Igitur qui desiderat pacem, praeparet bellum atomica

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ABSTRACT
Is it coherent to defend nuclear deterrence from an ethical and just-war point of view, given the likely devastating effects of an actual nuclear exchange? This article holds that the salutary effects of successful deterrence are so substantial that, given the state of the world today, such deterrence does abide by the proportionality criterion of the just war tradition when considered against the direct political effects of deterrence, not the military effects of detonations. This article further explores why such salutary political effects are likely to remain viable in the twenty-first century, given both technical and political developments. The article also explores some of the main arguments against nuclear deterrence derived from the Cold War and considers to what extent they are relevant today.

KEYWORDS
Nuclear deterrence; ethics; proportionality; US Catholic Bishops

Introduction

The research associated with this article is almost entirely serendipitous, or at least the questions it seeks to address are. During an operational career delivering nuclear deterrence, the author has participated in a number of exercises and wargames exercising nuclear deterrence strategy. A frequent question then arising is the following: “Could this target not be struck with conventional weapons instead?” The answer is usually: “Yes, but the target doesn’t need the nuclear weapon; the crisis does.” On consideration, this apparently simple reductionist response suggests a particular understanding of nuclear deterrence strategy and the ethics associated with it; one that appears not well articulated in contemporary debate.

This article seeks to provoke debate to address this imbalance and therefore may appear more advocate than jurist. It seeks to stimulate consideration of the strategic thinking, deterrence theory and contemporary ethics associated with western nuclear deterrence in the twenty-first century; why do those who “do” nuclear deterrence believe it is not “wrong”? It concludes that under some extreme circumstances, the proportionality constraints on some actions normally prohibited can be temporarily realigned to be proportionate directly to the political effect they achieve, not their immediate military effect.
Bernard Brodie famously wrote: “Thus far the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must be to avert them” (Brodie et al. 1946, 76). Both sides in the Cold War treated nuclear systems as military weapons; they evolved strategies to fight and win wars using nuclear weapons to defeat their adversary, and those strategies effectively deterred conflict in the first place. There is a fundamental difference in the twenty-first century; modern nuclear deterrence strategies do not rely on warfighting but on the use of nuclear weapons for deterrence, a political effect, not for the military effect of their destructive capabilities.

There is no ethically legitimate political objective that would warrant nuclear aggression in order to achieve it, but the technology exists and cannot be wished away. The deterrence of war, however, is an ethically legitimate objective. This article will consider the evolution of the relationship between nuclear deterrence strategies and ethics and will argue that since Brodie described his chief purpose, nothing has changed, but everything is different. While the strategies to deter have evolved the public and political discourse on nuclear ethics remains unconsciously dominated by views developed and articulated in the Cold War.

In particular, the article will consider the symbiotic evolution of military ethics (in the form of the Just War Tradition) and the concept of conflict and how that relationship has shaped current doctrines. It will differentiate between the ethics associated with the strategic concept of “military effect” and those associated with the “political effect” that conflict is assumed to achieve. In that context, it will consider the ethics of nuclear deterrence in the 2020s.

**Ethics and conflict**

If there has been one hard and fast rule in the ethics of war, it is that the deliberate targeting of non-combatants is not legitimate: the principle of discrimination. However not all non-combatant casualties are illegitimate. The assumption underlying the doctrine of “double effect” is that any use of force might have more than one consequence; the intended military effect, and others that are perhaps inevitable but are not the desired outcome (Ramsey 1961, 39). As long as every measure has been taken to minimise non-combatant casualties to an appropriate level, what has become known as collateral damage must be “proportionate” to the military effect intended (Bellamy 2006, ch. 2).

A strategist might argue that conflict is the “... mere continuation of policy by other means ...”(von Clausewitz [1832] 1982, 119), and it is axiomatic that in strategic thinking about conflict, legitimate military effect must contribute to the achievement of the desired political objective; not simply the military defeat of the adversary. As British General Rupert Smith put it, “The confrontation is resolved when one or both parties adjust their desired outcomes to accommodate the other” (Smith 2010, 234). The purpose of the use of force is to compel an adversary to this accommodation.

Conflict evolves. The technological changes in means of communications and combat since the end of the Second World War have substantially altered the means of compelling accommodation between adversaries to the extent that Great Power conflict, whilst never entirely absent from the international stage, has been played out in the form of proxy wars, hybrid warfare and deterrence postures. A 2013 article, attributed to the Russian Chief of General Staff, General Valery Gerasimov, wrote; “... in the twenty-first Century we have seen a tendency toward blurring the lines between the states of
war and peace.” (Balasevicius 2017, 23). Gerasimov argues that the world is now in a perpetual state of conflict, perhaps “confrontation” might be a better translation; certainly, the idea that a blurring of the lines between peace and war tends more towards Smith’s idea of a “confrontation” which might involve “conflict” than a new definition of conflict per se. The combination of this blurring, and modern means of imposing political effects without resorting to traditional military activities, offer challenges to western concepts of conflict, strategy and ethics.

