MORALITY AND NUCLEAR WEAPONS: PRACTITIONER PERSPECTIVES

BRAD ROBERTS, EDITOR

Center for Global Security Research
Lawrence Livermore National Laboratory
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Introduction

Brad Roberts

For many in the nuclear policy debate, the moral context is simple and straightforward. For some, the likely humanitarian consequences of nuclear war lead inexorably to the conclusion that the weapons themselves are immoral, along with their employment and possession and the practice of deterrence. For others, the existence of nuclear weapons is an inescapable fact and deterrence is a moral obligation that follows from the duty to protect. Between these two camps there is much acrimony but little engagement, as neither seems much interested in understanding the concerns and moral logic of the other.

For many practitioners of deterrence, this standoff is unhelpful because it sheds little or no light on the many questions of morality that we encounter in our work. Military personnel responsible for operating nuclear forces and employing them in war must come to terms with the obligations to ensure that their actions would be compliant with the Law of Armed Conflict. Scientists, engineers, and technicians responsible for maintaining a safe, secure, and effective nuclear deterrent so long as nuclear weapons remain must come to terms with multiple moral obligations, including for example the duty to protect and the duty to work to create the conditions that would allow the safe elimination of nuclear weapons. The makers of nuclear deterrence policy must address numerous questions about the role, function, and characteristics of the nuclear deterrent with myriad prudential, political, technical, and moral dimensions. From the perspective of these practitioner communities, the moral context is neither simple nor straightforward. Rather, it is rich in dilemmas and choices between competing obligations for which the standoff between the two camps seems to have little to offer.

The purpose of this small volume is to introduce into the debate about nuclear weapons some perspectives from the practitioners of nuclear deterrence. In so doing, we hope to improve the moral discourse about nuclear weapons by setting out the complexities and moral dilemmas we encounter and our thinking about them. Contributors are drawn from the United States, the United Kingdom, and France. Many of us take our inspiration from Joseph Nye, Michael Quinlan, and Therese Delpech—practitioners of nuclear deterrence who saw the need and opportunity to join the debate about the morality of nuclear weapons—and did so to positive effect.[1] This volume is the result of a collaboration between CGSR and the French Commission on Atomic and Alternative Energy. We at CGSR owe a particular debt of gratitude to Mélanie Rosselet, who helped conceive the project and then led the French team.

1 See Joseph S. Nye, Jr., *Nuclear Ethics* (New York, NY: Free Press, 1986); Michael Quinlan, "The Ethics of Nuclear Weapons," in Quinlan, *Thinking About Nuclear Weapons: Principles, Problems, Prospects* (Oxford: Oxford University Press, 2009), pp46-55; and Therese Delpech, *The Savage Century: Back to Barbarism* (Washington, DC: Carnegie Endowment, 2007).

The Morality of Nuclear Deterrence

Michael May

The ruins of Hiroshima and Nagasaki revealed several things. One was that atomic energy worked. A tabletop experiment in a German laboratory in 1938 had discovered atomic fission and the huge amounts of energy fission released. At that time, however, it was not known whether this lab-scale discovery could be scaled up to either an explosive or a steady source of power. Hiroshima showed that the possibility could be realized. That was the only real secret of the atom bomb.

Hiroshima also made clear that international1 security had a new dimension. Many other cities lay in ruins in 1945 (65 were destroyed by fire bombing in Japan alone) and countless others before that, but Hiroshima and Nagasaki were each destroyed by one bomb carried by one airplane. Airplanes and other means of delivery had become available. Atomic bombs could be made. Regardless of size and military capability, many countries—including soon the Soviet Union—could acquire the capability to destroy the cities and strategic assets of an adversary. Clearly a policy was needed to address the new situation. The immediate focus was on the Soviet Union.

As early as 1945, three approaches surfaced.[2] One was to ban nuclear weapons, destroy existing ones, and find a way to enforce disarmament. To that end, in June 1946, before a session of the newly-created United Nations Atomic Energy Commission (UNAEC), the United States proposed what came to be known as the Baruch Plan. Baruch, speaking for the U.S. administration, proposed "the establishment of an international atomic development authority … that would control all activities dangerous to world security and possess the power to license and inspect all other nuclear projects. Once such an authority was established, no more bombs should be built and existing bombs should be destroyed. Abolishing atomic weapons could lay the groundwork for reducing and subsequently eliminating all weapons, thus outlawing war altogether."[3]

To deal in a lasting way with the lack of trust that characterized security relations among countries, the U.S. proposal as presented by Baruch required openness to international inspection of all nuclear facilities. It also specified that the United States would retain its atomic arsenal until the international organization was operating. Both

2 There was also the possibility of the United States withdrawing from Europe, as it had after World War I. The widespread destruction of World War II, the advent of nuclear weapons, the fear of German resurgence, and the threat from Stalin together with Roosevelt's and Truman's strong leadership led to popular support for a continued Allied presence in Europe. A January 1945 speech by Senator Vandenberg (R-Michigan), formerly a leader of the isolationist wing, supported the government policy and helped make the policy bipartisan.

3 See "The Acheson-Lilienthal & Baruch Plans, 1946," Department of State, Office of the Historian, https://history.state.gov/ milestones/1945-1952/baruch-plans (accessed March 31, 2023); "Part VI: The Manhattan District in Peacetime—The Baruch Plan," atomicarchive.com, https://www.atomicarchive.com/history/manhattan-project/p6s5.html (accessed March 31, 2023).

of these conditions were rejected by the Soviet Union, which at the time was bending every effort to make its own nuclear weapons.[4]

A second approach was to use the current U.S. monopoly on nuclear weapons to prevent other countries, in particular the Soviet Union, from acquiring nuclear weapons, by force if needed. This approach rested on several illusions, one being that having or using nuclear weapons would allow the United States and its allies to roll back the Soviet occupation of Eastern Europe and control the Soviet territory, and another being that the U.S. population was ready for another long, bloody war, as this approach would surely have entailed. Nevertheless, "rollback" was pushed by some conservative forces inside and outside the U.S. government for a number of years.[5]

The third approach was to rely on what came to be known as nuclear deterrence. Nuclear weapons are natural deterrents: they are cheap compared to equivalent conventional forces, they can be protected from attack, and they pose a risk of destruction to the cities and military concentrations of an aggressor that is generally out of proportion to gains expected from aggression. The process of implementing stable nuclear deterrence, however, was long, at times dangerous, and required considerable learning on both sides. Domestic politics, the need to deter conventional attack in Europe, and uncertainty about what would be "enough" led to numbers of nuclear weapon systems that were more than 10 times higher than probably would have been required for deterrence. Nevertheless, with all its faults as perceived by both doves and hawks, a lasting bipartisan consensus supported the policy of nuclear deterrence.

Stability was facilitated at least in Europe by the existence of a recognized (recognized as fact, if not as a matter of declaratory policy) line of division separating what each side considered its vital interests: with minor adjustments, it was the line reached by the armies of the Western Allies and the Soviet Union at the end of World War II. This line was neither just to the Central European countries that had borne so much of the burden of the war, nor was it what was agreed to at Yalta. But it had been drawn in blood and was backed by considerable force on both sides. Each side considered that it separated areas of vital interest. Until the current war in Ukraine, no area of contention was considered a vital interest by both sides. The war in Ukraine has introduced a new threat to the stability of nuclear deterrence. Likewise, a similar threat to stability has arisen in Taiwan.

The United States and the Soviet Union from the 1950s to the onset of the Russian invasion of Ukraine also supported arms control. Arms control contributed to stability. The existence of a continued conversation on the threat that nuclear weapons posed to both countries—coupled with the acceptance by both sides of limitations and eventually reductions—showed an awareness of a common interest beyond the rivalries.

4 David Holloway, "The Post-Hiroshima Project," Chapter 7 in *Stalin and the Bomb* (New Haven, CT: Yale University Press, 1996), Kindle edition.

5 See "Rollback," Wikipedia (last modified date March 24, 2023). https://en.wikipedia.org/wiki/Rollback. Accessed March 31, 2023. Also see Peter Grose, "Operation Rollback America's Secret War Behind the Iron Curtain," *The New York Times* (2000). https://archive.nytimes.com/www.nytimes.com/books/first/g/grose-rollback.html?scp=8&sq=Counterforce&st=Search. Accessed March 31, 2023.

In the midst of a dangerous competition, it pointed to a time when mutual nuclear threats might no longer be the central element of the relationship.

Nuclear deterrence—together with U.S. assistance in rebuilding Europe and Japan, and the creation of defensive alliances such as NATO and U.S. alliances with Japan and Korea—achieved its goal: nuclear war was prevented through the decades of U.S.-Soviet confrontation and proxy conflicts were limited by mutual caution. Under the "nuclear umbrella" and many associated measures (political and economic, as well as military), the states of Western Europe, Japan, and South Korea remained or became democratic and prosperous.

The policy of nuclear deterrence "worked," under the conditions of the times and as part of a particular set of policies. It was perceived at least by the nuclear powers as the only feasible and effective nuclear weapons policy, with security and protection of the people being the measure of effectiveness. Should the policy thereby be considered moral? The policy holds hostage the entire population of the adversary and accepts a similar risk for ourselves. Can that be considered moral?

That's not obvious. Why should morality be determined solely by feasibility and effectiveness? Choosing the most effective security policy feasible is a necessary part of a government's responsibility to its own people, but is that enough to make it moral? Most principles of morality consider that human life is precious, that we are responsible for other lives as well as our own, and that lives should be endangered only for the purpose of safeguarding survival and freedom. How do those principles fit into a policy that, however well intended, holds whole populations at the mercy of some mistaken or misunderstood decisions, of a failure in communication, or perhaps even of an accident?

Different people apply principles of morality to different entities: family, tribe, or nation, or—for a few—the world. Most people believe in and to various extent practice moral behavior with their family and nearest circle of people. For many, the range of people to whom the lives of other people matter is limited by race, religion, or nationality. For everyone, the range of people to whom they feel they have moral obligations depends on whether there is a state of conflict with other groups, as well as on economic pressures and individual factors.

Government policymakers must chart a course of action on behalf of groups of people who have different understandings of morality. The actions taken must meet immediate challenges, be viable in the long run, and meet standards of morality in the view of most of their constituents. In wartime, for most people, morality plays a very limited role. But in the case of nuclear weapons policy, the problem for U.S. leaders was long-term peacetime survival, when the urgency of war would be gone. For a policy to last once the feeling of urgency recedes, especially in a democracy, it must be seen not only as effective. It must also be seen as moral–or at least as moral as possible under the circumstances. Leaders can broaden (or narrow) their people's understanding of what a moral policy requires, but they cannot go far beyond it.

One trend helps bring prudence and morality together. Historically, material progress has gone hand in hand with awareness of a broadened interdependence. Increasingly, we need our enemy, as the present Ukraine war with the consequent worldwide shortages of oil and grain demonstrates. That trend has not been enough to prevent wars. But it rendered wars into acts of mutual catastrophe, as well as acts of immorality.

