Nuclear Weapons & International Law
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December 21, 2011

The Law of Armed Conflict:
Necessity & Nuclear Weapons: To What End?

I. Executive Summary

It is a fundamental principle of international humanitarian law that, "a state may use only such force as is necessary to achieve its military objective."[1] This principle of necessity, a canon of the *jus in bello* doctrine, has been described as "both an authorization to conduct military operations and also an inherent limit on the scope of those operations."[2] In order to determine whether the principle of necessity might ever permit the lawful use of nuclear weapons in war, one must first examine the permissible scope of "military objectives" that might legitimately authorize the use of force. It is necessary in this consideration of *lawful use* of nuclear weapons to adhere to the principles of *jus ad bellum* in the State's entry into a situation of armed conflict. As set forth in Article 51 of the UN Charter, a state may only act in self-defense in response to a hostile act or intent, and such force must be limited in intensity, duration and scope to that which is reasonably required to counter the attack or threat of attack.[3] The only legitimate military objectives to be considered are those undertaken in self-defense intended and reasonably expected to ultimately counter the attack or threat thereof. Legitimate military objectives defined, one must then examine the measure of their achievement in the long- and short-run through an evaluation of the force necessary to attain such achievement through the expenditure of time, life, and physical resources, in relation to and consideration of the military advantage expected to be gained. It is crucial to determine what force is necessary, as opposed to

[1] CHARLES J. MOXLEY, JR., NUCLEAR WEAPONS AND INTERNATIONAL LAW IN POST COLD WAR WORLD 52 (2000).

[2] IAN HENDERSON, THE CONTEMPORARY LAW OF TARGETING: MILITARY OBJECTIVES, PROPORTIONALITY AND PRECAUTIONS IN ATTACK UNDER ADDITIONAL PROTOCOL I 44 (2009).

[3] MOXLEY, *supra* note 1, at 37.

unnecessary, in light of the related *jus in bello* doctrine – particularly in consideration of the principle of proportionality – in order to determine whether the ultimate goal of countering the enemy's attack, but no more, has in fact been achieved with a cumulative force that was necessary, but no more, for such ends.

An understanding of the framework of the principle of necessity in general application to the law of armed conflict, it will make it possible to consider whether the principle of necessity as such will permit for the lawful use of nuclear weapons in the context of extreme need set forth as an open question in the International Court of Justice's 1996 advisory opinion on nuclear weapons: whether a country in a situation of extreme self-defense facing complete annihilation with no other options may lawfully employ nuclear weapons.[4]

II. A State May Use Only such Force as is Necessary to Achieve its Military Objective

In contrast to the extremely permissive 19th-century German military concept of *Kriegsraison*, which justified any violation of the rules of war when military necessity "demanded," [5] the modern understanding of the principal of necessity, one of the canons of the *jus in bello* doctrine, is much more restrictive: "a state may use only such force as is necessary to achieve its military objective."[6] It is no longer assumed that the ends will justify any means.

[4] *Legality of the Threat or Use of Nuclear Weapons*, I.C.J. Reports 1996, 226, 266 [hereinafter *Nuclear Weapons Case*].

[5] HENDERSON, *supra* note 2, at 36. The term "kreigsraison" is derived from the German phrase "kreigraison geht vor kreigsmanier" ("the necessities of war are prior to [ie. take precedence over] the customs of war"). *Id*. at nn. 75-76.

[6] MOXLEY, *supra* note 1, at 52.

III. To Achieve its Military Objective

"The decisive limitation upon war is the limitation of the objectives of war."[7] Such an understanding is crucial to the interpretation and application of the principle of necessity to military action. One can only evaluate necessary force in the context of and in relation to a determined objective,[8] for the "[f]orce that is unnecessary for a limited objective may be necessary for a more comprehensive objective, and the force that is economic in the short run may be the most uneconomic in the long run."[9]

A. What is a military objective?

If the State must have "an explicit military objective justifying each particular use of force," it is necessary to determine what a military objective is.[10] The Department of Defense Dictionary of Military and Associated Terms ("DoD Dictionary") defines an "objective" as "[t]he physical object of the action taken, e.g. a definite tactical feature . . . "[11] That is to say, there must then be some physical, tangible target concerned. Additional Protocol I to the Geneva Convention expands upon the concept of physical object as military objective, limiting such objects to "those . . . which by their nature, location, purpose or use make an effective contribution to military action."[12] Additional Protocol I also recognizes that enemy combatants

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[7] MYRES MCDOUGAL & FLORENTINO P. FELICIANO, LAW AND MINIMUM WORLD PUBLIC ORDER: THE LEGAL REGULATION OF INTERNATIONAL COERCION 34 (1961) (*quoting* OSGOOD, LIMITED WAR: THE CHALLENGE TO AMERICAN STRATEGY 4 (1957)).

[8] MCDOUGAL & FELICIANO, *supra* note 6, at 75.

[9] *Id.* at 35

[10] MOXLEY, *supra* note1, at 52.

[11] DEPARTMENT OF DEFENSE, DICTIONARY OF MILITARY AND ASSOCIATED TERMS 241 (1979).

[12] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts, art. 52, 1977, 1125 UNTS 3 [hereinafter API]. Additional Protocol I has been ratified by 170 countries. Although the U.S. has signed, but not ratified the protocol, a nearly identical description of military objectives appears in the United States Air Force Intelligence Targeting Guide. HENDERSON, *supra* note 2, at 47 n.21.

themselves – provided they are not *hors do combat* – may also qualify as military objectives.[13] Essentially then, a military objective is a source of enemy power capable of being reduced to a concrete physical, tangible target, animate or inanimate.

B. What is a valid and legitimate military objective?

A valid and legitimate military objective is one whose "total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage."[14] An offer of definite military advantage will only be found where the action is determined likely to further the overall political purposes or aims of the acting State.[15] Military advantage has no independent value; "military purposes are not fixed constants; they are, at least in broad outline, determined and controlled by the character and scope of the political purposes of the belligerent."[16] It is the political object that served as the original motive for war that must necessarily "dominate and delimit" both the immediate military aim and the overall campaign.[17] Therefore, each military objective must further the political aims of the State engaged in the conflict, regarding its overall resolution.