Contemporary western strategy struggles with modern concepts of “cyber warfare,” “hybrid warfare,” “grey war” or “operations below the level of conflict” because, ethically, they do not fit within the western strategic concept of “conflict.” They conform more closely to Smith’s use of “confrontation” and are core elements of Gerasimov’s argument. The lexicon of just war has evolved in symbiosis with thinking about the character of conflict to the point that the ethical framework applied in the West prescribes the ability to conceptualise conflict in any other way than the way it is now. James Turner Johnson (2011, 7) suggests: “Both just war and pacifist thought in Western culture have developed as historical traditions shaped by diverse influences … Exactly how these traditions have developed historically is fundamentally important for understanding them and drawing out their meaning in the contemporary context.” Is it time to develop the tradition anew?

**Military and political effect**

Historically, a sequential series of military actions designed to achieve cumulative military effect would contribute to progress towards a given political objective, and alignment of each military effect with achievement of that political objective was part of the “right intent” tenet of the just war tradition. In 1921, Douhet published “Command of the Air” which suggested that airpower could “step over” the armed forces of the adversary to attack industrial and population centres and defeat the adversary by destroying its will to fight: “… the battlefield will be limited only by the boundaries of the nations at war and all of their citizens will become combatants…” (Douhet 1998, 10). Douhet conceptualised defeat as a cognitive, not military, process. The bleak amorality of his proposition that all citizens would become combatants suggested the principle of discrimination seemed not to apply.

Douhet suggested that modern military technology (air power) might enable direct achievement of the desired political effect of a conflict without engaging in the subordinate military efforts. A similar idea, and the ethical repercussions, were present during the Second World War in consideration of the Allied strategic bombing campaign. Discussions within the British Parliament, Cabinet and Air Ministry were vitriolic and inconclusive, and the debate about the morality of that campaign continues today (see Grayling 2006; Gray 2010; Gray 2012; Lee 2013; Overy 2013). The eventual strategy, balanced between the indiscriminate bombing of cities for the purpose of “dehousing” and the allegedly precision bombing of “military-industrial” targets, is exquisitely poised on the knife edge of Aquinas’s “double effect” and collateral casualties issue discussed above (Cabinet Office 1942, 4). The use of atomic bombs against Japan was the ultimate manifestation of this strategy.

The ethical framework these examples challenged still pertains; military action must contribute to the desired political objective with consequences proportionate to “…

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the concrete and direct military advantage anticipated” (Geneva Conventions Additional Protocol 1977, art. 51). Winston Churchill advocated abrogation of neutral states’ rights in a note describing the concept of the “supreme emergency” to Cabinet in December 1939:

Our defeat would mean an age of barbaric violence … we have a right, indeed are bound in duty, to abrogate for a space some of the conventions of the very laws we seek to consolidate and reaffirm. … The letter of the law must not in supreme emergency obstruct those who are charged with its protection and enforcement. … Humanity, rather than legality, must be our guide. (Churchill 2009, 492)

In considering this exceptional condition of “supreme emergency,” Walzer accepts that the underlying rights have been overridden, but asserts that they are still present and are not lost (Walzer 1977, 247). Thus, in this circumstance of supreme emergency, the ethically prohibited may be exceptionally, and temporarily, countenanced. This is not simply to suggest that necessity trumps ethical constraints. The defence of liberal democracy in Western Europe against Nazism was an appropriate political effect justifying abrogation of neutral states’ rights under the “supreme emergency” condition, which the military effect of preventing Wehrmacht forces landing in Norway might not. In the context of the “supreme emergency,” the constraints on actions still exist, but they are temporarily rendered proportionate directly to the political effect they achieve, not their immediate military effect.

Tragically, none of the military activities of WWII directly achieved the political effect sought; military action and experience prior to 6th August 1945 suggested that direct political effect continued to elude military action despite devastating military effect. Notwithstanding modern revisionist histories (Wilson 2008), it is clear that in 1945 world leaders believed that the atomic bomb attacks on Hiroshima and Nagasaki had directly caused the Japanese surrender. Freedman (2017, 280) suggests that; “The simplest if depressing assumption was that war had become progressively more murderous … and that future wars would be even more intense and existential.”

Twenty-first-century technologies might match Douhet’s aspirations. Nuclear weapons can devastate cites; “non-kinetic” cyber capabilities can attack, degrade and potentially destroy infrastructure and economies; and modern information warfare can interfere with the processes that define liberal democratic culture. The requirement for cumulative military action and effect can increasingly be “stepped over” because these capabilities appear to offer a shortcut to the eventual political objective.

