle means that States do not have “unlimited freedom of choice of means in the weapons they use.”
  \item \textsuperscript{53} Id. at ¶ 82.
  \item \textsuperscript{54} Id. at ¶ 86.
  \item \textsuperscript{55} Id. at ¶ 89.
\end{itemize}
The ICJ found that as international humanitarian law applies to the use of nuclear weapons, the principle of neutrality also applies.\footnote{Id. at ¶ 88} This principle prevents the “incursion of belligerent forces into neutral territory, or attacks on the persons or ships of neutrals.”\footnote{Id. at ¶ 88-89.} Belligerents are bound to respect the sovereign rights of neutral powers and neutral states have equal interest in having their rights respected by belligerents.\footnote{Id.} The principle of neutrality applies to transborder incursions of armed forces and to transborder damage caused to a neutral state by the use of a weapon in a belligerent state equally.\footnote{Id. at ¶ 88-89.} It is an established part of customary international law and applies to all international armed conflict, whatever type of weapon might be used.\footnote{Id. at ¶ 91.} The use of nuclear weapons while respecting this principle is particularly difficult, whether the effects of use in belligerent territory spread to neutral territory, or whether the strike occurs in international neutral territory, such as an attack of a submarine in international waters.

E. ICJ Advisory Opinion Conclusions

In its conclusions to be drawn from the applicability of international humanitarian law and the principle of neutrality to the use of nuclear weapons, the ICJ balanced two points of view. One point of view advanced the position that the fact that the use of nuclear weapons is subject to and regulated by the law of armed conflict does not necessarily mean that such use is prohibited \textit{per se}.\footnote{Id. at ¶ 92.} The opposing point of view holds that in the view of the necessarily indiscriminate consequences of the use of nuclear weapons, their use could never be compatible with the principles and rules of humanitarian law including the principle of neutrality, so their use is therefore prohibited.\footnote{Id. at ¶ 92.} The ICJ balanced the two points of view by recognizing both that
the unique characteristics of nuclear weapons seem scarcely reconcilable with respect for the law of armed conflict, yet every state has a fundamental right to survival, and thus to resort to self-defense in accordance with Article 51 of the U.N. Charter when its survival is at stake.63 It concluded that it could not reach a definitive conclusion as to the legality or illegality of the use of nuclear weapons in an extreme circumstance of self-defense in which the very survival of a state would be at stake.64

From this conclusion stem two important ideas. First, it is clear that some uses of nuclear weapons would be illegal under international law. Second, as the principles of “normal” international law apply to the use of nuclear weapons, the principles and precedent of “normal” international criminal law apply to individuals involved in the use of nuclear weapons. This paper continues by examining liability for those individuals under international criminal law.

IV. Criminal Liability for the Use of Nuclear Weapons Under International Law

This paper focuses on liability at the International Criminal Court (“ICC”) because that is where there is jurisdiction over individuals who have the most serious crimes under international law.65 One hundred twenty states adopted the Rome Statute on July 17, 1998, thereby creating the ICC.66 The vision of these states and the ICC is to put an end to impunity for the perpetrators of the most serious crimes of concern to the international community and to end such crimes.67 The ICC is not a substitute for national courts.68 Only when a state is unable or unwilling to

63 Id. at ¶ 92-96.
64 Id. at ¶ 97.
65 In this paper, as at the ICC, precedent at permanent and ad hoc international tribunals aids in determining issues of international law, although the necessary mens rea for certain crimes differs slightly in the statutes of the international tribunals as well as their case law. It is possible that the use of nuclear weapons could lead to the creation of a new ad hoc tribunal to deal specifically with such a situation, but the absence of such an occurrence, this paper focuses on liability at the ICC.
66 There are currently 123 members of the ICC. INT’L CRIM. CT., UNDERSTANDING THE INTERNATIONAL CRIMINAL COURT, https://www.icc-cpi.int/icedocs/pids/publications/uicceng.pdf
67 Id.
68 Id.
carry out investigation and prosecution does the ICC do so.\textsuperscript{69} The ICC prosecutes the perpetrators of the most serious crimes committed in the territories of its state parties or by nationals of its state parties after entry into force of the Rome Statute on July 1, 2002.\textsuperscript{70} For the ICC to have jurisdiction over a crime, the alleged perpetrator must be a national of a state party or the crime must have been committed in the territory of a state party.\textsuperscript{71} Of the nine nuclear powers, only two have recognized the jurisdiction of the ICC and two are signatories that have not ratified the Rome Statute.\textsuperscript{72}