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[13] API, art. 41. "A person who is recognized or who, in the circumstances, should be recognized to be hors de combat shall not be made the object of attack . . . . A person is hors de combat if: (a) he is in the power of an adverse Party; (b) he clearly expresses an intention to surrender; or (c) he has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself." The Additional Protocol's explicit protection of such combatants is itself implicit permission to target enemy combatants who are not hors de combat.

[14] API, art. 52 (1). Again, although the U.S. has signed, but not ratified the protocol, a nearly identical description of military objectives appears in the United States Air Force Intelligence Targeting Guide. HENDERSON, *supra* note 2, at 47 n.21.

[15] MCDOUGAL & FELICIANO, *supra* note 6, at 33 (*citing* CLAUSEWITZ, ON WAR 9 (Jolles, trans., 1943).

[16] MCDOUGAL & FELICIANO, *supra* note 6, at 75.

[17] *Id.*

Historically, political objectives and military aims have been construed so expansively so as to include "the overpowering and utter defeat of the enemy," "complete surrender," "complete submission," and "victory"[18]:

> The political object may [have been] such as to require the complete conquest of the enemy; or it may [have been] obtained if the enemy [was] compelled to sue on terms satisfactory to the Government; or the object may [have been] to induce other powers to join as allies; or it may [have been] to cause the enemy to abandon the purpose for which he went to war.[19]

Today, however, the modern State's understanding of the permissible political goals in armed conflict is much more limited. Article 2, Section 4 of the United Nations Charter provides that "[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 state, or in any other manner inconsistent with the Purposes of the United Nations."[20] If an armed attack occurs, the use of force is permitted under Article 51, *only* in self-defense in accordance with international law, and *only* until such time as the Security Council is able to act to restore and maintain peace.[21] International law recognizes a State's right to resort to force in self-defense as a last resort[22] so long as: (1) the force used is "in response to a hostile act or hostile intent"; and (2) the force is "in all circumstances limited in intensity, duration, and scope to that which is reasonably required to counter the attack or threat of attack . . . ."[23] It is therefore generally accepted, in

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[18] *Id.*

[19] *Id.* at 33-34 n.92 (*quoting* MAURICE, BRITISH STRATEGY: A STUDY OF THE APPLICATION OF THE PRINCIPLES OF WAR 73 (1929)).

[20] U.N. Charter art. 2, para. 4.

[21] U.N. Charter art. 51.

[22] TOM RUYS, 'ARMED ATTACK' AND ARTICLE 51 OF THE UN CHARTER: EVOLUTIONS IN CUSTOMARY LAW AND PRACTICE 95 (2010).

[23] MOXLEY, *supra* note 1, at 37 (*quoting* THE NAVAL/MARINE COMMANDER'S HANDBOOK at 4-9 to 4-10 [hereinafter "Naval/Marine Handbook"]). A growing number of scholars support the statement made in the Naval/Marine Commander's Handbook that the use force in self-defense is justified against both an

customary practice and legal doctrine today, that the only valid military objectives are those bases of enemy power – human, material, or institutional – that logically relate to the political and military aim of halting or repelling an armed attack in self-defense, but go no further.[24]

It is well-settled that a state may only use force in self-defense as a last resort; the state must either have reasonably exhausted all peaceful means of resolving the conflict, or it must be evident that such efforts would be futile.[25] However, although there have been instances in which States have explicitly claimed that peaceful measures failed before its decision to resort to force,[26] and although there are instances in which third-party states have criticized actors in a conflict for failing to exhaust potentially peaceful solutions,[27] customary practice does little to prospectively illuminate what sort of peaceful overtures might be reasonably required in any situation; the argument that self-defense may only be exercised as a last resort has not typically played a leading role in assessments of the legality of acts of force.[28] Debates before the Security Council of the United Nations have, however, suggested that the last resort requirement would be of much greater concern if acts of anticipatory self-defense were to become widely accepted as lawful; it is generally regarded as a less crucial concern when self-defense is

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armed attack and the imminent threat of an armed attack, as interpreted to assert the legality of anticipatory or pre-emptive self-defense. Anticipatory and pre-emptive self-defense are, however, are still contested to some great degree internationally. Additionally, customary practice has not yet established the permissibility of fully anticipatory self-defense claims, as those States claiming to take pre-emptive action continue to justify their acts of self defense in relation to previous attacks, and the fear such further or additional attacks are imminent, aligning their arguments more with the doctrine of defensive armed reprisals permitted against pin-prick attacks than a purely anticipatory or pre-emptive defense. RUYS, *supra* note 22. See notes 36 and 43, *infra*, for a further discussion of anticipatory/preemptive self-defense and defensive armed reprisals.

[24] RUYS, *supra* note 22, at 94-95.

[25] *Id.* at 95.

[26] E.g. U.S. claims regarding its 1993 and 1998 strikes against Iraq. *Id.* at 96.

[27] E.g. Ghana's criticisim of U.S. military action in Libya in 1986; and Yugoslavia's criticism of Israel's offensive in Egypt in 1956. *Id.*

[28] *Id.*

undertaken in response to an attack that has already occurred, unless the acting State has evidenced "a manifest unwillingness to utilize diplomatic channels."[29]

It is possible that the last resort requirement, with this dual-standard for anticipatory and traditionally responsive self-defense, is meant to address the need for force to be used only in response to a hostile act or hostile intent. Once an attack has occurred, it will most likely be possible to presume hostility from the attendant circumstances – for example, from the political context or the gravity of the attack – so that concrete proof of hostile intent in the rejection of peaceful overtures is made unnecessary.[30] Before an attack has occurred, there is a much greater risk that any ambiguous actions may prove the result of a misunderstanding that could easily be addressed through diplomatic channels, as opposed to evidence of an actual hostile intent.[31] In any event, a State may not lawfully pursue any military objective in furtherance of its political aim of self-defense until all reasonable peaceful measures have been exhausted or it can be shown that their exercise would be futile, and a State must establish, whether through rejection of its peaceful overtures or otherwise, that the State it is defending itself against is in fact a hostile aggressor. For if that State is not a true aggressor, there can be no military advantage to be gained because there is no true attack or threat thereof to counter, and there can therefore be no legitimate military objective.