Hence the struggle to define and bound hybrid warfare, soft war, grey zone conflict, cyber warfare and the myriad conflict types which challenge strategists today; they transcend the purely military effects to achieve political effect. It appears that in practice conflict need no longer comply with “western” constraints; be they geographic, temporal or human. Indeed, “conflict” might not necessarily involve the use of force at all:

We must stop thinking that war is when there is fighting, and peace is when there is no fighting … It is possible … to negotiate non-aggression or disarmament, and at the same time to wage war … (Evgeny Messner, Vsemirnaya Myatezhevoya [The Worldwide Subversion-War] (1971), translated and cited in (Fridman 2017)).

This Soviet-era thinking might not have gained much traction in the West, but recent events in Crimea and Ukraine have given western commentaries on Russian strategy,
doctrine and concepts of conflict far more salience. There is, however, one use of force that appears to have been achieving persistent and direct political effect for some time; the use of nuclear weapons.

**Twenty-first-century nuclear deterrence strategy**

In an ever-more interconnected, unpredictable and rapidly developing international security environment, it is important to be quite clear: nothing in this article condones the use of nuclear weapons to achieve anything except deterrence.

There is a widespread assumption that any use of nuclear weapons would inevitably lead to the annihilation of humanity. However, nuclear war and nuclear deterrence are not synonymous; they are actually antonymous. Nuclear warfighting would involve the use of nuclear weapons for their military effect; the military benefits derived from attacking military targets. Nuclear deterrence is activity designed to reduce the likelihood or consequences of armed conflict between great powers, including (but not limited to) nuclear conflict. It might include the limited use of nuclear weapons to reimpose deterrence. Nuclear deterrence is both political process and political effect.

Within weeks of the bombing of Hiroshima and Nagasaki, the British Prime Minister, Attlee, wrote: “The only deterrent is the possibility of the victim of such an attack being able to retort on the victor” (Attlee 1945b) and, soon after: “The answer to an atomic bomb on London is an atomic bomb on another great city” (Attlee 1945a). Attlee had intuitively described the essence of nuclear deterrence; the fear of retaliation against cities would influence potential adversaries’ decisions to pursue aggressive policies against a nuclear armed state. Michael Quinlan wrote of British nuclear policy in the 1980s:

... the language was deliberately chosen - partly with ethical concerns in mind - to convey that while cities would not be guaranteed immunity, the UK approach to deterrent threat and operational planning in the Trident era would not rely on crude counter-city or counter-population concepts. (Quinlan 2009)

and that fundamental political effect pertains today. In 2016 Defence Secretary Michael Fallon asked if we could “… still expect them [the USA and France] to pick up the tab and to put their cities at risk to protect us in a nuclear crisis?” (Fallon 2016). This is not to suggest that deterrence strategies rely on an intent to target cities, merely that any aggressor must consider the risk that they might.

Decades of complex strategic theorising have never matched the elegant simplicity of Attlee’s view. In this author’s experience, the vast majority of those involved in strategic decision-making are less interested in arcane theories than in working definitions of deterrence from sources like US Strategic Command, NATO Allied Commander Operations, or more parochially, UK National Security Doctrine. Quinlan’s elegant discursive writing is much more appealing than, say, Gauthier’s algebraic hypotheses (Gauthier 1984; Quinlan 1991, 1997, 2009).

Deterrence is a psychological process that suggests to a potential aggressor that the benefits of political objectives gained by aggression would be outweighed by the costs. There are two ways these costs can be imposed. “Deterrence by denial” threatens to impose those costs by making achievement of the objective difficult or costly: in essence, defence. “Deterrence by punishment” threatens to impose costs by retaliation;
in the case of nuclear deterrence, by retaliation with nuclear weapons against assets that the defender believes the aggressor regime holds dear.

It is the risk of retaliation which has the greater deterrent effect in the mind of an adversary; the aggressor has no control over the retaliation and therefore has no control over the level of risk to which they are exposed. If the deterrer is a nuclear power, the level of risk to which the aggressor would be exposed and which they must consider against the potential gains is incalculably great, and not under their control. 60 years ago, Schelling suggested; “To inflict suffering gains nothing … The only purpose … must be to influence somebody’s behaviour, to coerce his decision or choice. To be coercive, violence has to be anticipated. And it has to be avoidable by accommodation” (Schelling 1966, 165). This accommodation is the same political resolution of confrontation described by Smith above.

NATO’s position is the following: “The fundamental purpose of NATO’s nuclear capability is to preserve peace, prevent coercion, and deter aggression.” (NATO 2016, para. 54). Russian doctrine is similar: “… A coordinated system of military and non-military … measures taken consecutively or simultaneously … with the goal of deterring military action entailing damage of a strategic character …” (Ven Bruusgaard 2016, 10–11). In providing this translation, Ven Bruusgaard goes on to comment that “Russia’s nuclear weapons deter aggression by threatening to inflict unacceptable damage on any potential aggressor in a retaliatory strike.” NATO continues: “Nuclear weapons are unique. Any employment of nuclear weapons against NATO would fundamentally alter the nature of a conflict.” This tends to emphasise the non-warfighting nature of the weapon, defined in internal NATO documents: “The fundamental purpose of Alliance nuclear forces is deterrence. This is essentially a political function.”