There are four sets of crimes within the jurisdiction of the ICC, and the use of nuclear weapons could constitute multiple of these crimes.\textsuperscript{73} Under Article 5 of the Rome Statute, crimes within the ICC’s jurisdiction are the crimes of genocide, crimes against humanity, war crimes, and the crime of aggression.\textsuperscript{74} Crimes against humanity relevant to the use of nuclear weapons include murder, extermination, torture, or “other inhumane acts of similar character intentionally causing great suffering, or serious injury to body or to mental or physical health.”\textsuperscript{75} For the purpose of the Rome Statute, these acts must be committed “as part of a widespread or systematic attack directed against any civilian population, with the knowledge of the attack.”\textsuperscript{76} War crimes relevant to the use of nuclear weapons are grave breaches of the Geneva Conventions of August 12, 1949 including willful killing; torture or inhuman treatment; willfully

\textsuperscript{69} Id.
\textsuperscript{70} Id.
\textsuperscript{71} Id. The ICC may also exercise jurisdiction over a matter if on-state parties accept its jurisdiction or if the U.N. Security Council refers it.
\textsuperscript{72} France and the United Kingdom are parties of the Rome Statute. The United States and Russia have signed the statute but not ratified it, which means that while they are not fully bound by the treaty, they cannot do something opposite to its object and purpose.
\textsuperscript{74} Id. at art. 5.
\textsuperscript{75} Id. at art. 7.
\textsuperscript{76} Id.
causing great suffering or serious injury to body or health; and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.\textsuperscript{77} War crimes also include serious violations of the laws and customs of international armed conflict such as \textit{intentionally} directing attacks against the civilian population as such or against individual civilians not taking direct part in hostilities; \textit{intentionally} directing attacks against civilian objects; \textit{intentionally} launching an attack in the \textit{knowledge} that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated; attacking or bombarding towns, villages, dwellings or buildings which are undefended and which are not military objectives; and employing poison or poisoned weapons.\textsuperscript{78} The ICC has jurisdiction over such crimes when committed in particular as part of a plan or policy or as part of a large-scale commission.\textsuperscript{79}

The Rome Statute specifies the responsibility of commanders and other superiors in Article 28. A military commander is criminally responsible for crimes committed by forces under his or her effective command and control where the leader "\textit{knew} or, owing to the circumstances at the time, \textit{should have known} that the forces were committing or about to commit such crimes" and failed to take all necessary and reasonable measures to prevent their commission.\textsuperscript{80} Non-military superiors are criminally responsible for crimes committed by subordinates under that person’s effective authority and control, where as a result of the leader’s

\textsuperscript{77} Id. at art. 8(a).
\textsuperscript{78} Id. at art. 8(b). Additionally, it is also a war crime to employ “weapons, projectiles and material and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering or which are inherently indiscriminate in violation of the international law of armed conflict.” However, such weapons must be the subject of a comprehensive prohibition and included in an annex to the Rome Statute, which may be amended.
\textsuperscript{79} Id. at art. 8.
\textsuperscript{80} Id. at art. 28(a).
failure to exercise control over subordinates within the effective responsibility and control properly where the superior “knew, or consciously disregarded information which clearly indicated, that the subordinates were committing or about to commit such crimes” and failed to take all necessary and reasonable measures to prevent or repress their commission.\(^{81}\)