Interceptive self-defense refers to the lawful use of self-defense to counter an attack that has been "commenced" although it has not yet produced any manifest result or effect as such; it refers to the opportunity for the lawful exercise self-defense even before the triggering attack has resulted in any damage or loss of life or before any invasion of territory by enemy forces has

[29] *Id.* at 96-98. E.g. 1981 Israeli raid against Iraq. *Id.*

[30] *Id.* at 346.

[31] *Id.*

occurred, so long as that "imminent" attack has moved beyond the planning stage so as to be fairly considered "irreversible" in its natural course.[32] The most obvious example of interceptive self-defense is the permission states have to intercept an incoming missile.[33] Beyond the example of an incoming missile, it is difficult to determine at exactly what stage an attack has progressed beyond the planning stage so that it has become irreversible in its natural course; it is difficult to distinguish instances of lawful interceptive self-defense, and acts of "preemptive" self-defense against imminent attacks that have not yet begun to be implemented, and whose permissibility has not yet been established in international customary law.[34] Interceptive self-defense is permitted because it would be unreasonable to require a State to suffer injury it is reasonably certain will occur before being allowed to protect itself against such further injury – as will become apparent in examining "necessary" force, the law of armed conflict is interested in minimizing death and destruction on a universal scale, and so there is an interest in allowing a State to defend itself, its citizens and its property from the moment injury is certain.[35] The permissibility of preemptive or anticipatory self-defense is debated in large part because the certainty of injury is lacking; not only is it difficult to establish that the opposing Party will in fact ultimately decide to act – so that there is a true hostile threat to counter, permitting the identification of a legitimate military objective – without the requirement of irreversibility, which allows for some reasonable prediction as to the nature, magnitude and scope of the "imminent" injury, it is impossible to accurately apply the principles of necessity and

[32] *Id.*

[33] *Id*. at 347.

[34] *Id.* Preemptive or anticipatory law is discussed further at notes 23, *supra*, 36, and 43, *infra*.

[35] *Id.* at 346.

proportionality to the defensive action undertaken and there is a serious risk of escalation.[36] It is difficult to know what sort of military advantage will allow a State to counter a threat posed by an opposing Party without knowing the nature of that threat; without knowing the nature of the threat, it is impossible to identify a legitimate military objective.

Once a triggering act of aggression has definitely occurred, however, the window of opportunity to undertake a forceful response in self-defense is limited, lest such time pass that the State risks the dissipation of the opposing Party's hostile intent with the result that the opposing Party is no longer an aggressor, but a peaceful State. This requirement of immediacy helps to distinguish "lawful self-defense" from "unlawful reprisal" and prevents the rhetoric of self-defense from being used as a screen to "sanction countless past acts of aggression or conquest."[37] If the opposing Party is no longer an aggressor, the threat that that State once posed has already been countered, and there is no lawful justification for the use of force against them. It is impossible to further efforts to successfully counter an already countered force, and without a permissible political purpose to be furthered with military advantages gained, there are no legitimate military objectives to be identified. It is tgenerally accepted that a lawful act of self-defense should "in principle be undertaken while the original armed attack which triggered it is still in progress and that there should be a close proximity in time between the start of the latter attack and the response in self-defence."[38]

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[36] *Id*. at 357-58. There is also a serious risk that without interceptive self-defense's heightened burden of proof to demonstrate that concrete steps for implementing the triggering attack have been taken, third-party states' evaluation of the imminence of the threat justifying preemptive or anticipatory action – including those on the Security Council -- will naturally rely more heavily upon their own relationships with the states concerned than any objective evidence. *Id.* at 358.

[37] *Id.* at 99.

[38] *Id.*

The immediacy requirement must be applied with some flexibility, however, in order to accurately gauge whether the passage of time has transformed an aggressor into a peaceful Party; "there is no clear-cut distinction between 'premeditated' reprisal and 'spontaneous' self-defense.[39] That is to say, it is acknowledged that a State should be allowed some time to prepare an appropriate attack on a legitimate military objective, which may include a need to collect intelligence regarding the aggressor State's initial attack, and that in some instances the responding may need to secure political approval for its self defense measures.[40] It is also a reality that if all peaceful methods of resolution are to be reasonably exhausted before resort to self-defense, this too will take time.[41] Therefore, despite the risk of preparation masking premeditation (and unlawful reprisal), there is some allowance for a State to take its time before acting upon a military objective, so long as there is a foundation for the reasonable belief that the opposing Party remains an aggressor.[42] Even greater allowance is made for a State responding in self-defense to a series of self-contained successive attacks as opposed to one isolated attack, so that if there is credible evidence to indicate the attacks will continue – the opposing Party remains an aggressor and the threat of continuing attack is imminent – the State may respond in self-defense even after the most recent attack has been completed, with the understanding such an act of self-defense is intended to deter additional attacks.[43] Such allowance is necessary to

[39] *Id.*

[40] *Id.* at 100.

[41] *Id.*

[42] *Id.* at 101.