Western nuclear weapon states all have some form of negative security assurance which guarantees that nuclear weapons would not be used against non-nuclear states which are in compliance with their NPT (Non-Proliferation Treaty) obligations. In a sense, this suggests that they have effectively committed themselves not to use nuclear weapons for any purpose other than deterrence or self-defence.

As Walzer suggested 40 years ago, nuclear weapons cause too much collateral damage for any conceivable military effect to be proportionate; nothing has changed, and the 1977 Geneva Convention Additional Protocol art. 51 still pertains. It would be possible for nuclear weapons to be used to attack remote facilities, submarines or ships discriminatorily without significant non-combatant hazard, but what would be the point? Ships and submarines can be successfully attacked with conventional weapons; there are very few military targets that cannot be effectively attacked conventionally. There are some “hardened” targets such as command bunkers or silos which are resistant to attack by even precision guided munitions, but these tend to be associated with national command or deterrent facilities and are therefore very high value political targets – not straightforward “military” targets.

The purpose of nuclear weapons is not for warfighting. There is no point breaking the nuclear taboo (Tannenwald 1999) to achieve a military effect which can be achieved with conventional weapons.

That is not to say, however, that a regime might not threaten to do exactly that in pursuit of some political objective. It is very difficult to identify a political objective that any rational person might consider worth the strategic risks associated with a
nuclear exchange, but there are those who might try. Ethical constraints ought to preclude contemplation of a nuclear warfighting strategy and none of the declaratory policies of the five nuclear weapon states\(^5\) suggest such a strategy. Rationally, only national self-defence really meets Walzer’s supreme emergency condition and could justify the use of nuclear weapons.

Thus the supreme emergency contingency pre-supposes “last resort” and “competent authority”; the question of the UN being the only competent authority for declaration of hostilities is, to be blunt, moot when discussing national survival: “… a nation that finds itself on the brink of an abyss will try to save itself by any means” (Clausewitz 2008, 483). Any other use of nuclear weapons would be ethically egregious. Even in the conditions of the supreme emergency when the state engages in a strategy of use of nuclear weapons for military effect in self-defence, it is difficult to identify a military effect sufficiently important to overcome the \textit{jus in bello} constraints of discrimination and proportionality (and the 1977 Geneva Conventions Additional Protocol art. 51). However, the political effect pertains.

The possession of nuclear weapons to discourage attack is not about using them for their military effect, but for their political effect: for the deterrence of the aggression. In this sense, nuclear weapons are “in use” and achieve the political effect of deterrence every day. The political effect of deterrence, the influence on the decision-making process of an aggressive adversary, is achieved by convincing an adversary that the risks associated with a particular course of action outweigh the potential gains. The political purpose of nuclear weapons is the imposition of peace.

\textbf{If deterrence “fails”}

No human action is free of risk. The effect of deterrence is to influence the decision-making process of an adversary in order to deter them from a particular course of action. It might fail. And in the same way that parking tickets do not deter jewel theft, nuclear deterrence is not designed to deter many perceived security threats. It is argued above that nuclear deterrence is only really relevant in the supreme emergency context and that it is difficult to see what political objectives would make a rational state threaten a nuclear power to that extent. There is, however, a valid argument that there is a risk that deterrence might not work.

This is where the difference between deterrence and war-fighting is at its most important, and its most subtle. It is conceivable that the deterrence posture may fail, and the deterrer must respond in a way that re-adjusts the aggressor’s risk calculation, posing a different “factor” for the deterrer’s resolve in order to re-impose deterrence. The deterrer may be compelled to use nuclear weapons. Ironically, or perhaps tragically, the credibility of this contingent willingness is part of the credibility of the overall deterrent posture. At the end of the Cold War, Quinlan (1991, 299) wrote:

\begin{quote}
... the purpose would be to compel the aggressor to change his initial judgement, by making clear in a dramatic and unmistakable way that the defender was in fact refusing to yield. ... The message to be transmitted, then, is essentially this: “You have wholly underestimated my determination to defend my interests; for your own survival, you must now stop.” ...
\end{quote}

This is essentially the same as the “wargame view” in the introduction; it is the crisis that needs the nuclear weapon, not the target.
The mechanics of nuclear deterrence rely on three related factors: the capability to respond with nuclear weapons, the will to respond, and the communication of that capability and resolve to any potential aggressor. In combination, these factors define the “credibility” of the deterrent. A deterrent might not be credible if an aggressor perceived that the deterrer’s weapon systems were vulnerable or unreliable, the will to respond was irresolute (or perceived as a bluff), or the communication of these to an aggressor was ambiguous or misdirected. The nuclear deterrence strategy adopted is therefore a key element of the credibility of the overall deterrence posture – a strategy premised solely on a strategic exchange as the only response option might be perceived as less credible than a strategy employing a range of responses adapted to the aggression experienced.