The nuclear deterrence policy presents a particularly sharp example of this mutual dependence. Even though each side in the Cold War thought its enemy to be evil and dangerous, the stubborn fact remained that, if nuclear deterrence were to continue leading to peace, each side depended on the other side being able to live with it. Each side, for prudential reasons, had to take into account the "enemy's" perception of its security. As a result, the range of people with whom at least some degree of moral behavior was required extended to our enemy: he must survive if nuclear deterrence is to keep the peace. Such a scenario does not reflect a high amount of morality, and not even that much was universally accepted. Given that the nuclear deterrence policy implied an acceptance of Soviet tyranny over Central European nations, many argued that the policy was purely prudential with no degree of morality. Was the policy as moral as our world could sustain under the circumstances?

However necessary, a nuclear deterrence policy by itself cannot be considered moral. It may keep the peace for a time but it doesn't by itself lead to long-term improvement in the situation that made it necessary. In the long run, it probably isn't even prudent: given our growing global interdependence, considerations of prudence and of morality must converge for a far-sighted policy. That convergence, however, can't happen by itself. The wrong policy—wrong morally and prudentially—can easily reverse the convergence. A policy actively aimed at security for all has to be a part of any deterrence policy with a claim to morality.

As Pope John XXIII pointed out in 1963:

> *This [complete nuclear disarmament] requires that the fundamental principles upon which peace is based in today's world be replaced by an altogether different one, namely, the realization that true and lasting peace among nations cannot consist in the possession of an equal supply of armaments but only in mutual trust.*[6]

That, in my view, is the bottom line. The Pope's world seems distant, only an ideal goal. To reach that goal, centuries of a thoroughly justified lack of trust among nations must be overcome. Yet it is essential for both moral and prudential reasons to move toward it.

6 Pope John XXIII, "On Establishing Universal Peace In Truth, Justice, Charity, And Liberty," in *PACEM IN TERRIS*, Encyclical (April 11, 1963), para. 112-113, *passim.*

A nuclear deterrence policy, if it is to be moral, must work toward a world where it is no longer necessary, because weapons—including nuclear weapons—are no longer necessary. Especially large, relatively secure, and wealthy countries must use their resources to lead the way. Difficult as it may be, with popular feelings, political success, and bureaucracies all oriented toward deterring an enemy, leaders must take the political risk of envisaging and planning for a time when the enemy is no longer an enemy.

Arms control does some of this work, but not enough. Nor would disarmament, a foolish goal without a trusted mutual security structure. France, Britain and Germany or its predecessor empires plotted and armed against each other for 1,000 years. After World War II, when the United States in cooperation with European leaders built a trusted mutual security structure, European states no longer armed against each other. Durable disarmament is the result of a trusted security structure.

After World War II, the United States brought its former enemies into mutual security arrangements just after Axis powers and Japan had killed some 400,000 Americans over the four years of war, a war in which nearly 40 million Europeans died. That post-war security structure built by former enemies led to a longer peace period in Western Europe than had occurred in centuries. To have some claim to morality, the Cold War nuclear deterrence policy must similarly lead to security arrangements that include our opponents.

Has it? The Cold War ended or, at least temporarily, moved off center stage. The Soviet Union disintegrated. Central European states became free again. The time to make broader security arrangements that would promise security to us and to our adversary came. There were a number of proposals to that end. But it is not what happened.

Instead, at the persistent and understandable request of the Central European states—in particular Poland, Czechoslovakia, and Hungary—NATO expanded. NATO forces came to the borders of Russia, over Russian objections that were also persistent and understandable. Fitting those moves into a plan for long-range stability in Europe did not seem to be a priority objective for the United States. In my view, long-range stability was not seriously addressed. The United States went directly from deterring nuclear catastrophe to being a “winner” without taking on what the responsibility of winning entailed.

Russia is difficult to deal with. It was not defeated by force of arms or occupied, as Germany and Japan were. Yet for about 10 years after the Soviet Union collapsed, there were possibilities for a stable Europe that were consistent with U.S. security. Despite promises of funding, with the Soviet Union and later Russia economically prostrate and politically unstable, there was no Marshall Plan for our former enemy. The several proposals for building a broader peace aimed at building a secure European future, such as Partnership for Peace, were aborted due to U.S. disinterest. Russian objections, after the successor nuclear states of the Soviet Union were

disarmed, were met with statements by U.S. security officials such as "We don't have to consider Russian objections" and "We don't need Russia."[7]

We do need Russia. The war in Ukraine has made that crystal clear. So far, nuclear deterrence has held and has helped constrain the United States and Russia's actions in that war. However, it is not clear to either side which actions would break that constraint. As a result, the situation there is as—or perhaps more—dangerous than any that occurred during the Cold War.

The Russian invasion directly precipitated this danger. There can be no lasting disarmament and no peaceful world if invasions remain possible. This one could lead to disaster. It could also, as all crises do, make possible a step forward if policies during and after the crisis take into account security for all sides. In that sense, the war in Ukraine poses a dangerous and unwelcome but perhaps necessary test of the morality of U.S. nuclear deterrence policy and more generally of the overall U.S. security policy in which nuclear deterrence is embedded.

I write "perhaps necessary" because "winners" do not come easily to the realization that winning is not everything—that winners today remain responsible for the security of "losers" for both prudential and moral reasons. In today's world, winning is a step on the road to a more secure arrangement among nations or else it is not really winning. A relatively moral policy toward the losers of World War II was carried out but the threat of Stalin's Soviet Union helped in that effort. After the Cold War, the United States acted as if it didn't need to be afraid of anything, at least in the European continent. The war in Ukraine may teach a better lesson if it doesn't destroy us.

In summary, I don't think a policy of nuclear deterrence is immoral in itself. I agree with the judgment that it is the best we can do under present circumstances to prevent nuclear war or actions likely to lead to nuclear war. But a policy of nuclear deterrence by itself is also not moral. Morality requires positive action toward a moral good, pursued in more difficult as well as easier times.

I also think that humans may not be able to live with nuclear weapons and nuclear deterrence forever in the world as it is. Consequently, both moral and prudential considerations point to the need to work toward disarmament controlled and verified by an international organization backed by all powers. But even such an organization, were it possible, would not be enough by itself. If "the realization that true and lasting peace among nations cannot consist in the possession of an equal supply of armaments but only in mutual trust,"[8] there can no longer be invasions or threats of invasion. Given the world as it is today, that is a more difficult goal to reach than nuclear disarmament—but there cannot be lasting nuclear disarmament without it.

7 M.E. Sarotte, *Not One Inch: America, Russia and the Making of Post-Cold War Stalemate* (New Haven, CT: Yale University Press, 2021).

8 Pope John XXIII, "On Establishing Universal Peace In Truth, Justice, Charity, And Liberty," in *PACEM IN TERRIS*, Encyclical (April 11, 1963), para. 112-113, *passim.*

Are Morality and Nuclear Deterrence Compatible?

Nicolas Roche and Hubert Tardy-Joubert

This article is derived from a communication delivered on January 28, 2019 at the Académie des sciences morales et politiques and a seminar organised with Hubert Tardy-Joubert and Jean-Baptiste Jeangène Vilmer at the Centre interdisciplinaire d'études sur le nucléaire et la stratégie of the École normale supérieure.

"Today whoever contemplates wars and strategy raises a barrier between his intelligence and his humanity," wrote Raymond Aron in 1976, in *Clausewitz, Philosopher of War*, indicating that any attempt to reconcile morality and deterrence was impossible.[9]

And not without reason. On the 6th and 9th of August 1945, mankind realized that it was in possession of the means to destroy itself, creating a rupture in history. The following months saw the development of protest movements against such a different form of weapon, on ethical grounds. This ethical and political rejection of the nuclear weapon has marked our entire contemporary history, raising essential questions for democracy.

Yet, the ethical issues of nuclear weapons often give rise to two separate debates, as Pierre Hassner said in 1989 in his book *La Violence et la Paix*. The first is a philosophical religious debate which questions strategic realities through the prism of morality. The second is a political strategic debate about deterrence. And they occur in two separate worlds which communicate little and pay heed to one another even less. These two debates must nonetheless be systematically "distinguished and reunited, broken down and recombined" to deepen the discussion and argumentation. As Joseph Nye wrote in the preface to *Nuclear Ethics* in 1986: we are all, in our democracies, targets, victims, and, as citizens, participants in nuclear deterrence; we must therefore develop "moral reasoning," rather than content ourselves with a "cry of moral outrage."

This debate has concerned the French little in their nuclear history, hence the need to define an intellectual framework for it. We will set three extreme positions aside, as they would prevent us from considering the specificity of nuclear weapons. 1) Relationships of power between States are amoral by nature, and morality is irrelevant to the strategic debate. 2) Since other States are considering using nuclear weapons, so can we, and the global situation exempts us from all normative thinking corresponding to the nature of our democratic societies. 3) War is immoral because it consists of killing; it is therefore tantamount to murder, and violence cannot be moral because the two terms are contradictory.

9 This article is reprinted with permission. It originally appeared in *COMMENTAIRE* 168 (Winter 2019-2020).

Here, the debate focuses on the morality, amorality, or immorality of the nuclear weapon and its doctrines. Some strategic approaches are incompatible with this debate and will be excluded: if strategy is an apodictic science, with definite conclusions based on deterministic forecasts, the debate is over; if deterrence is doomed to fail and escalation is impossible to control, or if, conversely, deterrence prevents nuclear war outright, then there is no room for moral debate.

A real combination of strategic, philosophical, and religious approaches is necessary and none of these three fields can cover the entire debate alone: it is easy to be abstract and disconnect morality from strategy, just as it is tempting to focus exclusively on relationships of power without testing them against the moral principles of our societies.

History of Moral Criticism of Nuclear Weapons

The atomic bombings of Hiroshima and Nagasaki revealed the horror of nuclear war, sparking multiple appeals for global control or abolition of nuclear weapons.

The first part of the Cold War, from the 1950s to the early 1960s, marked by a massive nuclear arms race and a proliferation of crises, saw ethical and religious debates over nuclear weapons abound in western countries. The different Churches reflected on this issue of unprecedented radicality. The debates raised many of the questions that are still topical today: do the doctrines of just war and double effect apply, or is the nuclear weapon, whose use is conceived in terms of massive retaliation, so radically new that it transforms the ethics of war?

Some important moments punctuated this initial debate. Peace movements emerged in Germany and Karl Jaspers published *The Future of Mankind* in 1958. *The Campaign for Nuclear Disarmament* was founded in the UK and the debate was marked by the intellectual influence of Bertrand Russell. The issue of targeting large population centers, at the centre of nascent deterrence, formed the main debate.

The Protestant Churches adopted a radical pacifistic attitude. The Catholic Church followed a more tortuous path, attempting to define the conditions in which nuclear deterrence might be morally acceptable for a time. A few main themes emerged from the Cold War, and were codified in the Second Vatican Council: nuclear deterrent strategy aims to achieve a balance and, provided that it only seeks to ward off an enemy's aggressive plans, it is a temporarily acceptable evil.

Rising tensions between East and West at the end of the 1970s sparked the second phase in the moral debate, firstly as part of the Euromissile crisis which provoked demonstrations and "Better red than dead" slogans. Development of the peace movement was deep and powerful. The United States sought to replace nuclear weapons with other concepts not based on the risk of nuclear devastation: Ronald Reagan's speech in 1983, expressing his wish to go beyond deterrence thanks to antimissile defense, contains strong moral criticism of dependency on nuclear weapons.