The Rome Statute specifies \textit{mens rea} for the principle crimes under its jurisdiction as well as for accomplice liability. These levels of \textit{mens rea} apply when a crime does not otherwise specify a level of \textit{mens rea}. As stated in Article 30 on the mental element, unless otherwise provided, “a person shall be criminally responsible and liable for punishment for a crime . . . only if the material elements are committed with \textit{intent} and \textit{knowledge}.”\(^{82}\) A person has intent where “[i]n relation to conduct, that person \textit{means to engage in the conduct}” and “[i]n relation to a consequence, that person \textit{means to cause that consequence or is aware} that it will occur in the ordinary course of events.”\(^{83}\) Knowledge means “awareness that a circumstance exists or a consequence will occur in the ordinary course of events.”\(^{84}\) The emphasis on the ordinary course of events is a particular challenge for the use of nuclear weapons. Nuclear weapons are incredibly destructive, so in their use would likely cause many of the abovementioned war crimes to occur. However, their current ordinary use is in service of deterrence, which is considerably less likely to result in war crimes.

For aiding and abetting and relevant to corporate leadership, as stated in Article 25(3)(c) on individual criminal responsibility, a person is criminally responsible and liable for punishment when “for the \textit{purpose} of facilitating the commission of such a crime, [the person] aids, abets or otherwise assists in its commission or its attempted commission, including

\(^{81}\) \textit{Id.} at art. 28(b).
\(^{82}\) \textit{Id.} at art. 30(1).
\(^{83}\) \textit{Id.} at art. 30(2).
\(^{84}\) \textit{Id.} at art. 30(3).
providing the means for its commission.”85 A person is also criminally responsible and liable for
punishment under Article 25(3)(d) when the person

[i]n any other way contributes to the commission or attempted commission of such a
crime by a group of persons acting with a common purpose. Such contribution shall be

*intentional* and shall either:

(i) Be made with the *aim* of furthering the criminal activity or criminal purpose of the
group, where such activity or purpose involves the commission of a crime within the
jurisdiction of the Court; or

(ii) Be made in the knowledge of the intention of the group to commit the crime

[emphasis added].86

The key difference between liability under Article 25(3)(c) and Article 25(3)(d) is the specificity
of the contribution. Under Article 25(3)(c), the purpose of facilitating is to a specific crime,
while under Article 25(3)(d), the purpose of facilitating is to assist a group with the aim of
furthering the criminal activities of the group. The crimes under Article 25(3)(d) are not specific,
only the general criminal activity of the group is. This distinction brings up the question of the
legality of the use of nuclear weapons, addressed in the ICJ advisory opinion. Because the ICJ
concluded that the use of nuclear weapons is not *per se* illegal, it is not clear that an aider and
abettor could be held liable for contributing to either a specific crime or a group with criminal
intentions without more information.

International criminal law itself clearly requires *mens rea* for individual liability. Yet
another view exists, asserting that no *mens rea* is actually necessary to establish a State’s

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85 Id. at art. 25(3)(c).
86 Id. at art. 25(3)(d).
liability. After all, it is the behavior of States that is regulated by the law of armed conflict, and the law of armed conflict would lose much of its efficacy if its laws were couched in intent. Additionally, a harmful act has the same result whether done intentionally or inadvertently. This is a minority view, however, and as States must act through individuals, individuals are where the international community has decided to place responsibility for violations of international humanitarian law. Thus, this paper continues by examining the potential responsibility of corporate leadership and military leadership for the use of nuclear weapons.

A. Corporate Leadership

International criminal law has held corporate leadership responsible for aiding and abetting war crimes. There is a solid body of customary international law supporting the definition of aiding and abetting as knowingly providing substantial assistance to the principal perpetrator of an offense. Early such efforts held industrialists liable for complicity in war crimes committed during World War II in the Nuremberg trials. In the three “the industrialist cases,” IG Farben, Krupp, and Flick, the Allies charged prominent German industrialists with various crimes. In the Krupp case and the Farben case, defendants were charged with crimes against peace and participation in a conspiracy against peace. All of the industrialists were tried for spoliation, or coercive expropriation of industrial plants, and having employed forced labor allotted to the corporations by the German government.