Most of the time, the deterrent effect is sustained simply by maintenance of the capability and demonstrable resolve. Deterrence is essentially a strategic messaging function and as suggested above, it is in this sense that nuclear weapons are in use for nuclear deterrence every day. In periods of increasing tension, a more overt message may need to be sent to enhance a potential aggressor’s perception of the deterrer’s resolve – this could take the form of changes to force readiness or posture, increased exercise profiles, or other measures with aligned strategic communications messaging. It is important to judge this appropriately – overly aggressive messaging might precipitate conflict, too much reserve or conflicting signals might suggest a lack of resolve and undermine the deterrent message. A miscalculation that led to conflict between Great Powers would not mean that deterrence had failed irretrievably, however. It indicates that at that moment, the aggressor decided that the perceived risk of a nuclear response is outweighed by the perceived gains to be made. It is difficult to see how this could be a rational decision, but it is possible.

Contrary to contemporary media reports, modernisation of nuclear weapon systems is not about making it easier to fight a nuclear war but to enhance the credibility of a nuclear deterrence strategy. Mostly, they are being made safer with enhanced assurance, safety and security measures, although they will also be more precise. In terms of the argument above, modernised nuclear weapons are no more useable as tools of warfighting than their predecessors. They do however improve strategic stability by enhancing the credibility of deterrent strategies. Strategically, they provide flexible delivery options for response, assuring (but not increasing) the capability aspect of deterrence. Ethically, they enhance discrimination and therefore ease the issues of proportionality. This enhances the “resolve” aspect of deterrence. The arguments above against the use of nuclear weapons for political gain still pertain; these factors augment the deterrent effect of nuclear weapons, they do not legitimise the use of nuclear weapons for warfighting.

The intuitive aversion to the use of nuclear weapons is related to the just war tenets of discrimination, proportionality and right intent. For key figures in this ethical debate – Walzer, Childress, Fisher and also ethically minded strategists such as Nye writing in the 1970s and 1980s – the prescriptive link between military effect and proportionality was valid since both the Pact and NATO considered nuclear weapons for their military utility (Walzer 1973, 1977; Childress 1978, 1987; Fisher 1985; Nye 1986). This perception endures today. Citing a 2013 White House report on the Nuclear Employment Strategy of the USA, Brad Roberts (2016, 35) makes essentially the same point:
The principle of discrimination obliges the United States to distinguish between civilian and combatant targets. The principle of proportionality obliges the United States to ensure that any harm inflicted on noncombatants is not excessive in relation to the concrete and direct military advantage anticipated by an attack on a military objective.

**Ethics and nuclear strategy**

During the Cold War, James Turner Johnson (1984, 29) suggested that: “...both the resort to force and the application of forceful means must be subjected to a searching intentionality of justification and restraint...” This searching tends to be conducted in the form of the tenets of the just war tradition on the premise that conflict can be justified to remedy the evils of injustice, and not that the use of force is, of itself, the evil (Johnson 2009, 255).

Perhaps the definitive “searching intentionality” of the ethics of nuclear deterrence during the Cold War was the Pastoral Letter of the Council of American Catholic Bishops, entitled “The Challenge of Peace” and published in 1983 (US National Conference of Bishops 1983). This letter (hereafter: the Pastoral) constituted guidance to Roman Catholics on the morality of nuclear deterrence in the context of the nuclear arms race of the early 1980s, a point which the Bishops recognised as a “new moment” (par. 126). This (naturally) strongly Catholic moral treatise was couched in terms of the Just War tradition and derived from 14 conference meetings which took oral and written evidence from 35 experts over 18 months.

The technical basis for their understanding of nuclear deterrence strategy and the implications of nuclear war was contained in the reports of the Pontifical Academy of Science conference of October 1981: “Declaration on the Prevention of Nuclear War” and “Statement of the Consequences of the use of Nuclear Weapons” (Chagas 1982a; Chagas 1982b). The entire process was conducted in the context of PD59 (President Carter’s 1980 Nuclear Weapons Employment Policy), President Reagan’s 1981 National Security Decision Directive 13 and the associated deployment of intermediate range nuclear forces (Pershing Short-Range Ballistic Missiles and Ground-Launched Cruise Missiles) in Europe (van Voorst 1983). The Pastoral’s entire context anticipated a warfighting strategy exploiting “tactical” nuclear weapons for military effect based on the delegated release of nuclear weapons to battlefield commanders.

The language of the Pontifical Academy reports is that of nuclear warfighting: “Recent talk about winning or even surviving a nuclear war must reflect a failure to appreciate a medical reality: any nuclear war would inevitably cause death, disease and suffering of pandemic proportions and without the possibility of effective medical intervention” (Chagas 1982b, 6).