[43] *Id.* Some scholars call these permitted acts of self-defense in such situations "defensive armed reprisals." *Id.* at 107. Lawful acts of self-defense to prevent *additional* attacks (or "defensive armed reprisals") must be distinguished from acts of anticipatory self-defense; the two are not the same. Following 9/11, it has been asserted that the United States has always supported the legality of anticipatory self-defense, and that the legality of anticipatory self-defense has always enjoyed broad acceptance within the international community as evidenced through customary practice. All of the examples of United States practice that have been pointed to in support of this statement, however – its

provide States the opportunity to defend themselves against a series of small-scale consecutive "pin-prick" attacks that are so brief in individual duration that they are over before a response of any kind can begin and may continue in series indefinitely.[44] Such acts of "self-defense" may not, however, be driven by punitive motivations, for then they are not truly acts of self-defense and no legitimate military objectives can be identified to further a permissible political purpose necessitating the use of force.[45]

It is well-settled that the political aim of self defense – "countering the attack or threat of attack"[46] or "halting and repelling the attack" – imposes a definite limitation on the permissible extent and duration of a State's lawful military actions.[47] There is debate, however, as to exactly what "countering," "halting" or "repelling" attacks or threats thereof, entails.[48] The preamble to the St. Petersburg Declaration provides that: "the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy."[49] Many scholars have expanded upon the extent to which enemy forces must be weakened in order for the aims of self-defense to be met. Some scholars describe the aim of self-defense as the elimination of danger, which could necessarily include the deterrence of future attacks depending

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strikes against Tripoli in 1986, its 1993 operation against Iraqi intelligence headquarters, and its 1998 operation against alleged terrorist infrastructure in Sudan and Afghanistan – depended upon an assertion that the United States had been the victim of a prior attack and feared further attacks would imminently follow and are thus more akin to defensive armed reprisals. There is not one instance in which a State has relied upon a fully anticipatory justification for its use of force. *Id.* at 342-43. Anticipatory/pre-emptive self-defense is discussed further at notew 23 and 36, *infra*.

[44] *Id.* at 106.

[45] *Id.* at 107.

[46] MOXLEY, *supra* note 1, at 37 (*quoting* NAVAL/MARINE HANDBOOK at 4-9 to 4-10).

[47] RUYS, *supra* note 22, at 112.

[48] *Id.* at 112-13.

[49] St. Petersburg Declaration (1868).

upon the particular circumstances involved.[50] Carl von Clausewitz, an 18th-centry Prussian military theorist was of the opinion that elimination of danger could only be achieved if the opposing forces were to be "destroyed, "that is to say, put into such a condition that they can no longer continue to fight."[51] Some modern scholars identify the goal of self-defense as causing the opposing Party to rethink and abandon its desire to continue fighting.[52] Modern customary practice seems to identify this abandonment of the desire to attack, as evidenced through partial or complete surrender, as the point at which the enemy has been effectively countered, halted, and repelled, through its acknowledgement of the fact that any further action would be purely punitive or retaliatory in nature and thus no longer qualify as self-defense.[53] There is no military advantage to be gained once the opposing Party has lost the desire to fight, and the political purpose of self-defense has been achieved; no legitimate military objectives may be identified beyond that point.

Although proportionality will be discussed more extensively in relation to necessary force, it is worth noting in the context of valid military objectives that it is generally acknowledged that although there ought to be some rough quantitative degree of proportionality in the scope and magnitude of the initial act and its response in most instances, it may sometimes be necessary and lawful for acts of self-defense to ultimately surpass the degree of the initial attack in order to effectively reach the ends of self-defense, and cause the opposing Party to truly abandon its desire to continue to fight; in such instances, the threshold for unlawful reprisal will

[50] RUYS, *supra* note 22, at 112.

[51] MCDOUGAL & FELICIANO, *supra* note 6, at 79 (*quoting* CLAUSEWITZ, *supra* note 14, at 19).

[52] HENDERSON, *supra* note 2, at 64.

[53] RUYS, *supra* note 22, at 94-95, 120.

not be crossed.[54] This is particularly true when the acts of self-defense were a series of pin-prick attacks or when the threat of reoccurrence is otherwise high so that it is believed necessary to deter further attacks in the future[55] In such instances, the consideration of proportionality may reasonably include both a "retrospective" and "prospective" evaluation.[56] One scholar has suggested that were the initial attack extensive enough to threaten the very existence of a State, that State might need to "tackle the source" of the attacks itself and would thereby be permitted to pursue "a total military defeat of the attacking State or the removal of its regime."[57] Conversely, when an attack is on a small-scale and isolated in nature, there is generally more of a demand for rough comparability in the resulting injury.[58] Legitimate military objectives always include those that will tend to further the State's aim of causing the opposing Party to recognize tactical defeat as an inevitability and consequently abandon its attack or threat thereof. Legitimate military objectives only exceptionally include those that are necessary to insure that the opposing Party will be induced to abandon any plans for further attack, and seek to do so through forcing the opposing Party to accept that tactical defeat will be inevitable in that future circumstance as well.

C. What is achievement of a military objective?

Achievement of a military objective most obviously consists of the "total or partial destruction, capture or neutralization" of a human, material, or institutional source of enemy

[54] *Id.* at 112.

[55] *Id.* at 116.

[56] *Id.*

[57] *Id.* at 117.

[58] *Id.*

power.[59] Because military objectives are capable of being reduced to concrete, physical targets, such achievement is easily measured and can usually be evaluated immediately.

Achievement of a military objective, however, refers not only to the success of the physical action taken in relation to the target identified, but also to the ultimate realization of the definite military advantage such successful action was intended to offer.[60] This military advantage may be realized as a direct result of the impact on the target – i.e. it may flow as a direct result from depriving the enemy of that particular source of power – or it may be realized indirectly as, for example, when one military objective is intended to distract the opposing Party's attention from the State's pursuit of another military objective, as was the case regarding the Allied attacks on *Pas de Calais* before the invasion of Normandy in 1944; certain military objectives must be identified together as components of one system in order to correctly identify the military advantage they enable to accrue.[61] Military advantages may also need to be evaluated in the context of duration of a conflict and attendant military strategy. One military scholar provides the example of an attack upon a military academy to illustrate this point. A military academy is an obvious source of military power.[62] In the context of a short-lived conflict, however, the advantage to be gained from attacking a military academy is likely to be extremely slight, for it is unlikely to effect a reduction of the opposing Party's fighting force, and it may not contribute to the overall successive of the defensive aims.[63] On the other hand, in the context of a prolonged conflict, destroying a military academy might well effectively diminish

[59] API, art. 52.