This second movement took a radical turn in certain countries. Nuclear war was described as the ultimate, absolute evil: nuclear weapons reveal the true nature of war,

that of mass murder. However, in the Catholic Church, Pope John Paul II took up the notion of transient evil, becoming both moralist and strategist in a message in June 1982: “Under current conditions, a deterrence based on balance, not as an end in itself, but as a step towards progressive disarmament, can still be judged as morally acceptable.”

The third phase in the moral debate began in the mid–2000s. After the end of the Cold War, and the end of totalitarian threats, strategists and philosophers lost sight of the importance of deterrence. Attentions then turned primarily to terrorist threats and the risk of terrorism becoming synonymous with nuclear threat.

The Global Zero movement initiated in the United States in 2008 and officialized in President Obama’s Prague address (2009) expressing his “vision” of a “world without nuclear weapons,” and then in the “humanitarian impact” movement, which led to the 2017 Treaty on the Prohibition of Nuclear Weapons, comprises an essential moral dimension.

These stands were based on an historical moral diagnosis: what was unconvincingly acceptable during the Cold War is no longer acceptable, and in the absence of totalitarian threat, nuclear weapons no longer have any justification. The moral reasoning of humanitarian disarmament was applied to nuclear weapons, and morality supplanted strategic importance.

Two other arguments arose in addition. The first, based on a norm of justice, denounced the inegalitarian legal possession of nuclear weapons under the non-proliferation treaty. The second related to protecting future generations, tying in environmental concerns on grounds of the precautionary principle.

France stands out in this brief historical overview because the moral debate at national level was somewhat less deep and meaningful. Although not completely absent, it did not catch on politically. Compared to many of our partner nations, religion carries less weight in the moral definition of public policies in France. To France, deterrence is consubstantial with sovereignty and national independence, which have marked the nation’s identity since the trauma of June 1940 and the crises at the end of the IV Republic (Suez, Indochina). French doctrine of nuclear deterrence, or prevention of war, lays down the absolute principle that deterrence definitely works and guarantees stability, thereby depriving moral debate of purpose. In France, engaging the moral debate would mean losing faith in the credibility of deterrence and admitting that it could fail.

So why then raise the moral question of deterrence in France today?

First, we are at the end of a strategic cycle that began 25 years ago in Europe, based on, we believed, a gradual decline in nuclear threats and power struggles at the international level. After the end of the totalitarian threat, deterrence was destined to lose its significance. But since the mid-2010s, we have realized that threats of force remain central and that other states continue to reason in terms of nuclear aggression.

Furthermore, a deeper political and moral question is raised, relating not to nuclear strategy but to the organization of the world. While the era of totalitarianism

may be over, the post-1945 aspiration—albeit imperfect and illusory—to establish a multilateral world order based on law and human rights, is today clearly challenged by authoritarianism, illiberal drifts, destruction of norms, weakening multilateralism, primacy of military force, and resurgent risks of major war.

In this context, two trends are in direct opposition in the West: one is predominantly moral, and led to the Nuclear Weapon Ban Treaty, adopted in 2017, ultimately aiming for the abolition of these weapons; the other, which describes itself as realistic, fully assumes the responsibilities of power. But are we condemned to this sterile opposition between unconditional abolitionism and military cynicism?
This is a legitimate question and a European democracy like France can no longer avoid it. To outline some responses, there are two main pathways. The first is conventional and has fuelled all moral thinking on deterrence since 1945: given the two extremes associated with the functioning of the weapon, can we identify war ethics of extremes? The second, which was very present in the first years of the nuclear era, aims to provide a more complex and complete philosophical explanation, combining moral issues specific to deterrence and the historical purposes of our international action.

Just War and Nuclear Deterrence

The question amounts to considering the main criteria of just war, as defined since Saint Augustine and Saint Thomas Aquinas, and applying them to nuclear weapons and deterrence: does the anthropological change brought about by humanity's burst into the nuclear age shatter the ethics of war? Or does it make the countless moral contradictions of war more obvious and acute?

One notion central to just war doctrine is that of a legitimate authority which alone may make the ultimate decision to start war and therefore kill. But what authority is sufficiently legitimate to trigger a nuclear attack? Or, more precisely, how do we define a legitimate nuclear decision in a liberal democracy? Nuclear deterrence involves various decisions that must be distinguished: program launch and financing, definition of doctrine, planning, and targeting. The decision to fire the weapon is merely the result of all these prior decisions. Yet, our reflection often focuses on this last decision exclusively. Deterrence comes at this extreme point in the ethics of extremes. The personalization of deterrent strategy and the fact that just war doctrine generally regards one supreme power as the legitimate authority should not distract from the fact that, in our political systems, unless those other decisions have been made first, the legitimacy of the decision to fire is a futile question.

This leads us to approach the question again from the perspective of political philosophy and the definition of sovereign power. Because, above all, nuclear deterrence is about protecting the political community, the survival of the nation and the political and legal form it has taken, i.e. the State. As Kant emphasized, any attack on the State is an attack on the political form adopted by the people to exercise their freedom.

In our modern-day democracies, responsibility for deciding to go to war is governed by a secularized set of norms defining the limits and intangible principles of this right of self-defense. It consists of public international law, and the fundamental principles of Human Rights. Consequently, the inevitable tension between safeguarding the very existence of the State and respecting certain fundamental principles must be settled by an authority which derives its legitimacy from several sources: it may be the law itself, charisma and tradition, collective deliberations, and trust in the institutions to which they give rise.

In any event, legitimacy and public information go hand in hand. The decision and the authority making it will only be legitimate if a public arena has been created and if a clear, rational, and honest message justifies the policy pursued. This is no doubt where the tension surrounding deterrence is highest, between the need for consultation and cohesion, and the need for secrecy. This is particularly true when it comes to defining vital interests. While their ambiguity and imprecision are central to doctrine of deterrence, they are also central to what the definition of the body politic by the supreme power, and thus by the people, should be.

Therefore, in our democracy, by electing the French President by direct universal suffrage, and by taking part, through its representatives, in votes on taxes and public defense policy, the population participates—sometimes directly, but most often indirectly—in legitimizing this exorbitant policy under the ordinary right of self defense that nuclear deterrence ensures. Nuclear weapons, therefore, ultimately involve traditional debates over sovereign power and war. This rise to extremes lies in the fact that nuclear war can result in the nonexistence of the State and the nation itself. But does it crush this criterion of just war? Perhaps not. However, the public forum must exist, the deterrence policy must be publicly stated, and those who place their trust in the responsible authority must be able to make a free, rational choice.

In war ethics, once legitimate authority is defined, it must have a just cause to wage war and this decision must be taken with the right intention. This right intention, says Saint Augustine, is one that is directed towards good, peace, and justice. It must not simply aim to punish and dominate. It is the will to do good and avoid evil, says Saint Thomas Aquinas. In this Christian view of morality, intention is the essential factor.

In its advisory opinion in 1996, the International Court of Justice refused to find the principle of nuclear weapons unlawful. The Court held that it could “not conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake.” This principle was interpreted by France, and by the other nuclear-weapon countries, as confirming the legality of their deterrence doctrine, directed at extreme circumstances of self-defense in which the survival of the nation is at stake.

Transposed into philosophical terms, if the cause is just, i.e. protecting the State from a threat against its very survival, and the intention is right, i.e. preventing or putting an end to such a threat, deterrence is not unlawful. It nonetheless

involves major moral dilemmas because several elements must be distinguished in a just cause.

Self-defense as such, covers the right to survive as a political state entity. But it must also be defined in practice. According to Joseph Nye, the objective of the threat cannot be limited solely to the survival of the species or the individuals in the community. It must be extended to freedom "which gives value to our lives beyond mere existence." Yet, he adds, there can be no crusades to promote democratic values under protection of nuclear weapons, as we must avoid hubris. This would appear to disqualify doctrines of aggressive sanctuarization and blackmail. However, this conception raises the obvious problem of interpreting a State's intentions: what might be considered aggressive and offensive by one, may be regarded as defensive by the other.

The aim of preventing war and keeping the peace covers a more general and absolute version of deterrence: it does not serve to protect a State, a community for which the supreme power is responsible, but humanity itself, from a total war between major powers. Nuclear weapons then paradoxically become a weapon for prohibiting war, including conventional, limited wars, out of fear of being unable to control escalation. This cause can only be just. But it poses the problem of the intention of the threat: if it is not a pure bluff, and it cannot be if it is to be credible and effective, then the intention of the threat is to respond to an attack with a retaliatory strike that would be out of proportion with the benefits the adversary initially expected to gain.

This is where the doctrine of double effect comes into the reasoning. The former British official Michael Quinlan went to great efforts to justify nuclear deterrence on an ethical basis: not nuclear weapons in themselves, but the deterrence policy. The doctrine of double effect is a theory of moral philosophy seeking to explain the circumstances in which an action that has both good and bad effects may be undertaken. It asserts that a bad consequence may sometimes be justified if it is a secondary effect of the action, and not deliberately produced. Thus, the action of defending oneself can have a double effect: that of protecting one's own life, and of causing the death of the aggressor. Such an action will be lawful if it is taken solely to protect one's life, since any being naturally tries to stay alive as long as possible. However, an action undertaken with the right intention can be bad if it is not proportionate to its purpose. So, if we use more violence than necessary to defend ourselves, the action will be unlawful. This theory underpins the principles of international humanitarian law developed since World War II in the Geneva Conventions.

Michael Quinlan sought to apply it to nuclear deterrence. Its weakness, which is often set against him, lies in the fact that there is no shared sense of proportion between the threat of firing a nuclear weapon and its incidental effects. Profoundly marked by the Cold War era, this reasoning represents an original, but challenged, philosophical effort to morally justify nuclear deterrence.

The literature often mentions the paradox of the deterrent intention, which aims to not do what it intends to do. Is it morally acceptable to have the intention to act,

when one's action would seek to take thousands of innocent lives? Is it moral to intend to do something immoral? This question, which seeks to distinguish threat (the intention) from use (the action), was a core theme in many U.S. studies on nuclear ethics in the 1980s.

Gregory Kavka's work, for example, seeks to mitigate this paradox: in deterrence, it may be right to intend to perform an action, even a bad action, if it avoids the occurrence of an evil. If self-defense or prohibiting war is the just cause, the deterrent intention can then have three goals.

Should we consider that only bluffing meets the right intention criterion? In other words, must the President's real intention be to never order nuclear retaliation? The ambiguity and uncertainty would deter the adversary, and the intention would, in essence, be moral.

Or rather, should we consider that the deterrent function necessarily stems from the harm and damage a strike would cause to civilians, even though they are not the direct target of the reprisal? In this case, applying the theory of double effect is a trickier task, as the deterrent effect proceeds from the collateral damage.

Finally, the deterrent intention may consist not in the punishment or retaliation, but in restoring deterrence by targeting enemy forces or things highly valued by the potential attacker to cause it to stop its attack. In this case, the double effect works.

However, in this debate over the intention of a nuclear strike, rather than just the threat, the whole nuclear strategy is pushed towards use of the weapon. The tension between strategy and morality, locked up in the categories and criteria of just war, reaches its peak. The criterion of right intention does not prevent just war theories from being applied to deterrence, but it stretches the dilemmas and pre-existing paradoxes to their extreme.