There is today an almost continuous range of explosive power from the smallest battlefield nuclear weapons to the most destructive megaton warhead. Nuclear weapons are regarded not only as a deterrent, but there are plans for their tactical use and use in a general war under so-called controlled conditions. (Chagas 1982a, 14)

The third report is simply entitled “Nuclear Winter: a Warning” (Chagas 1984).

The Pastoral is over 60 pages long, and merits very careful examination. Its arguments are measured, and its conclusions nuanced, and they were contested both within and
outside the Church (Hebblethwaite 1983; Krol 1983; Okin 1984). I will certainly not seek to paraphrase it, although it will consider its contemporary relevance in the context of the assumptions which informed the Pastoral nearly 40 years ago.

The core element of the argument here is that of the nature of proportionality.

When confronting choices among specific military options, the question asked by proportionality is: once we take into account not only the military advantages that will be achieved by using this means but also all the harms reasonably expected to follow from using it, can its use still be justified? (US National Conference of Bishops 1983, par. 105)

“Which targets are ‘military’ ones and which are not? … What of a munitions factory in the heart of a city? … how many deaths of non-combatants are ‘tolerable’ as a result of indirect attacks – attacks directed against combat forces and military targets, which nevertheless kill non-combatants at the same time?” (par. 109). “We are advised, for example, that the United States strategic nuclear targeting plan (SIOP-Single Integrated Operational Plan) has identified 60 ‘military’ targets within the city of Moscow alone, and that 40,000 ‘military’ targets for nuclear weapons have been identified in the whole of the Soviet Union” (par. 180). The Pastoral goes on to discuss the broader effects of such attacks on military targets, and considers that any conflict is unlikely to be limited because battlefield commanders would be unable to control escalation (pars. 145–152). The military effects achieved could never be proportionate to casualties on that scale.

Considering nuclear war between NATO and the Warsaw Pact in the 1970s, Michael Walzer concludes that the disproportion between this collateral cost and the results they would achieve “… would be colossal.” (Walzer 1977, 277). On this level of analysis, such an exchange would therefore be illegitimate.

Since 1991, nuclear arsenals have been very significantly reduced, and the concept of deterrence through parity, which drove much of the Cold War strategy and arms races, is now accepted as simplistic (although it is regrettably regaining traction in some quarters). And as shown above, deterrence strategy is no longer predicated on a conditional intent to fight and win a nuclear war.

Amongst mature Nuclear Weapon States, weapon systems tend not to be held at Cold War readiness states and the control of the release of nuclear weapons is no longer delegated to battlefield commanders, greatly reducing the risk of inadvertent escalation. To put this in context, since its inception in 1969, NATO’s High Level Group (which advises on nuclear strategy) has never met in crisis to discuss nuclear deterrence Crisis Response Measures.

The concept of Nuclear Winter, to which the Pontifical Academy of Science reports referred, is derived from a paper published in the journal Science (Turco et al. 1983). Although often attributed to Carl Sagan, he was merely the most senior of five authors. It reports a series of experiments which exploited models designed to predict the environmental effects of volcanic eruptions on the climate. The baseline simulation was an exchange of 10,400 nuclear weapons with a total yield of 5000 megatons. As described above, exchanges of this magnitude were associated with warfighting, i.e. the use of the nuclear weapons for their military effect. This is not the basis of modern deterrence strategy.

Most of these putative explosions were expected to be ground bursts (where the fireball comes into contact with the ground and lifts huge amounts of debris into the atmosphere where it is irradiated and becomes airborne dust). Modern weapons are
usually tailored for airbursts (where the fireball does not reach the ground), are more accurate and of a smaller yield specifically in order to minimise the risk of such fallout. But modern debate is still couched in the same terms as the 1980s.

If a modern state is compelled to use nuclear weapons to reimpose deterrence, any target would not be selected for its military value, but its deterrence value – as Roberts (2016, 35) puts it: “... those things most valued by enemy leadership.” Thus, selection of government or command centres or other high value political targets which, as military targets would not be justified due to the high proportion of non-combatant casualties, may be legitimate against a proportionality metric considered against the effect of the re-imposition of deterrence. The political effect is deterrence of further escalation; the level of tenable non-combatant casualties is therefore not proportionate to an almost incidental nominal military effect, but to the political effect of the re-imposition of deterrence; in essence, peace.

In terms of differentiation between nuclear deterrence and nuclear war, the Pastoral asks: “May a nation threaten what it may never do? May it possess what it may never use?” (par. 137). This echoes Paul Ramsey’s famous condemnation of nuclear deterrence as just as illegitimate as nuclear warfighting on the basis that: “Whatever is wrong to do is wrong to threaten, if the latter means ‘mean to do’” (Ramsey 1961, 134–135).