[60] API, art. 52.

[61] HENDERSON, *supra* note 2, at 53.

[62] *Id.* at 64.

[63] *Id.*

the opposing Party's fighting capabilities in a later phase of that conflict.[64] While Additional Protocol I requires the definite military advantage offered to be determined according to the circumstances at the time, it is possible that it could be reasonably foreseeable that a conflict may be particularly protracted; context is crucial.[65]

It is not enough, however, that some definite military advantage may be traced, directly or indirectly, back to the military objective undertaken in order for it to be considered a success. A military objective can only be considered properly "achieved" if the definite military advantage it provides contributes to a net military advantage, for only then can the objective be considered to truly further the political purposes that delimited and defined its identification as such in the first place; "a military action may not be regarded as necessary that causes more destruction than it is worth, i.e. which on a net basis does not contribute to achieving the military objective."[66] If attainment of the military objective operates to distance the acting State from the attainment of its political purpose in countering an attack or threat thereof, because of rebounding effects, or a net loss in the State's own property or combatants, either directly or as a result of ensuing escalation, it is not a legitimate or permissible objective and cannot be lawfully achieved.

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[64] *Id.*

[65] *See* API, art. 52.

[66] MOXLEY, *supra* note 1, at 62 (*quoting* NAVAL/MARINE HANDBOOK, at 5-6 to 5-7 n.6). A valid and legitimate military objective is one whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.

III. Only Such Force as is Necessary

According to Article 22 of the Hague Regulations, the "means of injuring the enemy is not unlimited."[67] Thus, the allowance the principal of necessity provides for a State to use "only such force as is necessary to achieve its military objective" cannot be understood to mean *whatever* minimum amount of force is necessary to achieve the total or partial destruction, capture or neutralization of the particular and discrete military target concerned.[68] Instead, the law of armed conflict dictates that there are certain inherent limitations a State must abide by in order to ensure that "only such destruction as is *necessary*, *relevant* and *proportionate* to the prompt realization of legitimate belligerent objectives" is realized.[69] A State may only employ such force as is necessary, relevant and proportionate to the achievement of its political objective.

A. What degree of force is necessary?

It is generally understood that, "only that degree and kind of force . . . required for the partial or complete submission of the enemy with a minimum expenditure of time, life and physical resources," is permitted in seeking to attain or achieve a military objective.[70] The force used to achieve the total or partial destruction, capture or neutralization of a particular and discrete military target that is the subject of a legitimate military objective may be greater than the force tactically necessary to achieve the physical result, provided it is reasonably certain that the use of such "extra" force will ultimately result in a lesser loss of time, life and resources for both sides cumulatively at the conflict's close; it is the consequence of the force used, not its

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[67] *Id.* at 65.

[68] *Id.* at 52.

[69] MCDOUGAL & FELICIANO, *supra* note 6, at 72.

[70] MOXLEY, *supra* note 1, at 53 (*quoting* NAVAL/MARINE HANDBOOK, at 5-2 to 5-4).

magnitude that is relevant in considering its necessity.[71] In his individual *Nuclear Weapons Case* opinion, Judge Schwebel emphasized the importance of expected certainty of outcome in this consequences analysis: when it is uncertain whether a conventional weapon would be capable of destroying a submarine, it may be permissible to use nuclear weapons in consideration of the greater certainty the destruction would occur; although the force applied would be greater, the destruction of that submarine might result in lesser net loss of lives, time, and resources at the end of the conflict, so that the attainment of its destruction with greater force than might arguably have been necessary to achieve the same physical result, was justified.[72] Once the maximum level of "necessary" force has been determined, however – that is, the maximum level of force capable of contributing to the partial or complete surrender of the enemy forces with a minimum net expenditure of time, life, and resources – "humanitarianism becomes applicable and makes further violence, already militarily unnecessary, nonpermissible."[73]

In order to determine whether the force supplied by a particular weapon is necessary, the level of destructiveness of that weapon must be capable of regulation by the user.[74] The State must be aware of and in control of its application of force.[75] Otherwise, it will be impossible to ascertain whether the use of such a weapon will in fact likely lead to the attainment of the target, and the overarching political goals directing the State's action in the conflict; that is to say, whether a net military advantage will result. Using a weapon without the certain ability to control its effects leads to a significant risk of escalation, which might very well undermine any net military advantage to be even temporarily achieved. If it is not possible to determine exactly

[71] HENDERSON, *supra* note 22, at 230.

[72] *Id.*

[73] MCDOUGAL & FELICIANO, *supra* note 6, at 79.

[74] MOXLEY, *supra* note 1, at 53, 57.

[75] *Id.* at 54.

what the effects of any particular use of force will entail, it is impossible to know whether there is a lesser force capable of providing the same or greater overall military advantage.

The State's selection of any one means of achieving a particular military objective, or in its selection among different military objectives capable of providing a similar military advantage, must account for some sort of reasonable connection between the particular use of force employed and the objective/advantage obtained.[76] If the State cannot establish such a reasonable connection, the military action will not result in a net minimum expenditure of time, life, and resources, with the result that such force cannot be considered necessary. The State must use different force or refrain altogether – pick another objective.[77] The ultimate limitation upon the force employed is that which is necessary to obtain the partial or complete submission of the enemy according to the standard set forth in Part II, *supra*. As discussed in Part II, some degree of relationship between the intensity of the force permitted to be applied and the precise aim of the self-defense; "the more comprehensive and ambitions the objective is, the higher tend to be both the degree of intensity of coercion which must be applied and the level of destruction effected to achieve such objective, for the greater will be the target's resistance."[78] Any use of force intended to go beyond countering the threat is unnecessary, for "prominent among the motivations of participants is, of course, a desire not to provoke retaliatory destruction which necessarily raises the costs of of achieving an objective. Coercion and destruction in excess of the amount necessary to reconstruct the expectation structure of the enemy elite represent inefficient and wasted expenditure of force and constitute a invitation to costly retaliation."[79]

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[76] *Id.* at 152-53.