According to the principle of proportionality, military retaliation in a conflict must not cause more harm to civilians than required by the expected benefit. Nuclear deterrence conventionally postulates that the threat of retaliation by the attacked nation would be disproportionate to what the aggressor expects to gain from the initial attack. This disproportion is thus what deters it from taking action. Therefore, the concepts of proportionality are not the same, nor are the terms of comparison.

If nuclear weapons with more discriminate uses, and therefore more proportionate to the expected military benefit, should be favored for reasons of morality, how then do we resolve the dilemma that they would become more suitable for use? What moral judgment should be passed on these developments that would trivialize and lower the threshold for their employment? This is why the principles of limiting nuclear war have been studied little in France, as it is unwilling to imagine the failure of its deterrence policy. Yet these principles influence, or should influence, how targeting and planning policies are defined, and even the technical specifications of nuclear weapons themselves.

In that case, can more acceptable nuclear doctrines be identified, in relation to the criteria of just war? And what maxims would be drawn from ethics of war?

First, nuclear weapons hold only in a strict context of self-defense. The world is based on the sovereignty of States, which guarantee the free exercise of the people's will and may take measures necessary to guarantee their survival. This self-defense must be both a just cause—it must come after an initial attack, and come from a right intention—it must pursue the bona fide objective of stopping the attack and must not conceal any other motives.

This just cause of self-defense must be closely related to the general objectives of foreign policy, what Joseph Nye calls "a just but limited cause." It may not be a cover for an aggressive intention to change the world order. This condemns certain doctrines, where the threat is not intended to protect the survival of the State, but to promote its interests and challenge the status quo.

But, even if the cause is just and the intention right, this right of self-defense does not permit everything. The fundamental democratic principle of individual rights must be taken into account. The first principle is the refusal of anti-demographic targeting: if deterrence is to be morally acceptable, within the framework defined by just war, its effectiveness cannot hinge on the direct threat of killing a part of the attacking nation's civilian population. Vengeance or punishment must not be the sole dimension, particularly if the punishment would be collective. The threat of nuclear retaliation must therefore target the future, i.e. restoring deterrence and stopping the attack. The actual use of nuclear weapons must be proportionate to this objective only.

Lastly, the radical nature of military nuclear decisions to be made requires careful justification of the legitimacy of the decisionmaking authority. One objective becomes clear, that of favoring collective, rational deliberation, with Parliament, within a government, between several ministries, several bodies, and among all citizens. Deliberations and decisions must be made public whenever possible; a public forum for nuclear deterrence must be created; and a real responsibility to provide regular, honest explanations must be assumed.

For a Moral Theory of Nuclear Deterrence

Most concepts of the moral debate over nuclear weapons are found in just war doctrine. However, this approach does not cover all the moral issues that nuclear weapons raise, as the approach aims to characterize the potential effects of a nuclear confrontation.

In reality, this analytical nature reveals a contradiction: by seeking to apply the concepts of war ethics to a deterrent weapon, the risk of missing the purpose is high because they are not fully relevant to anyone seeking a moral distinction between threat and use. Advocates of deterrence, by wanting to render nuclear weapons morally acceptable based on just war criteria, run the risk of contributing to lowering the threshold. Symmetrically, by focusing on the apocalyptic image of a nuclear conflict, abolitionists cannot address every aspect of deterrence, which requires morality to be considered from a political and historical perspective. The difficulty, therefore, is that deterrence is caught up in a double moral contradiction.

In itself, its rationality lies in the fact that it contains violence, in both senses of the word. It is a strategy (reason, language, and force) that internalizes incomparable violence to restrict it, i.e. to prohibit its use. Since 1945, nuclear weapons have embodied immoderation. And deterrence is a strategy for limiting this immoderation. Nuclear deterrence internalizes violence to negate it.

This admission leads to a second contradiction, by relating deterrence to peace, the supreme political good. This is no doubt the fundamental dividing line between supporters of abolition and advocates of deterrence. Peace can be understood in two ways: negatively, it is the absence of conflict; in the full sense, it means real cooperation, which is a regulative idea or an idea of reason, within the Kantian sense. Complete disarmament and a world without nuclear weapons relate to this concept. It is not a utopian idea, but the normative principle that must guide our actions in History. It does not demonstrate the inevitable need for historical progress; it calls for action to make it happen.

But since deterrence implies a minimum amount of hostility, it limits the cooperative aspects of peace and renders the disarmament process uncertain. This is the main argument put forward by advocates of immediate disarmament, pinpointing a normative contradiction between the guarantees provided by deterrence and the historical perspective of disarmament. Deterrent rationality is not sufficient for peace in the full sense of the word. It underpins a political order in which the parties' agreement is not based on moral convergence or the common identification of a good, but on a reciprocal threat of violence leading to its suspension.

This relationship is therefore unstable, because it does not transcend the power struggle. The threat of violence becomes part of that struggle, in which it regulates violence, and must therefore always be a possibility. This is the dual nature of deterrence: power struggle, arms race, and death on the one hand, and reciprocal neutralization, control, and agreements on the other. The order of force does not yield to moral order. A new relationship emerges from within the power struggle, that of reciprocal deterrence. So, can any other bases be found for a moral theory of deterrence?

The advent of the atomic age was an ontological event in which mankind became aware of itself as freedom. This realization of Man's absolute responsibility for its fate came early, with the Hiroshima bombing. Sartre wrote in the first issue of *Temps modernes*: "One day, mankind would inevitably be put in possession of its own death [...] Each morning, we shall be on the eve of the end of time [...] If humanity as a whole continues to live, it will not be simply because it was born, but because it has decided to extend its life." The nuclear weapon is an operator of universalization: the world and humanity are endowed with a distinctive consistency, because through the atomic bomb, they can relate to their own disappearance. The nuclear weapon completes man by effecting a metaphysical transformation of human kind which now has the means to bring about its own end, the means of absolute freedom of life and death. Henceforth, humanity experiences its finiteness. It is the last narcissistic injury in the history of our modernity.

In 1983, in *La Force du vertige*, André Glucksmann went even further and wrote, as if he were a missile: "A missile is a weapon of truth [...] Deterrence does not invent inhumanity, it makes it visible by enjoining it to visibly exist [...] I am neither good nor bad, I can be misused, I am true. This is a rare quality." The nuclear weapon reveals the hidden face of war between men, its true dimension; it reveals the extreme inhumanity of which men, carried away by their passions, are capable.

The nuclear weapon is then awareness of the unity of humanity in the face of threat. In addition to this realization of the nature of war and man comes the sentiment that the stakes no longer concern the individual or even a political community, but humanity, which experiences its unity. Russel and Einstein wrote in an eponymous manifesto in July 1955: "consider yourselves only as members of a biological species which has had a remarkable history, and whose disappearance none of us can desire [...] All, equally, are in peril." Karl Jaspers intensified this analysis in 1958 in *The Future of Mankind:* "either mankind will disappear entirely, or its political and moral condition will be transformed." As ironic as it might seem, the advent of the atomic age may have marked, by the negative aspect, the beginning of man's universal history, i.e. a history in which humanity can and must assume responsibility for its future.

One question haunted the first post-1945 thinkers: Can we disinvent the nuclear weapon? The third stage in the reasoning consists in wondering whether mankind can go back on its history and undo this anthropological change. This brings us back to the first and largely forgotten criticisms of the weapon. Russel and Einstein wrote about nuclear disarmament: "This hope is illusory. Whatever agreements not to use H-bombs had been reached in time of peace, they would no longer be considered binding in time of war, and both sides would set to work to manufacture H-bombs as soon as war broke out, for, if one side manufactured the bombs and the other did not, the side that manufactured them would inevitably be victorious." Karl Jaspers went further, underlining that "giving full effect, unilaterally and without delay, to the principles of the state of legal peace, would be an act of suicide." And going back to the rudiments of political philosophy, Hobbes wrote in *Leviathan*: "But if other men will not lay down their right, as well as he, then there is no reason for anyone to divest himself of his: for that were to expose himself to prey, which no man is bound to, rather than to dispose himself to peace." Unilateral disarmament then becomes tantamount to a political community laying itself open to the risk of violence by others, rather than being on the path to peace. In all-out war, any prior agreement would be cancelled, the first to build the absolute weapon wins, and in this approach, it is highly likely that only dictators will have the weapon. At the height of the Cold War, Raymond Aron called for reflection on the consequences of adopting radical pacifism in the nuclear age.

But is all hope of a moral purpose of man's action lost? Must we accept that in the nuclear age, this humanity which now has the means to destroy itself will not find a way out of this false peace, which is nothing but moral imperfection? The first

philosophers of the new nuclear era were more ambitious in their demands than contemporary criticism of deterrence, calling for a real transformation of mankind and the political organization of humanity.

In *Combat* in August 1945, Albert Camus insisted that:

> *it will be necessary [...] to choose between collective suicide or the intelligent use of our scientific conquests [...] plead even more energetically for a real international society. Russel and Einstein launched this urgent call: "The abolition of war will demand distasteful limitations of national sovereignty [...] we urge the Governments of the world to realize, and to acknowledge publicly, that their purpose cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them."*

Karl Jaspers turned this appeal into a philosophical demand for conversion:

> *Reason must permeate through people, to become effective and lasting. We cannot, therefore, elude "democracy" [...] If, by world peace, reason is to eliminate atomic bombs, it will be solely by democracy as a form of political life. This almost goes back to the necessary conditions for establishing perpetual peace defined by Kant in his first definitive article: "The civil constitution of each state shall be republican."*

In the early nuclear age, nuclear weapons were considered to imply two requirements: a moral reform of humanity, a transformation of the organization of international relations, the only way to channel this invention. Through what it revealed about our ability to destroy, the weapon became an urgent appeal to realize our condition as a free and moral being of reason. This moral transformation of mankind is a preliminary condition for universal disarmament: the nuclear weapon, which ultimately reveals man as a reasonable and moral being, forces us to make this radical choice between destruction and the creation of an international society.

So, establishing world peace by law rather than fear, and replacing armed coexistence with cooperation and community, such is the appeal made to mankind since the beginning of the nuclear age. This demand is the one made by the Catholic Church. Although a regulatory ideal, it has been achieved on a smaller scale in Europe. While Europe has not put an end to disagreements for its members, it has channelled the violence through procedures and agreed interdependencies, and turned military confrontations into mechanisms of collective deliberation based on the republican form our of constitutions, within the Kantian meaning of the word. And this is likely the most problematic point of this philosophical reasoning: it postulates the imperative republic form of governments and of general democracy. It means that an accomplished international life implies not only a formalistic approach in terms of

collective deliberation, voting and decisionmaking procedures, but also a substantial dimension, with shared principles and historical purposes.

This approach integrates nuclear weapons into a moral vision of mankind, its historical purpose, and international relations. This brings us back to philosophy and the ontological definition of good and evil. In line with the radical critics, nuclear weapons must be regarded as an imperfection, a defect compared to what should be, according to the words of Saint Thomas Aquinas: evil is a privation, something deprived of good, an imperfection, an ontological deficiency. Morality cannot be taken out of an historical context. As the nuclear weapon exists, deterrence is the lesser evil compared to a doctrine of use. The negativity of nuclear weapons controlled by deterrent strategies even produces some good, by historically limiting violence.