87 Moxley, supra note 10 at 539.
89 Id.
91 Id.
92 Id.
94 Id. at 504-05.
95 Id. at 473, 457.
The industrialist cases provide guidance on the mens rea necessary for criminal liability for accomplices of war crimes. Accomplices were held liable based on the knowledge that the principle was committing the underlying crime.\(^{96}\) In the IG Farben case, the president of the company that supplied the Nazi government with the gas used in the gas chambers was convicted of aiding and abetting a war crime.\(^{97}\) In the Krupp case, eleven people were convicted of deportation, exploitation and abuse of slave labor. Knowledge that the principal is committing the underlying act is necessary, but knowledge that the act is a crime is not.\(^{98}\)

There is some divergence in the formulation of aiding and abetting liability at the ICC as well as in earlier international criminal law jurisprudence.\(^{99}\) Despite differences in precise wording, recent case law at the ICC points towards a general customary international law standard for aiding and abetting.\(^{100}\) Importantly, while there are even differences between the precedent of the ad hoc tribunals and the ICC with respect to the requisite mental state of an accomplice and the nature of contribution to the crime, the factual analysis in each case seems to result in similar conclusions about what elements must be satisfied in order to establish complicity.\(^{101}\) One such difference which has recently been rejected is whether the contribution under Article 25(3)(c) must be “substantial.”\(^{102}\) The precedent of the ad hoc tribunals required “substantial” contribution, while the qualifier is absent from the Rome Statute.\(^{103}\) The early jurisprudence from the ICC continued to require “substantial” assistance under the “essential” contribution required under 25(3)(a).\(^{104}\) More recent cases do not test whether the contribution

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\(^{96}\) Moxley, supra note 10, at 571.

\(^{97}\) Id.

\(^{98}\) Id.

\(^{99}\) Aksenova, supra note 90, at 3.

\(^{100}\) Id. at 4.

\(^{101}\) Id.

\(^{102}\) Id. at 6.

\(^{103}\) Id.

\(^{104}\) Id.
was “substantial.” Indeed, a recent pronouncement on the matter expressly rejected the requirement that the assistance be “substantial,” arguing that no specific quantitative threshold is necessary because of the causality requirement. With the causality requirement, the assistance must have facilitated the offense in some way, and if it does not, 25(3)(c) does not apply.

Returning to the mens rea of aiding and abetting, the fault requirement concerns two elements, as in the more general mental culpability article of the Rome Statute. The accomplice’s mental culpability constitutes the attitude towards the assistance provided and the awareness of the harm resulting. Again, there is some divergence in precedent at the ICC and earlier ad hoc tribunals. Earlier tribunals required at least knowledge with respect to the assistance provided and the harm resulting. In contrast, the ICC recently clarified in the Bemba et al. decision that “purpose” refers only to the facilitation, not the principal offense.

A crucial distinction in assisting a group acting with a common purpose under Article 25(3)(d) and aiding and abetting under Article 25(3)(c) is that Article 25(3)(c) covers contributions to a specific crime, while Article 25(3)(d) covers contributions to a group done with the knowledge of the intention of this group to commit crimes more generally. Additionally, Article 25(3)(c) calls for a higher standard of fault, purposeful contribution to the crime, while 25(3)(d) uses the general standard of intent in Article 30(2)(a). As noted above, the general standard provides that person has intent where “[i]n relation to conduct, that person

105 Id.
106 Id.
107 Id.
108 Id. at 7.
109 Id.
110 Id.
111 Prosecutor v. Bemba, ICC-01/05-01/13, Pre-Trial Chamber II, Decision pursuant to Article 61(7)(a) and (b) of the Rome Statute, ¶ 35 (Nov. 11, 2014).
112 Aksenova, supra note 90, at 8.
113 Id.
means to engage in the conduct”\textsuperscript{114} Thus, under Article 25(3)(d), intent to contribute and knowledge of group’s criminal intentions are sufficient to establish accomplice liability.\textsuperscript{115} The accomplice need not have had intent to commit a specific crime, but knowledge of the crime is required under 25(3)(d)(ii).\textsuperscript{116}