The Pastoral comes to the very contentious conclusion that it accepts the concept of deterrence “not as an end in itself but as a step on the way toward a progressive disarmament” (par. 173). The Pastoral quite logically concluded that nuclear war, as then understood, would not be legitimate; the issue in the 2020s is not that any use of a nuclear weapon would not be horrific; of course it would. The issue is that selective use of nuclear weapons for their deterrent effect is not tantamount to a nuclear war a la nuclear winter, and the effect to which that horror would be considered proportionate is not the military effect considered by the Pastoral, but the political effect of the re-imposition of deterrence; if not peace, then at least an imperfect absence of violence.

The argument developed here does not advocate the deliberate targeting of non-combatants; the discrimination tenet remains absolute. The notion that just such a risk exists, however, is of course the implicit (but probably not conscious) assumption behind Fallon’s statement above.

**Pax atomica: a moral good?**

By 1648, the Thirty Years’ War had resulted in the deaths of about 1% of the population of the World. The casualties in the four years of the US Civil War amounted to 2% of the population of the USA. The First World War claimed 1% of the population of the World in four years, and the Second World War nearly 2% in six years. The experience of modern great power war suggests that, in conventional conflicts without using nuclear weapons, states have been capable of inflicting casualties on an industrial scale.

Since 1945, the annual casualties attributed to conflict have been between one person per ten thousand and one per hundred thousand of World population (0.001%–0.01%). The complete absence of great power conflict since 1945 correlates perfectly with the advent of nuclear deterrence. There obviously may well be other causative factors, but it is fair to conclude that the fear of escalation to nuclear war to which Michael Fallon refers above has at least contributed to the unprecedented peace of the last 75 years.
Wars between “proxies” are not great power conflicts precisely in order to minimise the risk of escalation. Indeed, “proxy” wars are symptomatic of the deterrent effect of nuclear weapons. Bruno Tertrais (2011) suggests that no major power conflict has taken place in nearly 70 years; there has been no direct military conflict between nuclear powers; no nuclear armed country has been invaded; and no country covered by a nuclear guarantee has been attacked, conventionally or otherwise. He makes a detailed, compelling case that nuclear weapons have suppressed major conventional conflict, and have not simply deterred nuclear conflict.

This “peace” may be uneasy and not fit in with philosophical or canonical definitions of peace. While pax atomica is clearly not an ideal situation; it is difficult to envisage a better one in the current international security environment. Despite historical and current aspirations, this is not new. In 1963, the Papal Encyclical Pacem in Terris stated that “Nuclear weapons must be banned. A general agreement must be reached on a suitable disarmament programme, with an effective system of mutual control” (Pope John XXIII 1963, par. 112). In 1970, the Nuclear Non-Proliferation Treaty (NPT) stated:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control. (United Nations 1970, art. VI)

In 1982, Pope John Paul II wrote to the General Assembly of the United Nations:

[The Catholic Church] has deplored the arms race, called nonetheless for mutual progressive and verifiable reduction of armaments as well as greater safeguards against possible misuse of these weapons. … I wish to reassure you that the constant concern and consistent efforts of the Catholic Church will not cease until there is a general verifiable disarmament … . (Pope John Paul II 1982, par. 5)

In 2009, President Obama

... state[d] clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons. ... We go forward with no illusions. Some will break the rules, but that is why we need a structure in place that ensures that when any nation does, they will face consequences. (Obama 2009)

This was reiterated at the Vatican Conference on Nuclear Weapons in 2017; Rose Gottemoeller (Deputy Secretary General of NATO) called for all states to do more to advance toward a world free of nuclear weapons but in a way that does not “jeopardize international peace and security” (Davenport 2017).

Each of these statements acknowledges that the World is imperfect and that there is a need to ensure security and stability, even while striving for a World free of nuclear weapons. At some level, implicit in all of these views is the concept that the proportionality associated with the use of nuclear weapons for deterrence purposes is somehow justified by the political effect of deterrence.

At the 2017 Vatican Conference, Pope Francis stated: “If we also take into account the risk of an accidental detonation as a result of error of any kind, the threat of their use, as well as their very possession, is to be firmly condemned” (Davenport 2017). At the Hiroshima Peace Memorial in 2019, he continued:
… the use of atomic energy for purposes of war is today, more than ever, a crime not only against the dignity of human beings but against any possible future for our common home. The use of atomic energy for purposes of war is immoral, just as the possession of atomic weapons is immoral … A true peace can only be an unarmed peace, because peace is not merely the absence of war … (Vatican News 2019)

The 2017 United Nations General Assembly Resolution 72/30 “Humanitarian Consequences of Nuclear Weapons” is the first major international agreement that does not acknowledge the need for ongoing efforts to maintain international peace and security in the process of achieving “general and complete disarmament” (UN General Assembly 2017). One experienced modern commentator described it as a Kellogg-Briand Pact for the twenty-first century (Bruno Tertrias in Jurgensen and Mongin 2020, 188). As a disarmament aspiration, the treaty is commendable, but in the absence of some replacement mechanism to sustain strategic stability, the geopolitical naivety of such a document is difficult to overstate.