Might we then say that deterrence is a political good—its purpose being to protect a political community—or a strategic good—since it establishes a precarious, unstable security balance, albeit in tension with the absolute Good that cooperation would represent, but that it is the best strategy in a nuclear world? And that it is above all a historical good, because deterrence historically helps to reduce military violence, even paradoxically? Nuclear peace is armed peace, characterized by a situation deprived of an evil: this is the paradox underlined by Aron, the possibility of an unlimited threat limits the effective threat of destruction.

But evil is meaningless on its own; it belongs to a dialectic pair with good, such that the deprived situation of our nuclear world is that of an epoch in the history of humanity in search of a real historical good. It demands peace, not as a mere inhibition of violence, but as a state of harmony between nations, i.e. the cosmopolitical horizon we have inherited from the Enlightenment. This conception implies that history has a purpose, requiring voluntary action and effort to achieve human freedom. What conclusion must we draw about man's behavior in this transient phase in our history?

First requirement: deterrence as a means of limiting historical violence. Here, we can find guidance in some principles established by Hegel: the need to convert violence into language; the creation of an unstable, precarious state of spiritualization of violence; self-restraint, etc. In his preface to General Gallois' 1960 book *Stratégie de l'âge nucléaire*, Raymond Aron said it in more strategic terms: "the day a sort of balance in weapons of mass destruction is struck, the fear of retaliation could incite self-restraint [...] Peace born out of fear? It would not be the first nor the worst trick of Reason." These words are similar to those of Karl Jaspers: "as, in a world war, the atomic bomb threatens at some time or other, no great power will dare to start a war [...] Total threat engenders total salvation [...] There is never peace in coexistence, only in cooperation. But to take some respite, we resign ourselves to coexistence at least to put off war."

Second requirement: a defined, limited objective for deterrence. To achieve the transient goal of paradoxically limiting violence without jeopardizing the ideal that must ultimately replace it, its role must be restricted to the most extreme circumstances. Karl Jaspers was again extremely demanding: "The atomic bomb, as the problem of the existence of humanity *par excellenc*e, is equivalent to only one other problem: the danger

of totalitarian domination [...] with its terrorist organization that abolishes all freedom and human dignity. If in the one case existence is lost, in the other the life-worthy existence is gone." While the totalitarian threat, i.e. Nazism or Soviet Communism, is no longer, this requirement means limiting the role of deterrence to the protection, by a political community consisting of, Kant would say, men, citizens and subjects, of its life-worthy and therefore free existence. This significantly reduces the threats addressed by deterrence.

Third requirement: constant awareness that this historical condition is transient. André Glucksmann evoked the profoundly transient and imperfect nature of deterrence in the nuclear age: "deterrence is agreement between those who do not agree [...] If we were all philosophers, second justice would rule supreme: "we would not watch each other to prevent injustice, we would each watch ourselves with the fear that by accepting injustice in our souls, we were living with the greatest of evils." However, the theory that we are all philosophers is the least philosophical of all." This leads us back to the definition of Justice by Glaucon in Plato's *Republic:* "And this, then, is the genesis and being of justice; it is a mean between what is best—doing injustice without paying the penalty—and what is worst—suffering injustice without being able to avenge oneself." Deterrence is therefore this definition of Justice as a "mean," pending global unification under a common system of moral standards.

Fourth requirement: legitimate authority, democracy, and deliberation. Sartre, in a very Marxist vision of human history made by people against governments, made one of the most radical criticisms of the effect nuclear weapons have on the organization of States and thus on their history:[10] "War becomes detached from Mankind, it is no longer restrained by the masses who suffered in it [...] It can be launched with no control by the people and is therefore an arbitrary power in the hands of a few men [...] The atomic bomb is a weapon against history." This is an uncompromising criticism of the criterion of legitimate authority, combined with a certain philosophy of history. And we do not need to share his view to emphasize that, in this transient state, a careful approach must be taken to the tension between collective deliberation and individual decisions, between public debate and maintaining secrecy. This requirement is particularly important because one of the conditions for achieving concord and perpetual peace is the republic form of States. Deterrence must not prevent this historical ambition.

Let us transpose these philosophical requirements into principles of nuclear strategy. Raymond Aron, again in *Clausewitz, Philosopher of War*, stressed that "the reason of nuclear strategists is immoral, in essence, since it conditionally accepts or decides on the perverse act of exterminating thousands of human beings [...]; theologists have not succeeded in overcoming the antinomy [...] The subtleties of nuclear strategy do not resolve the paradox, they limit it." Our nuclear situation is therefore aporetic: we can contain or limit the immorality, but we cannot totally resolve this paradox underpinning deterrence. We could therefore outline a few principles on which to base a moral theory of nuclear deterrence.

10 "La bombe H, une arme contre l'Histoire," *Défense de la paix* 38 (July 1954).

The nuclear weapon must not be anything other than a weapon for preventing major war between major powers. Both its distribution and strategic purpose must be limited. If we are to have nuclear weapons, they must be for deterrence only. The threat of using the weapon can only be accepted in extreme circumstances of self-defense, when faced with an extreme threat, to ensure that a political community can continue to live a free and worthy life, the essential good of the human condition. Deterrence must, therefore, be linked to the continued physical existence of the political community, or its refusal of subservience that would be the end of its moral and republican existence. Deterrence requires an imperative effort to restrict the arms race, to avoid any drift towards hegemony or victory. To be consistent with the regulative ideal that guides our entire historical and political project, we must pursue the domestication of violence by law. In strategic terms, this means constantly seeking to conclude legally binding agreements to control weapons and gradually achieve multilateral, negotiated disarmament. Lastly, this conditional and temporary acceptance of deterrence must be governed by the principles of just war, i.e. legitimate authority, proportionality, distinction, right intention, and just cause. Such governance meets what we could describe as a nuclear categorical imperative: do not do anything today in matters of nuclear weapons that would render less likely the achievement of peace between Nations, the transformation of men into free and moral beings, and the possibility of a political community participating in this future.

Here, then, is a regulative ideal: the principle that a State must regulate its actions to foster a certain state of the world conforming to reason. In the historical order, perpetual peace plays this role. It cannot be decreed or declaimed. It is the principle by which legal advancements become historical progress. It does not mean an immediate transition from historical conflict, rendered extreme in the nuclear age, to the reign of morality, but a slow historical process undertaken by the mediation of law.

Dealing with Moral Complexity in Nuclear Policy Making

Brad Roberts

In one of his first major policy addresses as president in April 2009, Barack Obama set out his conviction that the United States, as the only state to have employed nuclear weapons in war, has a special moral responsibility to lead the effort to rid the world of nuclear weapons.[11] Accordingly, his nuclear policies were set out in a normative and aspirational context. His Nuclear Posture Review (NPR), which I co-directed with a Joint Staff counterpart, involved frequent debates about ethical matters—debates that in some cases continued through the administration. This chapter reviews the ways in which ethical considerations shaped the Obama NPR and its implementation. It also explores some of the ways in which the Obama administration's normative and aspirational perspectives have been carried into the Biden administration. A full, complete, and systematic explication of the role of moral obligations in the making and implementation of the nuclear policies of either administration is beyond the scope of this short essay. My primary purpose is to offer insights into how to address the enduring moral dilemmas that are an inescapable aspect of nuclear policymaking.[12]

Moral Complexity in the Obama Era

President Obama left no doubt about his view of nuclear weapons in his April 2009 Prague speech:

> *In a strange turn of history, the risk of nuclear war has gone done but the risk of nuclear attack has gone up…This matters to people everywhere… No matter where it happens, there is no end to what the consequences might be—for our global safety, our security, our society, our economy, our ultimate survival….We must stand together for the right of people everywhere to live free from fear in the 21st century.*[13]

Later in his term, speaking as the first American president to visit the peace memorial in Hiroshima, he argued further that:

> *We have a shared responsibility to look directly in the eye of history and*

11 Remarks by President Barack Obama, Hradcany Square, Prague, Czech Republic (April 5, 2009).

12 The views expressed here are the personal views of the author and should not be attributed to his employer or its sponsors. The author is grateful for comments on earlier versions of these arguments by Rose Gottemoeller and the other participants in the January 2013 CGSR roundtable.

13 Ibid.

> *ask what we must do differently to curb such suffering again…Among those nations like my own that hold nuclear stockpiles, we must have the courage to escape the logic of fear, and pursue a world without them. We may not realize this goal in my lifetime. But persistent effort can roll back the possibility of catastrophe. We can charter a course that leads to the destruction of these stockpiles.*[14]

Accordingly, President Obama directed his administration to take concrete steps toward a world without nuclear weapons and to work to create the conditions that would allow further steps by the United States and others later. Within the administration, this policy was widely embraced as a moral imperative. In shorthand, it conveyed a moral duty to disarm.

But President Obama also articulated a moral duty to protect. This was evident in the Prague speech: "Make no mistake: as long as these weapons exist, the United States will maintain a safe, secure, and effective arsenal to deter any adversary and guarantee that defense to our allies."[15] This duty was elaborated more fully a few months later, in the president's acceptance speech of the Nobel Peace Prize in December 2009:

> *We must begin by acknowledging the hard truth: We will not eradicate violent conflict in our lifetimes. There will be times when nations—acting individually or in concert—will find the use of force not only necessary but morally justified. I make this statement mindful of what Martin Luther King Jr. said in this same ceremony years ago: "Violence never brings permanent peace. It solves no social problem: it merely creates new and more complicated ones." As someone who stands here as a direct consequence of Dr. King's life work, I am living testimony to the moral force of non-violence. I know there's nothing weak—nothing passive, nothing naïve—in the creed and lives of Gandhi and King. But as a head of state sworn to protect and defend my nation, I cannot be guided by their examples alone. I face the world as it is, and cannot stand idle in the face of threats to the American people. For make no mistake: Evil does exist in the world. A non-violent movement could not have halted Hitler's armies. Negotiations cannot convince Al Qaeda's leaders to lay down their arms. To say that force may sometimes be necessary is not a call to cynicism—it is a recognition of history, the imperfections of man, and the limits of reason.*[16]

14 Remarks by President Barack Obama, Hiroshima Peace Memorial, Hiroshima, Japan (May 27, 2016).

15 Obama, Prague Speech.

16 President Barack Obama, "A Just and Lasting Peace," Nobel Lecture, Oslo, Norway (December 10, 2009).

Accordingly, President Obama directed his administration to take steps to maintain deterrence against nuclear attack on the United States and/or its allies and partners, to strengthen extended deterrence and assurance of allies, and to ensure strategic stability with Russia and China. Many in the administration and the Department of Defense embraced these policies as a moral imperative.

Thus, the stage was set for debate inside the administration. Some saw the two moral obligations as contradictory and chose one over the other, with each claiming, in sometimes acrimonious debate, to be the agent of the president's true convictions. But the president's intention was clear enough: to develop a nuclear policy agenda that was defensible in both moral and prudential terms. It is important to note that this intention was not limited to nuclear policy. For example, the policy debate about whether to join the landmine convention entailed a similar set of interests and imperatives.

To implement this policy framework, a number of high-level policy objectives were agreed, along with the supporting policy initiatives. For many in the administration, those initiatives became implied moral imperatives in their own right. For purposes of this discussion, I will highlight here three objectives: to reduce the number of nuclear weapons, to reduce the role of nuclear weapons, and to strengthen the nonproliferation regime.[17] Each involved choices among competing moral obligations. The choices, once made, often came to be seen as moral imperatives of their own. Moreover, the nature of those choices changed as the effort to implement the supporting policy initiatives ran afoul of an uncooperative world.