An interesting application of this principle comes from a hypothetical in the \textit{Mbarushimana} case. The hypothetical provides an example of a well-intentioned arms dealer who sells arms to State C instead of warring States A and B because the arms dealer knows that both States A and B are committing war crimes.\textsuperscript{117} However, if unbeknownst to the arms dealer, State C is funneling all of the arms to State A, then the arms dealer may meet all of the requirements for 25(3)(d) liability for uncontroversial non-criminal conduct, unless there is an additional requirement that the person at least be aware that the arms are going to State A.\textsuperscript{118} Arguably, in most cases the arms dealer would have at least some knowledge about the final destination of the weapons, and the question is rather the degree and specificity of knowledge that determines liability.\textsuperscript{119}

Several international cases expand on the need for specificity of knowledge. The International Criminal Tribunal for the Former Yugoslavia (“ICTY”) answered the question of whether corporate officials need to know the exact war crime to be committed using their

\textsuperscript{114} Rome Statute art. 30(2).
\textsuperscript{115} \textit{Prosecutor v. Mbarushimana}, ICC-01/04-01/10, Pre-Trial Chamber I Decision on the Confirmation of Charges, ¶ 289 (Dec. 16, 2011) (distinguishing art. 25(3)(c) and art. 25(3)(d)). “Differently from aiding and abetting under article 25(3)(c) of the Statute, for which intent is always required, knowledge is sufficient to incur liability for contributing to a group of persons acting with a common purpose, under article 25(3)(d) of the Statute. Since knowledge of the group's criminal intentions is sufficient for criminal responsibility, it is therefore not required for the contributor to have the intent to commit any specific crime and not necessary for him or her to satisfy the mental element of the crimes charged. This stands in sharp contrast with liability under article 25(3)(a) of the Statute, where the suspect must meet the subjective elements of the crimes charged.”
\textsuperscript{116} \textit{Id.}
\textsuperscript{117} \textit{Id.} at ¶ 288, n.681.
\textsuperscript{118} \textit{Id.}
\textsuperscript{119} Aksenova, supra note 90, at 8.
supplied equipment or is general awareness sufficient.120 In the Furundžija case, the trial chamber stated that it is not necessary for an aider and abettor to know the precise crime that was intended and which was committed.121 The person is guilty as an aider and abettor with knowledge that one of a number of crimes will probably be committed, and one of those crimes is in fact committed.122 The ICTY also considered the situations when the accused’s individual assistance was remote from the actions of the principal perpetrators and when the assistance could have been used for both lawful and unlawful activities, situations particularly applicable to the use of nuclear weapons.123 In these cases, the chamber required a direct link between the aid provided and the relevant crimes committed by principal perpetrators.124 However, this interpretation did not last as several subsequent cases at the ICTY maintained that specific direction is not an element of aiding and abetting under customary international law.125

Applying the question of knowledge to nuclear weapons reveals how much more complicated liability of corporate leadership for aiding and abetting war crimes can be. Considering that the current “use” of nuclear weapons is non-use as such, but instead use as deterrence, possessing a nuclear weapon in order to dissuade others from using one against a state does not appear to commit any crimes directly, leaving aside the issue that a state may not threaten to do what it may not legally do. Because of this wrinkle, it is unlikely that corporate

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120 Id. at 12.
122 Id.
124 Perišić at ¶ 44.
leadership could be held liable for aiding and abetting the actual use of nuclear weapons if their intention is merely to aid and abet deterrence.

Under Article 25(3)(c), corporate leadership must *purposefully* contribute to crime. With seventy-five years of non-use of nuclear weapons, generally developing and producing nuclear weapons is unlikely to be with the *purpose* of contributing to a crime. However, it is certainly conceivable that a situation could arise in which corporate leadership in fact does purposefully contribute to a crime involving the use of a nuclear weapon.