These positions return to the view that the use of force is the evil, not the purpose to which that force is turned. In 2010, in support of the argument for “nuclear zero,” Cortright and Vayrynen (2010, 21) argued that:

Disarmament is ultimately a political process. To reach nuclear zero it is necessary to achieve what Professor Jonathan Schell describes as political zero, a state of political relations among nations in which there is no desire or need to possess nuclear weapons, where tensions and animosities that lead nations to fear their neighbours have declined towards zero. … Political zero does not mean that nations live in a world without conflicts; it only means the risks of conflict can be limited in a system where certain mechanisms exist to prevent them from escalating to dangerous levels.

The World exists in the absence of “political zero,” and presently the mechanism that exists to prevent conflict escalating to dangerous levels is nuclear deterrence. As discussed above, it is a political, not military process and it has (at least) contributed to the prevention of Great Power conflict since 1945. In the absence of an alternative, it is difficult to see how a world free of nuclear weapons (even if that could be achievable, verifiable and enforceable) would be anything but a world made more open to conventional conflict on a scale last seen in 1945.

Conclusions

Ethics and strategy have evolved in symbiosis, and post-enlightenment ethical concepts underwrite modern western strategy in ways that are so fundamental they are intuitive, and therefore not consciously challenged. Alternative concepts of World order see international relations as a perpetual spectrum of confrontation in which armed conflict is simply one element. Modern technologies increasingly provide the means to transcend traditional concepts of the use of force, borders, theatres of operations, combatant and non-combatant and thus challenge the “western” model of conflict and international relations.

What contemporary popular debate there is about nuclear weapons is shaped by positions which have atrophied since the end of the Cold War and use terminology and concepts that are no longer appropriate for modern nuclear deterrence strategies. Much modern opposition to nuclear deterrence conflates nuclear deterrence with nuclear
war and Mutually Assured Destruction. This is epitomised in the 2017 UNGA Resolution which advocates a ban on nuclear weapons without considering at all the implications for international security that this would entail.

Based on the work of the Pontifical Academy of Science, the Pastoral of the American Catholic Bishops provided the touchstone for consideration of the ethics of nuclear deterrence in the Cold War. It is to be hoped that Pope Francis’s current efforts will emulate those of 1983 and produce a similarly sophisticated contribution to the moral leadership so sadly lacking at this, the twenty-first-century “new moment.”

Against the 1977 Geneva Conventions Additional Protocol art. 51, the use of nuclear weapons for military effect is not justified; military action must according to the 1977 text contribute to the desired political objective with consequences proportionate to “… the concrete and direct military advantage anticipated.” Nuclear weapons have never been used for military effect. The purpose of the bombing of Hiroshima and Nagasaki was not to achieve the military effect of the destruction of military targets, but the political effect of coercing the Japanese regime to surrender.

Nuclear weapons have been successfully used to unprecedented political effect ever since in the deterrence of great power conflict, but much of the contemporary critique remains couched in terms of their use for military effect.

There is no military effect ethically proportionate to the collateral damage that the use of nuclear weapons would entail. However, modern nuclear deterrence strategies are not predicated on using nuclear weapons for military effect but political effect: the imposition of deterrence. The political effect against which the proportionate use of nuclear weapons may have to be considered is the re-imposition of peace and the avoidance of further escalation. In terms of a supreme emergency, this renders the possession and use of nuclear weapons as tools of deterrence if not legitimate, at least excusable.

Author’s note

I recognise that this article raises very difficult questions without doing any of them full justice. I offer this as a catalyst for an informed debate that does examine these important and highly controversial questions, a debate that at least identifies what international relations in a world free of nuclear weapons would look like, and how strategic stability will be maintained in the transition and once such a world is achieved.

Notes

1. “Therefore, those who want peace, prepare for nuclear war.” With all due apologies to Vegetius.
2. In 2007, Michael Quinlan and Charles Guthrie (2007, 46) concluded that “The [just war tradition] does not yield a tidy and unambiguous answer to each question. It continually calls for judgement, often contestable in good faith, on matters lying well beyond the expertise of moral philosophers…”
3. Catholic News Service (2017).
4. Unclassified extract from NPG-D(2012)0002, “NATO Nuclear Deterrence; Political Principles for Nuclear Planning and Consultation.” 9 October 2012.
5. There are five nuclear weapon states recognised by the Nuclear Non-Proliferation Treaty, and four other states which are accredited with having developed nuclear weapons outside the NPT regime. They tend to be referred to as Nuclear Armed States.
6. US Civil War military casualties were between 620,000 and 800,000 fatalities; see Hacker (2011).
7. Values derived from Becke (2014) and Gleditsch et al. (2002).
8. Values derived from Becke (2014).

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