The commitment to further reduce the number of nuclear weapons followed from the president's judgment, first articulated in Prague, that "the existence of thousands of nuclear weapons is the most dangerous legacy of the Cold War…The Cold War has disappeared but thousands of those weapons have not."[18] President Obama thus called for quick conclusion of a successor to the START treaty (set to expire in 2010) which, he hoped, would set the stage for a later round of even deeper cuts and in which he hoped to include all nuclear weapon states.[19] But the negotiation of New START proved more difficult and protracted than expected and the reductions agreed less than hoped. The president rejected further unilateral reductions by the United States, despite the advocacy of some, on the judgment that doing so would be harmful to strategic stability and to the assurance of allies. In the administration's second term, it became abundantly clear that Russian President Vladimir Putin had turned against cooperation with the West and begun his campaign to escape arms control constraints, develop and employ banned capabilities, interfere with Western political processes, and lead toward a world of "new rules or no rules"—all while centralizing nuclear weapons in his strategy for Russian renewal.

17 Brad Roberts, "On Adapting Nuclear Deterrence to Reduce Nuclear Risk," *Daedalus* (2020), pp69-83.

18 Obama, Prague speech.

19 Ibid.

The commitment to further reduce the role of nuclear weapons followed from the president's conviction that the United States remained overly reliant on nuclear means of deterrence and could safely increase its reliance on conventional deterrence for strategic purposes. Thus, the administration narrowed the role of nuclear weapons in its declaratory policy and increased the role of the other military domains in its deterrence strategy. But President Obama rejected the "sole purpose" formulation of declaratory policy. He did so on the argument that a narrow range of contingencies then remained in which the vital interests of the United States and/or an ally or partner might be put in jeopardy by non-nuclear means. The administration also began to understand that many of the advantages at the conventional level of war long enjoyed by the U.S. military had eroded during the long wars in Iraq and Afghanistan and that the development of non-nuclear strategic assets, such as missile defense and conventional strike, had been slowed. Then a new problem began to come into clearer focus: Moscow and Beijing had assessed that improvements made by the United States (to its homeland missile defense and to long-range precision non-nuclear strike capabilities made in part to reduce reliance on nuclear weapons) would undermine their strategic deterrents. This further reduced their interest in working with the United States to reduce the number of nuclear weapons, which presented a moral dilemma: whether the United States maintained or reduced the role of nuclear weapons, the role would remain or increase in Russia and China. The president chose to strengthen conventional deterrence.

The commitment to strengthen the nonproliferation regime followed the president's convictions that "our efforts to contain these [nuclear] dangers remain centered on the global nonproliferation regime" and that "the basic bargain is sound."[20] Thus, the administration set out an agenda to strengthen the International Atomic Energy Agency, strengthen controls on fissile materials, promote a new framework for civil nuclear cooperation, ratify the Comprehensive Test Ban Treaty, and extend an open hand to North Korea and Iran while seeking improvements to enforcement mechanisms. In 2010, it presided over a successful NPT review conference. But the conference also brought home the point that many actors in the Global South and non-governmental organizations did not see the basic bargain in the regime as sound—because, in their judgment, the nuclear weapon states were failing to deliver on their end of the bargain. Thus, the Treaty for the Prohibition of Nuclear Weapons (TPNW, also known as the Ban Treaty) was born out of the humanitarian consequences movement and with it rising concern about its impact on the nonproliferation regime. The administration chose not to support the TPNW and to reject any tacit acceptance of the treaty as customary international law. It also encouraged its allies not to do so, not least because of the effort of some Ban advocates to utilize the Ban Treaty to try to collapse U.S. extended deterrence.

20 Ibid.

In sum, in formulating its nuclear policy agenda, the Obama administration took many steps consistent with the moral obligation to take practical steps toward the long-term disarmament goal. But it also rejected some steps as inconsistent with the moral obligation to protect. It took other steps in the name of the duty to protect strongly opposed by advocates of disarmament (such as modernizing the full triad of strategic delivery systems).

In implementing its agenda, the Obama administration had some important successes. But it also encountered many difficulties and disappointments. Its aspirations were frustrated by Russia's arms control violations and military-backed annexation of Crimea, China's nuclear buildup, North Korea's nuclear breakout, the rise of the Ban Treaty, and the growing anxiety of U.S. allies about the credibility of extended deterrence. In an internal review in its final year of its record in implementing the Prague agenda, the administration took stock of its accomplishments and looked for further steps it might take at the last minute, apparently finding none. In a valedictory speech on nuclear policy in the administration's final weeks, Vice President Biden noted with pride the administration's numerous policy successes (drawing largely on the first term) but also acknowledged that "we did not accomplish all that we had hoped."[21]

Not surprisingly, while the Trump administration took its turn at the helm, the effort to assign blame for what had not been accomplished by the Obama administration started. Some disappointed advocates of bold steps toward disarmament placed the blame squarely on a recalcitrant military, disloyal political appointees, and a president too given to prudence. The following quotation from William Perry and Tom Collina is illustrative:

> *When Obama tried to change nuclear policy, he encountered at every turn a built in body of opposition in the uniformed military who supported nuclear weapons….People are policy, and even good policy can be foiled by the wrong staff…The biggest roadblock to enacting Obama's nuclear agenda turned out to be the president's own team and his own moderation.*[22]

The track record discussed here tells a different story. The president and his team were engaged in a debate about moral obligations and moral dilemmas that often required difficult choices and thus also reflection and deliberation. That debate simply escaped the interest of such critics. This lack of attention to moral dilemmas is reminiscent of the criticism lodged 70 years ago by Robert Oppenheimer of the disarmament advocates of that era: "These people…are not in any way talking about

21 Remarks by the Vice President on Nuclear Security, Carnegie Endowment for International Peace, Washington, DC (January 11, 2017).

22 William J. Perry and Tom Z. Collina, *The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump* (Dallas, TX: Ben Bella, 2020), p202.

the ethical dilemmas because they deny that there are such dilemmas. They say that if we behave in a nice way, we will never get into any trouble. This is not ethics."[23]

The moral dilemmas confronting the Obama administration that were embodied in the twin moral obligations were tangible and occasionally substantial. The argument for compromising the duty to protect was not sustainable for moral and political reasons in the then-eroding security environment.

On to the Biden Era

Vice President Biden's 2017 valedictory speech was also the stepping stone to his own administration's Nuclear Posture Review four years later.[24] The 2022 NPR echoes many of the themes of that speech and of the 2010 NPR. It is aspirational in quality and provides a normative context for returning to the policy trajectory defined by President Obama in 2009. It also strikes a balance between the moral obligations to disarm and protect, though the balance has shifted a bit given the significant erosion of the global security environment over the last decade, as reflected in the commitment to strengthen deterrence—including by strengthening extended deterrence.

But there are also aspects of the 2022 review that seem not to have come to terms with developments since 2010 and the dilemmas that took shape as the Obama administration implemented its NPR. The Obama administration seized every opportunity to reduce the role of nuclear weapons that it also believed were consistent with the responsibility to protect. It judged that, in the security environment of a dozen years ago, further steps would not contribute to safety and security. Today's security environment is even less congenial. Russia and China have grown even less inclined to believe that developments in U.S. strategic capabilities, both nuclear and non-nuclear, are not threatening to them. North Korea has become more capable of attacking the United States and its allies with nuclear and other weapons of mass destruction. The surprise decision to reject "sole purpose" is welcome recognition of these facts. But the commitment to further reduce the role of nuclear weapons and the decision to eliminate the hedge function seem not to. Similarly, the decision to cancel the development of a modern nuclear sea-launched cruise missile seems inconsistent with the commitment to strengthen extended deterrence and assurance of allies.

Similarly, the Biden administration's commitment to seek dialogue with Russia and China on nuclear risk and the means to reduce it is difficult to square with the disappointing experience of the Obama and Trump administrations in trying to engage both on strategic stability. That experience brought into focus that Moscow and Beijing are uninterested in partnering with the United States to increase each other's

23 J. Robert Oppenheimer, "In the Keeping of Unreason," *Bulletin of Atomic Scientists* 16 (January 1960).

24 In skipping over the Trump administration, I am not suggesting that its nuclear strategy lacked a normative and aspirational context. My purpose here is to explore the ways in which the Biden-Harris administration has built upon the thinking and experience of the Obama-Biden administration.

confidence and security. Their interest is in making Americans more fearful, not less, as this seems to them to reduce the risk of U.S. action against them. The United States should continue to seek dialogue, as meaningful dialogue could contribute to risk reduction. But its strategy for risk reduction ought not be built on the premise of cooperative action with Russia or China to defend shared interests.

Some of the Biden administration's most important nuclear policy choices still lie ahead. It has only recently (in winter 2023) begun the process of reviewing and revising presidential nuclear employment guidance (a process that took well over a year in the Obama administration—and involved many ethical debates). It has also acknowledged that future changes to U.S. nuclear strategy and forces may be required in response to China's rapid expansion and diversification of its nuclear forces. Russia's future nuclear choices in the Ukraine war seem destined also to have implications for U.S. nuclear strategy and/or forces. Such choices will be a test of the Biden administration's continued focus on these moral dilemmas and capacity to find a way forward that balances them.

Lessons

The following lessons stand out from this narrative.

First, the Obama and Biden administrations have made good faith efforts to link ethical considerations to nuclear policy development. This is not to imply that others have not done the same. But Presidents Obama and Biden have both understood there to be a special moral duty for the United States.

Second, the moral context for policy cannot be reduced to one moral obligation or the other, to disarm or to protect. An ethical nuclear policy must heed both obligations, balancing them where it can and choosing one where it must. Those choices are not static, as policy must adapt to the changing context. In the current context, nuclear policy must reflect the erosion of the security environment, the hostility of U.S. adversaries, the rising anxiety of U.S. allies, and the resurging salience of nuclear weapons internationally.

Third, moral claimants on U.S. nuclear policy are generally loathe to accept the existence of competing moral claims. Many claim the moral high ground without understanding that the discourse about ethics requires something more. It requires engagement with prudential and aspirational concerns, respect for competing moral logics, and tolerance for the complexity of policymaking.

Fourth, the vilification of the opposing camp is as common in the nuclear policy debate as elsewhere in American politics and just as corrosive. In my experience, those policy advocates unwilling to accept the legitimacy of the twin moral obligations to disarm and protect ultimately marginalize themselves from the decisionmaking process—while placing the blame on others.

Fifth, if one accepts the existence of competing moral claims, a vast landscape of nuclear policy questions opens up for ethical discourse. Some policy questions have a significant moral dimension (e.g., declaratory policy); others less so. Policymaking

begins with seeing the policy problem whole, meaning that the moral dimension must be seen in the context of related prudential and political factors. In my experience, it often took the policymaking community a bit of time to clearly understand the moral considerations and obligations embedded in nuclear policy choices.

Sixth, sometimes circumstances make it very difficult for the United States to formulate a policy that addresses both moral obligations in a balanced way. We seem to be in such a moment today, as the further steps to disarm that might be taken at this time seem likely to undermine strategic stability and increase nuclear risks. In this circumstance, the Hippocratic Oath comes to mind: first, do no harm. This does not preclude taking steps to provide transparency, predictability, and stability when and if U.S. adversaries prove willing.