Under, Article 25(3)(d), corporate leadership must *intend* to contribute and have *knowledge* of group’s criminal intentions when developing and producing nuclear weapons. Because the criminal activities are more general under Article 25(3)(d), the ICJ’s advisory decision influences the determination of corporate liability. Because the use of nuclear weapons is not categorically illegal, presuming that the corporate leadership believes the group has intentions only to use the nuclear weapons in line with international law, corporate leadership could avoid responsibility under Article 25(3)(d) as well. Although, again, it is certainly conceivable that a situation could arise in which corporate leadership in fact does in fact contribute nuclear weapons to a group knowing of their criminal activities.

B. Military Leadership

Under customary international law, and affirmed in many other sources of international law, military leadership is liable for the acts of subordinates if it *knew or should have known* of their criminal acts and failed to prevent them.\(^{126}\) For other crimes, many treaties specify a *mens

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The different levels show drafters’ desire and ability to set different thresholds of criminal responsibility. Further, some scholars have concluded that a mens rea of willful includes a mens rea of reckless. For example, the International Committee of the Red Cross, one of the foremost experts in international humanitarian law, in its analysis of Additional Protocol I, concluded the accused “must have acted consciously and with intent, i.e. with his mind on the act and its consequences, and willing them . . . this encompasses the concepts of ‘wrongful intent’ or ‘recklessness’, viz. the attitude of an agent who, without being certain of a particular result, accepts the possibility of it happening.”

This conclusion makes sense in light of the “should have known” portion of command responsibility and the vast responsibility of commanders to prevent their subordinates from committing war crimes. Yet questions remain about the requisite level of knowledge, such as who must know, what they must know, how certain their knowledge must be, and when certainty is lacking, what level of risk is tolerable. In the context of the use of nuclear weapons, the questions become all the more pressing because of the scale of damage inherent in their use. Even in the fog of war, the fallout of any nuclear mistake is unpardonable. Fortunately, international tribunal precedent sheds much light on many of these questions. This section proceeds by examining international criminal precedent on several of these questions.

There is some variation in mens rea depending on the actual crime committed, even when the crime specifically requires a mens rea of willful. For the crime of willfully causing great damage.

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129 See id. at 556.
suffering, the standard is intentional.\textsuperscript{131} Interpreted further, intention toward the act or omission is required, but reckless to the result is sufficient.\textsuperscript{132} For the crime of willful killing, only reckless is required about whether the death ensues or not.\textsuperscript{133} For willful damage to institutions dedicated to religion or education, a reckless disregard of the substantial likelihood of destruction or damage is sufficient.\textsuperscript{134} In ICC caselaw, knowledge of risk is sufficient, but there must be a high risk.\textsuperscript{135}

As applied to the use of nuclear weapons, military leadership responsibility differs from corporate leadership responsibility because, presuming actual use, there would be no excuse of the policy of nuclear deterrence. Unlike corporate leaders who could reasonably claim that they had no expectation of actual use given the long history of lack of use of nuclear weapons, a commander who orders the use of a nuclear weapon knows that use will occur and, either knows or should know of all the destruction that use entails.

V. Military Leadership Case Studies

As the case for criminal liability for corporate leadership is weakened by the policy of deterrence, this paper focuses on the potential criminal liability of military leadership. Through two hypothetical case studies, this paper imagines which crimes military leadership could commit through the use of nuclear weapons and analyzes potential liability. The two case studies imagine two different use scenarios: a perfect use “clean” attack on a military target located far

\textsuperscript{133} Prosecutor v. Kayishema, Case No. ICTR-95-1-A, Judgment, ¶ 151 (June 1, 2001).
\textsuperscript{135} Prosecutor v. Lubanga, ICC-01/04-01/06-803, Decision on the Confirmation of Charges, 1277–79 (Feb. 7, 2007). The “awareness that a consequence will occur in the ordinary course of events” means that the participants anticipate, based on their knowledge of how events ordinarily develop, that the consequence will occur in the future. A low risk is not sufficient.
from civilian populations and interests and a foreseeable use attacking a military target located near civilian populations and interest. Each of these uses would face the unavoidable risks of nuclear retaliation and environmental damage to other areas, which will largely be left to consideration in future studies.