[77] *Id.* at 52.

[78] MCDOUGAL & FELICIANO, *supra* note 6, at 33-34.

[79] *Id.* at 35.

B. What use of force is unnecessary?

Any use of force beyond that which is necessary to bring about the partial or complete submission of the enemy with a minimum expenditure of time, life and physical resources is unnecessary and "must be avoided to the extent possible and, consistent with mission accomplishment and the security of the force, unnecessary human suffering avoided."[80] The law of armed conflict recognizes that it is unrealistic to expect acts of self-defense to be undertaken with exactly and only that quantum of force necessary to tactically counter an aggressor's attack – in fact, "it can be expected some attacks will almost inevitably lead to civilian deaths in the long term" – so it instead additionally permits that amount of force necessary to allow that attack to be tactically countered.[81] When the injury from such "unnecessary" force *can* be avoided – when its application does not actually enable the acting State to further its legitimate political objective of self-defense with a minimum expenditure of time, life and physical resources[82] – it *should* be avoided. Additional Protocol I requires that all "incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated" be avoided.[83] Accordingly, when a State has the opportunity to choose between several different military objectives offering a similar military advantage, the State has an obligation to choose that objective which will most certainly result in a net minimization of the loss of time, life, and resources at the conclusion of the conflict.[84] Because of interest in minimizing collateral damage, the benefit expected to

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[80] MOXLEY, *supra* note 1, at 52 (*quoting* NAVAL/MARINE COMMANDER'S HANDBOOK, at 3-3).

[81] HENDERSON, *supra* note 2, at 207.

[82] Notwithstanding its inherent inability to directly contribute to the furtherance of that objective because it does not concern a source of enemy power as defined above.

[83] API, art. 57.

[84] HENDERSON, *supra* note 2, at 158; MCDOUGAL & FELICIANO, *supra* note 6, at 72.

accrue from such collateral damage cannot be considered to contribute to military advantage when choosing between military objectives.[85] Under Additional Protocol I, the State additionally has the responsibility of insuring that reasonable precautions are taken to insure that collateral damage is minimized.[86] If excessive collateral damage cannot be avoided, the attack cannot proceed.[87] Certain prohibitions of unnecessary force are, however, absolute. For example, it has long been accepted that necessity does not justify, *inter alia*: "cruelty . . . the infliction of suffering for the sake of suffering . . . the 'wanton devastation of a district' . . . or 'maiming or wounding except in fight."[88] Accordingly, although the principal of necessity realistically accepts that certain lives will almost inevitably need to be lost in any armed conflict, it does not provide a "license to kill" combatants when such killing would be counterproductive or unnecessary to a net minimization of loss of time, life, and resources.[89] For this reason, it is unlawful to attack a combatant who is *hors de combat*, for "necessity cannot require harming a person who is no longer a threat."[90] The absolute prohibition against unnecessary harm to combatants – harm greater than that necessary to counter an attack, as defined above – has

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[85] HENDERSON, *supra* note 2, at 199.

[86] *Id.* at 181.

[87] *Id.*

[88] MOXLEY, *supra* note 1, at 55-56 (quoting THE AIR FORCE MANUAL ON INTERNATIONAL LAW, at 1-5, and 1-15 n.33 [hereinafter Air Force Manual].

[89] HENDERSON, *supra* note 2, at 67.

[90] HENDERSON, *supra* note 2, at 84 (*quoting* Peter Barber, "Scuds, Shelters and Retreating Soldiers: The Laws of Aerial Bombardment and the Gulf War" XXXI No. 4, ALBERTA LAW REVIEW 662, 679 (1993). The lack of threat presented by a combatant who is *hors de combat* must be distinguished, however, from the inability to offer effective resistance from a combatant who is weaponless or overpowered, or even retreating, but who will not offer surrender, for such combatant has the potential to regain his status as a threat at any moment – it would not be impossible – and as a member of the opposing Party's forces, he is still contributing to the enemy's source of power. Until *hors de combat*, the combatant may continue fighting, join another unit, etc. There is therefore no requirement that combatants must present an active threat in order to be lawfully attacked once engaged in a conflict. A state must only refrain from attacking a combatant who is (or should be) recognized to clearly express an intention to surrender. HENDERSON, *supra* note 2, at 84-87.

furthermore led to limitations on the weapons that a State may use:[91] The St. Petersburg Declaration prohibits the use of weapons "which uselessly aggravate the suffering of disabled men or make their death inevitable."[92] Article 23(e) of the Hague Regulations and Additional Protocol I, article 35(2) contain similar provisions, prohibiting the employment of weapons, projectiles and materials "calculated" or "of a nature such as would cause" superfluous injury or unnecessary suffering.[93]

The United States Air Force Commander's Handbook addresses the prohibition of such weapons by explaining that, for example:

> a person injured by modern military ammunition will ordinarily be placed out of the fighting by that alone; [so] there is very little military advantage to be gained making sure of the death of wounded persons through poison since they will usually be out of the battle before the poison takes effect.[94]

The implication is that any exercise of force that is more than that sort necessary to remove a combatant from the instant fight is illegal. There is a conclusive presumption that the conflict will not be won with a net minimization of the loss of time, life, or physical resources as a result of killing, as opposed to incapacitating, such combatants for the same reason that a State is prohibited from targeting combatants who are *hors de combat*: while incapacitated, combatants cannot contribute to the opposing Party's fighting capacity. Such combatants are therefore no source of enemy power; as compared to the period of their incapacitation, death cannot confer

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[91] MOXLEY, *supra* note 1, at 219.

[92] St. Petersburg Declaration (1868).