Finally, policymakers who close themselves to a discussion of normative factors undermine the legitimacy of their policies and are at risk of losing the consent of the governed. Generally speaking, the American public cares a lot less about throw-weights and warhead counts than about questions of right and wrong and about an eventual escape from the burdens and dilemmas of nuclear deterrence. In my experience, the same is true of the publics in allied countries. A nuclear policy that is defensible in both prudential and normative terms must be publicly defended.

Keeping the Peace, Revisited

Elbridge Colby

Précis: This article was published in First Things magazine in January 2011.[25] *It was prompted by a tide of criticism against nuclear deterrence from the Roman Catholic hierarchy. In the piece, I responded to those critiques within the framework of just war theory and the Christian moral tradition. Though the article was published a dozen years ago, the issues have only become more pointed in the time since 2011—as the Catholic hierarchy has, if anything, accentuated its criticisms of nuclear deterrence—even going so far as to become associated with the movement for the Treaty on the Prohibition on Nuclear Weapons. Heather Williams' chapter in this volume expertly catalogs this trend.*

Though this article focused on criticisms from the Roman Catholic hierarchy, its analysis is of relevance to non-Catholic readers, as it engages with critiques of nuclear deterrence from the standpoint of just war theory and the classical moral tradition, which are based on rational principles. Moreover, the critiques made by members of the Catholic hierarchy are very similar to those offered by non-Catholic critics of nuclear deterrence.

Over the last few years there has been a sharp change in the rhetoric of the Catholic hierarchy on the issue of nuclear weapons. During the Cold War, even as Church leaders warned of the terrible destructive power of nuclear weapons and their profound moral problems, for the most part Catholic leaders accepted—or at least tolerated—the need for such weapons. Not so today. In recent years, members of the hierarchy have issued blunt statements insisting on the imperative of near-term nuclear disarmament. These statements have revealed a disturbing inattention to important aspects of how nuclear weapons would be used and, more broadly, to the profound and beneficial implications of nuclear weapons for international stability. Given the Church's obligation to moral seriousness and the gravity of the issue, this matter deserves more care and reflection than these members of the hierarchy have given it.

Church leaders have been very active recently in insisting on the moral obligation to meaningfully pursue nuclear abolition. At a deterrence conference sponsored by the United States Strategic Command in July 2009, Archbishop Edwin O'Brien called the Catholic task "not to make the world safer through the threat of nuclear weapons, but rather to make the world safer from nuclear weapons through mutual and verifiable nuclear disarmament." Writing in support of the new Strategic Arms Reduction Treaty signed by the United States and Russia in April 2010, Francis Cardinal George described the pursuit of ridding the world of nuclear weapons as "a moral imperative."

25 This article is reprinted with permission. It originally appeared in *First Things* (January 2011).

Archbishop Celestino Migliore, until recently the Holy See's representative at the United Nations, has been especially insistent on the need for nuclear disarmament. Even Pope Benedict XVI, in his 2006 World Day of Peace message (and again in his 2010 message), dismissed those who count on nuclear deterrence for their security as holding "a point of view [that] is not only baneful but also completely fallacious. . . . The truth of peace requires that all . . . agree to change their course by clear and firm decisions and strive for a progressive and concerted nuclear disarmament."

Why the change from a guarded acceptance of nuclear deterrence to clarion calls for disarmament? The primary reason given is that the conditions that compelled the Church in the 1980s to give limited toleration to some forms of nuclear deterrence no longer exist. Clearly this assessment has been spurred on and strengthened by the high-profile campaigns for nuclear abolition of the last few years. Yet, especially when compared to the sober caution of leading abolition advocates such as George Shultz, William Perry, Sam Nunn, and Henry Kissinger, the much more radical position of the churchmen must be drawn from a more fundamental analysis than a mere change of political conditions. Indeed, the argument from church leaders for prompt nuclear abolition appears to derive quite directly from an analysis based on classical just war theory. As Cardinal George has written, the use of nuclear weapons "as a weapon of war is rejected in Church teaching based on just war norms."

This is a bold claim—and one with substantial merit—but is it so completely true that it would logically require the complete abolition of nuclear weapons?

The argument proffered by the churchmen is as follows. For the use of force to be morally tolerable it must be discriminate—civilians may not be the object of direct, deliberate attack—and it must be proportionate to the evil confronted and the good achieved. In light of these premises, an empirical claim is made: that nuclear weapons, by their very nature, cannot be used in a discriminate and proportionate fashion and thus are illegitimate. As Archbishop O'Brien has argued, nuclear weapons "cannot ensure noncombatant immunity and the likely destruction and lingering radiation would violate the principle of proportionality."

This judgment is grounded in an empirical assessment that escalation is highly probable in a nuclear exchange and therefore that the demands of proportionality cannot be satisfied. As Archbishop O'Brien puts it, "Even the limited use of so-called 'mini-nukes' would likely lower the barrier to future uses and could lead to indiscriminate and disproportionate harm. And there is the danger of escalation to nuclear exchanges of cataclysmic proportions." Nuclear weapons, in short, cannot be used discriminately and proportionately, both because of their inherent destructiveness and because their use is so likely to incur further, catastrophic damage. Therefore, because nuclear weapons cannot be used morally in warfare, they have no justifiable use and warrant elimination.

This argument has natural force. Nuclear weapons are immensely destructive, and their use carries grave risks of further escalation. Yet the analysis that Archbishop O'Brien and other churchmen provide is highly problematic. The most glaring flaw is

the intermixture of firmly grounded elements of Catholic moral teaching with highly disputed—and, in some cases, erroneous—analyses of military conflict, national decision making, and the legitimate uses of force. A deeper problem is that the churchmen's analysis disregards the profoundly serious dilemma of how best to preserve peace—a dilemma that has been with the Church at least since Ambrose and Theodosius sparred over resistance to the barbarian invasions. This dilemma between what safety and stability require on the one hand and what Christian love demands on the other deserves a more sober and respectful treatment.

Archbishop O'Brien, whose speech at the Deterrence Conference in 2009 represents perhaps the fullest exposition of the logic of this point of view, begins his argument for the inherent immorality of nuclear arms by stating that nuclear weapons "cannot ensure noncombatant immunity" and so are intrinsically illegitimate weapons. But this is an unreasonable standard even under just war theory, which requires only that violence not be deliberately directed at noncombatants. Indeed, no weapon can "ensure noncombatant immunity." Artillery can be turned against enemy positions or a crowded neighborhood, submarines against warships or hospital ships, rifles against enemy soldiers or captured civilians. Moreover, systems fail. Even today's precision-guided munitions go awry because of technical error or are targeted based on inaccurate intelligence.

Nor is the ability to ensure noncombatant immunity merely a problem of intent or better systems. Because conflict is competitive and adaptive, adversaries cannot always afford to dedicate sufficient focus to avoiding noncombatant injury without sacrificing their legitimate objectives. In the Second World War the Allies felt compelled to conduct saturation attacks and night bombings on German cities because of the formidable German defenses. (And this leaves aside the *deliberate* general bombings of Japanese cities to suppress industry and break Japan's national will.) Similarly, the United States pursued unrestricted submarine warfare against Japan in part because it could not safely or reliably distinguish innocent from war-supporting supply ships. Further, adaptive adversaries often will deliberately intermingle civilian and military targets to complicate attacks by an opponent attempting to abide by the principles of just war. One can see this clearly in the use, in Iraq, of mosques as defensive positions. For these reasons a fairer standard for judging the legitimacy of weaponry would be that the use of any weapon must be proportionally correlated to a just goal.

But Archbishop O'Brien argues that nuclear arms are distinct among weaponry because of their "likely destruction and lingering radiation" and because even smaller-scale nuclear weapons "would likely lower the barrier to future uses and could lead to indiscriminate and disproportionate harm." Cardinal George contends that "the horribly destructive capacity of nuclear arms makes them disproportionate and indiscriminate weapons that endanger human life and dignity like no other armaments." In other words, nuclear weapons are "likely" to be so destructive that their use cannot be reconciled with just war principles; and the use of nuclear

weapons, however small and restricted, involves inherent escalatory pressures that would raise the probability of further employment and catastrophic destruction. While both arguments have considerable elements of truth, they are too incomplete—and thus far too misleading—to serve as bases for the firm moral judgments drawn.

For it is simply not true that nuclear weapons are *inherently* incompatible with just war principles. Very highly destructive weapons, including nuclear weapons, can be targeted discriminately, provided the target is militarily significant and sufficiently separated from innocent parties. Under these traditional law-of-war guidelines, permissible targets might include missile silos, air bases, submarine ports, ground forces and their installations, leadership redoubts, and other militarily significant objects and facilities large or isolated enough to justify attack with highly destructive weaponry. Indeed, because of advances in the accuracy and reliability of systems, such targets can be attacked today with nuclear warheads that produce a lower yield and cause less destruction than those mounted on the highly inaccurate bombs and missiles of the early Cold War, thereby lessening the direct secondary effects of a strike. Yet even higher-yield nuclear weapons can be directed at isolated targets far from population centers. For instance, the American early-warning radar located far from any significant populace in northern Greenland near Thule surely would have been a legitimate military target for the Soviet Union. Other factors such as the time of the strike—and whether the weapon is detonated in an air or ground burst—also can minimize the secondary consequences. This is not to minimize the horrendous destructiveness of nuclear weapons but to emphasize that even extremely destructive weapons can be used to strike militarily significant targets while minimizing civilian casualties—in other words, discriminately.

With respect to the criterion of proportionality, we must also consider the role of necessity in a just cause. If the destruction of a target is critically important, it may be permitted under classical law-of-war doctrine if the ancillary damage is not intended and its costs do not outweigh the legitimate object achieved. This is known as the principle of double effect, to which the churchmen do not appear to give adequate weight. This rule states that actions causing serious damage may be permissible if they are a secondary effect of actions taken for a justified end. The rule distinguishes legitimate actions directed toward morally licit goals that incidentally cause serious harm from illegitimate actions that instrumentally cause harm to achieve a good end. The rule also emphasizes the principle that such damage inflicted must be proportional to the evil threatened and the good achieved. The Second Vatican Council, in *Gaudium et Spes*, gave self-defense as the archetypal valid reason for exercising this moral right.

Logically, therefore, weapons of great destructiveness could be used—including, potentially, against highly important targets not isolated from noncombatant populations—in the cause of defending against grave evils. During the Second World War the Allies frequently attacked Axis military and war-supporting facilities in highly populated areas (including in occupied countries such as France and China) because

that was the only plausible way to achieve their legitimate objectives. Earlier, it was an accepted practice that a city resisting a siege would endure sack and pillage in the wake of its conquest. If such a city were allowed clemency after resistance, it was agreed, military operations, including legitimate ones, would be impractical because a fortified city could hold out and frustrate an army's advance without consequence. More recently, the United States has stated consistently that it would not target adversary populations per se with its nuclear forces, although, in fairness, this would be of vanishingly modest comfort to those anywhere near legitimate targets broadly defined. This is not to minimize either the moral complexities associated with this rule or the dangers of nuclear use but to point to examples in which highly destructive threats and practices have been seen as justified because they were seen as necessary for the pursuit of just ends.