A. A “Clean” Hit

A perfect-use scenario would hit a remote military target and damage no civilian interests nearby. Such an attack might be on a nuclear-weapon-equipped submarine, for example. However, this use scenario is largely imaginary because even remote strikes can result in massive radiation damage, which in water dissipates much less and thus remains much more dangerous.\(^{136}\) For the purpose of argument, this paper considers the scenario anyway.

Potential liability for a perfect use scenario could be for “[i]ntentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.”\(^{137}\) Presuming an intentional launch, which is not necessarily certain, the mens rea towards the act would be satisfied.\(^{138}\) Inherent to the use of nuclear weapons is long-term and severe damage to the natural environment, so the mens rea requirement of knowledge would also be met. However, whether that damage would be clearly excessive in relation to the military advantage anticipated would depend on the facts.

B. A Foreseeable Hit


\(^{137}\) See Rome Statute art. 8(2)(b)(iv).

More foreseeable use of nuclear weapons would be to strike a military objective which is located near civilian populations and interests, as is the case with many military objectives. Such a strike would see the successful destruction of a military target, accompanied by unbearable civilian deaths and extreme damage to the environment, potentially over long distances and certainly over a long period of time. War crimes for which military leadership could be held liable include (i) *willful* killing; (ii) *willfully* causing great suffering, or serious injury to body or health; (iii) extensive destruction . . . of property, not justified by military necessity and carried out unlawfully and wantonly; and (iv) *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 clearly excessive in relation to the concrete and direct overall military advantage anticipated.\(^{139}\)

For this kind of strike, it is important to consider the damage and suffering caused by the use of a nuclear weapon in comparison with what could be done with conventional weapons. Conventional weapons are commonly used, which means that states are more likely to confront and fear them.\(^{140}\) Yet, their effects are not so destructive in space and time and not so clearly disproportionate to military advantages to be obtained.

Willful killing requires that the perpetrator killed one or more persons protected under one or more of the Geneva Conventions of 1949, that the perpetrator was aware of the factual circumstances establishing the protected status, the conduct took place in the context of international armed conflict, and the perpetrator was aware of the existence of the armed

\(^{139}\) See Rome Statute art. 8(2)(a-b).

conflict.\textsuperscript{141} With a strike so close to civilian populations and interests, and the known extensive
damage caused by nuclear weapons, a strike near a population center would appear to qualify for
liability for willful killing, and similarly willfully causing great suffering. At this point, the
extreme harm caused by nuclear weapons is clearly established, so any use must necessarily be
in the knowledge of these harms, satisfying the \textit{mens rea} requirements.

In contrast, liability for intentionally launching an attack in the \textit{knowledge} that such
attack will cause incidental loss of life or injury to civilians might not lead to liability so clearly,
as the launch is balanced by the relationship to the concrete and direct military advantage
anticipated. Under the \textit{Lubanga} precedent, knowledge of risk is sufficient, but must the risk must
be high.\textsuperscript{142} An intentional launch more likely to end in liability, but still, with the necessary
knowledge that there will be clearly excessive damage could prevent liability. Thus, liability for
this crime would also closely depend on the facts of the attack.

\textbf{VI. Conclusion}

In conclusion, this paper shows that there are many issues around criminal liability for
the use of nuclear weapons that are either still open or depend heavily on the facts of a particular
use. The ambiguity stems primarily from the lack of clarity on whether the use of nuclear
weapons is legal. With an ever strengthening movement for denuclearization and non-
proliferation, there remains hope that international community will establish that the use of
nuclear weapons is \textit{per se} illegal, which could lead to a safer world, in addition to providing
clarity on the \textit{mens rea} for criminal liability for their use.

\textsuperscript{141} \textit{ICC Case Matrix}, CASE MATRIX NETWORK, https://www.casematrixnetwork.org/cmn-knowledge-hub/icc-
\textsuperscript{142} See \textit{Prosecutor v. Lubanga}, ICC-01/04-01/06-803, Decision on the Confirmation of Charges (Feb. 7, 2007).