[93] Article 23(e) of the Hague Regulations; Article 35(2) API. Customary practice has established that it is per se illegal to use: "projectiles filled with glass or other materials filled with glass or other materials inherently difficult to detect medically, to use any substance on projectiles that tend unnecessarily to inflame the would they cause, to use irregularly shaped bullets or to score the surface or to file off the ends of the hard cases of bullets which cause them to expand upon contact and thus aggravate the wound they cause." MOXLEY supra note 1, at 58 (*quoting* AIR FORCE MANUAL, at 6-3).

[94] MOXLEY, *supra* note 1, at 59 (*quoting* AIR FORCE MANUAL, at 6-1).

any additional definite and direct military advantage. Although the incapacitation of wounded combatants may not be permanent, any incremental benefit to be conferred by permanently removing their existence, as opposed to their presence in the instant fight and for the indefinite future, is nonetheless implicitly and conclusively presumed outweighed by the consideration of the value of their lives in the prohibition of weapons that by their nature would go further. Likewise, once an enemy combatant has been incapacitated, any increase in the degree and magnitude of his injury is conclusively presumed to provide no additional net advantage.[95]

Additionally, any use of force intended *expressly* to terrorize the opposing Party's civilian population is prohibited.[96] While terrorization of the civilian population as an *incidental* effect of the lawful pursuit of a legitimate military objective is permissible, whatever benefit might be gained from such terror – for example, political pressure exerted upon the opposing Party's government to end the conflict – may not lawfully be considered in an evaluation of the military advantage expected to accrue from the objective's achievement.[97] This requirement that any benefit gained through the effects of terror must be ignored in the assessment of definite military advantage to be secured through the achievement of the objective is no doubt intended

[95] At first glance, this scenario may seem to beg analogy to the example of the destruction of a military academy in the context of a prolonged conflict, the military value of which depends upon the length of the conflict. So one might say that nonetheless a greater benefit accrues in permanently removing a combatant as opposed to temporarily incapacitating him, or in incapacitating him for a greater period of time, if it were known at the outset that the conflict were to outlast his more minimal incapacitation. But the military academy example can be distinguished in so far as but for the attack, no benefit would accrue; but for the attack, there would be no certain and immediate benefit. In the instance of incapacitating a combatant, however, the certainty of any additional benefit to be gained from his more permanent removal at that time is far less certain. He may recover more speedily than expected, or his condition may deteriorate on its own; he might be incapable of fighting ever again. He might be too old to continue fighting by the time that he recovers, so that nothing would be gained by inflicting a more serious injury. The benefit realized at the moment a military academy is destroyed in a long conflict is therefore much more certain than the benefit to be realized by killing as opposed to incapacitating a combatant in a long conflict; therefore the two are distinguishable.

[96] API, art. 51 (2).

[97] HENDERSON, *supra* note 2, at 118.

to dissuade States from using nominal legitimate military objectives as screens for acts of intentional civilian terrorization, for it is otherwise "often difficult in practice to distinguish the effects of the bombing of cities for purposes of destroying military installations and transportation and communications systems from those of bombing for purposes of terror."[98] While such a directive may not prevent a state from using a nominal military objective as a screen to shield its true intention to terrorize the civilian population, it provides that if such harm is done, the international community may rest assured that the act will nonetheless be reasonably certain to bring about the end of the conflict with a minimized net expenditure of time, life, and physical resources, as guaranteed by the achievement of the albeit nominal legitimate objective. Furthermore, there is in fact a distinct possibility that due to the discounted benefit of terrorization, when terror does effectively contribute to the military advantage gained, such military actions may in fact be extra-effective in "resulting in less aggregate destruction of values than other alternatives in the application of violence," suggesting that the decision not to classify incidental terrorization as prohibited, although it is classified as "unnecessary" may actually be in the best interest of the Parties to the conflict.[99]

IV. The Legality of Nuclear Weapons: Is an Otherwise Unlawful Use of Nuclear Weapons Permissible in the Context of Extreme Circumstances of Self-Defense?

In its 1996 advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons*, the International Court of Justice ("ICJ") concluded that, "the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in

[98] MCDOUGAL & FELICIANO, *supra* note 6, at 80.

[99] *Id.*

particular the principles and rules of humanitarian law."[100] The Court declined to definitively conclude, however, "in view of the current state of international law, and of the elements of fact at its disposal," whether extreme circumstances of self-defense would ever permit a State whose very survival was at stake to lawfully use such weapons.[101] Extensive debate ensued to determine whether the ICJ meant to suggest that that rules of international humanitarian law could be disregarded in extreme circumstances when a State's survival was at stake.[102]

It has been suggested that "the most favorable interpretation that can be offered" regarding to the ICJ's extreme self-defense hypothetical is that, "the court was actually saying that in an extreme enough circumstance the military advantage to be gained from the use of a nuclear weapon might be just large enough so that IHL would still be complied with notwithstanding the no doubt extensive collateral damage, environmental damage, etc."[103]

A more favorable interpretation yet, however, would place great significance upon the ICJ's refusal to reach a definitive conclusion in part due to the "elements of fact at its disposal."[104] The ICJ's advisory opinion provides ample evidence to suggest that the elements of fact not at its disposal in the context of preventing it from reaching a definitive conclusion as to the legality of the use of nuclear weapons in acts of extreme self-defense are those same elements of fact that it lacked in an earlier section of its discussion, relating to the limited use of "clean" low-yield tactical weapons potentially capable of satisfying the requirements of the law of armed conflict.[105] If the ICJ's refusal to definitively reach only the issue of extreme self-

[100] *Nuclear Weapons Case*, 266.

[101] *Id.*

[102] HENDERSON, *supra* note 2, at 37.

[103] *Id.*

[104] *Nuclear Weapons Case*, at 266.

[105] *Id.* at 262-63.

defense is founded upon a consideration that only such "clean" low-yield tactical weapons capable of satisfying the law of armed conflict's requirements could make such use lawful, it is in fact certain that the Court did not mean to suggest that extreme circumstances could ever justify an abrogation of the laws of armed conflict and international humanitarian law. Instead, the Court would have meant to suggest that only when such an extensive need for self-defense exists, would the extreme force likely to be associated with even "clean" low-yield tactical nuclear weapons, possibly be justified in terms of the additional force necessary to convince the opposing Party to abandon a political objective of such magnitude.[106]

Such an interpretation is strengthened by the suggestion of one scholar that the Court's decision in the Palestinian Wall Case was meant to resolve the ambiguity regarding the use of nuclear weapons in extreme cases of self-defense that its 1996 advisory opinion has raised. In the Palestinian Wall Case, the ICJ, although acknowledging that both Israel and Palestine each often claim that the very existence of its State is at stake, nonetheless determined they were both "under an obligation scrupulously to observe the rules of international humanitarian law, one of the paramount purposes of which is to protect civilian life."[107] This understanding is furthermore generally consistent with modern understandings of "military necessity," as the concept has survived its *kriegsraison* incarnation: military necessity may not permit the violation of international humanitarian law to the extent that rules lay down absolute prohibitions and do not expressly provide "exception for those circumstances constituting military necessity."[108] This is because the "rules and customs of warfare are designed specifically for all phases of war. They comprise the law for such emergency," therefore, "to claim that they can be wantonly – and at

[106] *See supra* Part II.B.

[107] HENDERSON, *supra* note 2, at 37 (*quoting ICJ Palestinian Wall Case* (2004), ICJ Rep. 131).

[108] MOXLEY, *supra* note 1, at 60 (quoting Naval/Marine Handbook, 5-4 to 5-7).

the sole discretion of any one belligerent – disregarded when he considers his own situation to be critical, [would mean] nothing more or less than to abrogate the laws and customs of war entirely."[109]

In order for the use of a any weapon to be deemed lawful, the principal of necessity demands that: 1) the weapon is directed towards a legitimate military objective; and 2) the force to be delivered is no more than that which is necessary to enable the acting State to end the conflict with a minimum net loss of time, life and physical resources. This remains true then, even when the weapon under consideration is nuclear, and the State in question has been placed in circumstances of extreme self-defense such that its very survival is in question. In order to determine exactly what sort of elements of fact regarding "clean" low-yield tactical nuclear weapons could have made the ICJ conclude such use would be lawful, it is therefore necessary to proceed through the traditional necessity analysis.

The nuclear weapon will be directed towards a legitimate military objective if it is directed towards a physical target that is a basis of enemy power, and if the destruction, capture or neutralization of that target will positively contribute to the opposing Party's surrender.[110] It will not be difficult for a state to satisfy the requirement that the weapon be directed towards a physical target that is a basis of enemy power; any number of such targets should be easily identifiable enough – the may include troops, military vehicles, military armories, military factories, and so forth. It will not necessarily be quite so easy, however, to determine with reasonable certainty that the destruction, capture or neutralization of that target will offer a net military advantage, positively contributing to the opposing Party's surrender.

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[109] MOXLEY, *supra* note 1, at 60 (quoting *The Krupp Trial*, 10 LRTC 139 (1949)).

[110] And, when applicable, serve to bring about the opposing Party's relinquishment of any plan to commit further attacks, as well.

This may be due to the fact that that if the opposing Party is seeking the total annihilation of the acting State, it may be willing to absorb significant injury in its pursuit of that goal. Or it may be that the opposing Party's resolve to annihilate will in fact be strengthened as a result of such a damaging tactical attack; in many instances, bombings meant to destroy an enemy's morale have instead produced the opposite effect.[111] The significant risk of escalation and the serious threat the effects of such escalation could pose to the calculus of net military advantage secured in regard to the military advantage selected is, however, undeniable. In part, this is due to the fact that it is almost an absolute certainty that any use of nuclear weapons against a nuclear state or one of its allies will provoke a response that as at least equal in force, if not greater, so as to deter any further nuclear attack.[112] It is therefore highly unlikely, a state will be able to identify a legitimate military objective that requires the use of nuclear weapons.

Even if the State could reasonably guarantee a net military advantage, it is practically impossible, they could establish that the force associated with a nuclear weapon was necessary to enable the acting State to end the conflict with a minimum net loss of time, life and physical resources. If the acting state were a very small nation, defending itself against a very large nation, it is unlikely that, as discussed directly above, the larger state would abandon its goal of annihilation before that objective was achieved, through the retaliatory use of nuclear weapons or conventional means. If the two states involved were of comparable size, it is unlikely that the destruction of aggregate value would in fact be less with nuclear weapons as opposed to without. If the acting state were a large state, defending itself against a small state, it is incredibly unlikely the use of nuclear weapons would be necessary to minimize aggregate loss of value, when other means of defense would be certainly be likely.

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[111] HENDERSON, *supra* note 2, at 64.

[112] RUYS, *supra* note 22, at 360-61.

The only extreme use of self-defense in which the use of nuclear weapons would be lawfully permitted could then, ostensibly be if the acting state were not the first, but the second to the nuclear weapons. However, reprisals aside, the use of nuclear weapons under such circumstances would still depend upon a net minimization of the loss of time, life and property for both parties to the conflict with such use. Where the opposing Party was first to use nuclear weapons and the acting State knows that the opposing Party has exhausted its entire supply, for example, and the acting State is in such a position that it is likely it will be able to secure a tactical defeat of the opposing Party without such use, and conventional weapons will minimize the net loss of time, life, and property, it may not use its nuclear weapons; such use would be purely punitive and retaliatory in nature, and the military objective involved would therefore be illegitimate. The same would hold true even if the opposing Party did have more nuclear weapons, but the acting State had knowledge that the opposing Party would not use them, and a tactical defeat by conventional weapons would result in a net minimization of time, life, and physical resources, or if – almost inconceivably – a tactical defeat would still be possible even if the opposing Party were to continue to use its nuclear weapons with a net minimization of time, life, and physical resources. It is therefore going to be difficult in almost any situation imaginable, in which the force involved with even "clean" low-yield tactical nuclear weapons will lead to a minimization of the net loss of time, life and physical resources resulting from the conflict even in instances of extreme self-defense in which a state's very existence is called into question.