Archbishop O'Brien's rejoinder to these arguments is that any nuclear employment would carry too great a risk of further use. This is a decidedly prudential judgment and, in key respects, dubious. It is highly disputable that any use of a nuclear weapon, divorced from any other considerations, is the primary determinant of whether a nuclear or military exchange will result. It is not primarily the destructiveness or physical nature of a weapon that determines the risk of escalation but rather other factors such as the danger posed to the core capabilities and interests of an adversary. And so, while nuclear (as well as nonnuclear) strikes to suppress the nuclear capabilities of an adversary would intensify pressures to "use or lose" these forces, many types of nuclear strikes, particularly those more defensive or signaling in nature (and thus more justifiable), would be considerably less likely to do so. Conversely, weapons with significant utility in disabling an opponent's war-fighting capabilities are more likely to cause escalation than those designed solely to inflict damage. (Indeed, it is interesting to note the tension between traditional just war theory, which sought to channel violence toward military targets and thereby limit the scope of conflict, and the world of nuclear deterrence, which is heavily influenced by fears that such a focus may actually increase the likelihood of broader nuclear war.) A classic example is the escalation of competitive mobilizations at the outset of the First World War. More recently, the forward-leaning and primarily conventional "maritime strategy" of the U.S. Navy in the 1980s may have been more likely to prompt the Soviets to escalate to nuclear use than was the 1970s U.S. strategy to conduct limited nuclear strikes against isolated and relatively unimportant Soviet targets to terminate a large-scale war.

For these reasons, conventional forces, especially those of the United States, may be more likely to raise the chances of escalation because the United States and its allies operate with relative impunity. Indeed, this near-complete discretion is a major reason countries such as Iran and North Korea are attracted to nuclear weapons: Such weapons could deter the United States from exercising its conventional capabilities.

Fundamentally, the dangers of escalation stem more from strategic considerations of threats to leadership control, military forces, and the survival of the nation and less from the particular characteristics of the weapons used. This is not to understate the dangers of escalation that nuclear use would entail but rather to point out that weaponry is only one factor in such considerations, and likely not the most important.

This discussion only scratches the surface of Archbishop O'Brien's analysis. The key point is that the claim that nuclear weapons can never be used in a morally justifiable fashion does not stand up to scrutiny. Nuclear weapons can be used in ways that, while possibly inadvisable for other reasons, comport with classical just war principles.

But there is a very real tension between what nuclear weapons do and the obligations of Christian morality—a tension that should cause unease not only among moral strategists but also among strategic-minded moralists. This tension stems not primarily from the particular physical characteristics of nuclear weapons or their unique destructiveness but from their role as the ultimate keepers of the peace—a peace that Christians should prize and encourage, but one that also has its roots in, to put it bluntly, terror.

What is this tension? Human beings have always battled each other. Recent research suggests that a substantial fraction, perhaps even as high as a half, of prehistoric deaths were caused by violence. While better, civilized man has remained enormously destructive. The Thirty Years' War is supposed to have killed a third of the population of the Holy Roman Empire, while the two great wars of the first half of the twentieth century killed nearly 100 million people. And yet, abruptly, after 1945 wars between advanced nations have essentially stopped, and those that have taken place have been very limited. Why?

No doubt economic development and the spread of liberal civilization have played a role, as has the exhaustion that followed the great wars of 1914 and 1939. But these forces are ill-placed to explain such a broad and consistent trend, if for no other reason than that people have many times before been rich, civilized, and exhausted. Moreover, since it requires only one party to cause a major war, it seems implausible that all people are now so satisfied and upright that they are willing to forswear the use of force to gain their ends. The more plausible explanation for the trend is that the introduction of nuclear weapons has made the prospect of war so terrifying, and its consequences so manifestly incommensurate with any plausible gains, that such weaponry has deterred even the aggressive and the rapacious from starting a war. The result has been a long peace.

For the Christian, and for all people of good will, the result is cause for rejoicing. The absence of war is surely a good even if it is not grounded in the truest peace, that of love. Nor are the benefits confined merely to the absence of conflict. Because of the greatly reduced likelihood of war, countries can dedicate far more substantial resources to social needs and development—a good the pope explicitly noted as an important reason for disarmament in his 2006 World Day of Peace message.

Moreover, the danger of militarism is lessened, and liberal democratic systems, traditionally vulnerable to the criticism that they are ill suited to war, are more resilient.

Yet Christians must be uncomfortably aware that this peace is, after all, the "sturdy child of terror," as Churchill put it. Indeed, the more credible the nuclear threat and the more devastating its consequences, the more secure this peace. At root, the effectiveness of nuclear deterrence rests on making a prospective attacker fear the most baleful and awful consequences, while the moral direction of Christianity is a progressive invocation to love and sacrifice. It seems doubtful that a stability grounded in terror can be fully reconciled with the law of love, at least with finality.

But while nuclear deterrence can hardly be expected to satisfy counsels of perfection, Christian morality is not confined to the aspiration for perfection. Christians are required to avoid evil and do good, as understood by the law of reason and in recognition of the reality of sin. By this more worldly standard there is reason to think that, even if it cannot be perfectly reconciled with Christian moral demands, certain kinds and postures of nuclear deterrence can be made tolerable or even acceptable under just war theory.

For instance, while much discussion of the morality of nuclear weapons focuses on the problems posed by their use, less has gone toward the other pole of just war theory—*ius ad bellum*. Ultimately, judgments as to the legitimacy of actions taken in war cannot be completely segregated from the rectitude of the cause for which violence is undertaken. Surely the use of weapons of massive destructiveness for aggressive or discretionary purposes can hardly be defended, but their use in certain manners for the defense of legitimate national autonomy against an aggressor, in the most extreme circumstances, seems more readily justifiable. The latitude granted to the weakened and supine West against Stalin, or to Britain in 1940, or even as far back as to the European powers against the Turks, Vikings, and Arabs seems legitimately greater than that available to those conducting wars of lesser necessity. Perhaps, then, limiting the purposes for and conditions under which nuclear weapons may be used, such as in "extreme circumstances," as the 2010 U.S. Nuclear Posture Review suggests, could contribute to a morally tolerable form of nuclear deterrence. In terms of *ius in bello*, certain constraints on the use of nuclear weapons might also be imposed. Warnings, for instance, could be strongly encouraged to enable the civil population to avoid harm. Tolerance might be given in extreme circumstances to limited, essentially demonstrative, employment of nuclear weapons against targets isolated from substantial noncombatant populations. If such efforts are unavailing, targeting that focuses on those in power (and so responsible for the extreme measures being taken) and what they value, or on essential military facilities, as opposed to the general population, might also be tolerable in some particularly grave situations. In all cases the purpose of the strikes would be to prevent some grave evil, to deter further aggression or escalation, and to bring the war to a tolerable conclusion as rapidly as possible.

It must be admitted, however, that even if such restraints were imposed, nuclear deterrence would, in all likelihood, still rely on the threat of cataclysmic destruction. Indeed, in all honesty, the possibility that conflict might escalate to such a level lies near the root of the effectiveness of nuclear deterrence. It is precisely the prospect of such general destruction that so clearly makes any aggression not worthwhile. Thus, for instance, it was the vision of a general exchange between the United States and the Soviet Union that so terrified General Secretary Leonid Brezhnev that, visibly shaking, he resisted pushing the simulated release button during a military exercise in the early 1970s.

While we can take steps to minimize the tension, the fact is that we live with a paradox. The stability and peace we have enjoyed for 65 years, even in the face of a great and hostile Soviet Union, rests on the profoundly troubling threat to wreak catastrophic violence. It would be easy to say that those dark days of the Cold War are over and so we can, on strategic grounds, abandon nuclear deterrence. But this would be the height of imprudence. The history of world politics, at least, is not over, and the era of untrammeled U.S. military superiority is fading. Even thoughtful advocates of a world without nuclear weapons admit that the conditions necessary to allow abolition do not currently exist and would require fundamental transformations in the world order. In the meantime, nuclear deterrence continues not only to deter aggression but also to remind all that investments in military power are of decidedly limited value—an effect that has had and continues to have tremendous ramifications for interstate relations, the allocation of resources, and social and political life throughout the world.

This is not to luxuriate in this paradox so central to the modern world but only to give grounds for asking that church officials deal with the matter with more care and caution than they have in some cases. For instance, Pope Benedict, whose writings and speeches have captured with unique sobriety and wisdom the nature of life in the modern world and the solution that Christianity gives to our mortal condition, has said: “What can be said, too, about the governments which count on nuclear arms as a means of ensuring the security of their countries? Along with countless persons of good will, one can state that this point of view is not only baneful but also completely fallacious.” What can be said to such a dismissive statement, which questions even the good will of those who value the benefits of nuclear deterrence? Perhaps one can ask that the pope and other churchmen consider that those who defend nuclear deterrence do so not from evil intent or in an unreflective way but because they value peace and stability and because they fear a world in which violence can again be a more attractive tool of statecraft.

The Church should never, for any reason, quiet its call to sanctity, least of all for reasons of state. But for the Church to make a focused, concrete call for a specific goal such as nuclear disarmament is to go beyond that call; it is to make a concrete judgment about worldly affairs that presumably takes into account practical and

prudential factors along with moral ones. In such an instance, the validity of the Church's analysis of these worldly factors directly determines the validity of the overarching judgment. Given the significant weaknesses in the churchmen's analysis of the nature of nuclear weapons and the characteristics of their possible use, so must the concrete call for expeditiously abolishing nuclear weapons be correlatively weakened.

Without question, Christians must strive for peace and encourage the development of a society built on love and charity rather than on fear and self-interest. But precisely how to reach such a goal in a fallen world is a matter that, especially when considerations of war and death are involved, must be addressed not only with fervor and dedication but also with sobriety and prudence. In addressing matters of such consequence and difficulty as the role of nuclear weapons in preserving and restoring peace, no less can be expected from those who serve as the moral shepherds for those journeying in this fallen world.

Conclusion, 2023: The issues addressed in this article have only become more salient since 2011. This is partially because of the more intense fervor and pointedness of the nuclear abolition movement. More fundamentally, however, great power rivalry has reemerged as the defining feature of contemporary global politics in a way that was not felt to be the case in 2011.

In this world, nuclear weapons and nuclear strategy are likely to become more salient in U.S. strategy. For instance, in light of China's large and rapid buildup of its nuclear (and conventional) forces and the Russian war against Ukraine, the United States is beginning to grapple for the first time with how to deal with not just one but two nuclear peers. In light of this, it is very possible that the United States will conclude that it needs to rely more on nuclear weapons for its defense, especially for extended deterrence—and that it may need to increase the numbers and types of nuclear weapons it deploys. In this context, moral questions about nuclear strategy will become less theoretical and more pointed. What kinds of nuclear weapons and employment are morally defensible? On what basis? In what context? These questions demand a clear framework for addressing moral questions, if moral judgments are to be structured and logical rather than mere expressions of sentiment. I hope that my contribution to this important volume helps in advancing this highly significant discussion.[26]

26 Readers may also find some additional writings from the author of relevance in the context of morality and the use of force. These include:"Terrible, But Justified," *Global Asia* 10, no. 3 (September 2015), available at https://www.globalasia.org/v10no3/ debate/terrible-but-justified_elbridge-colby (accessed April 6, 2023); *The Strategy of Denial:*
American Defense in an Age of Great Power Conflict (New Haven, CT: Yale University Press, 2021); and "The Morality of a Strategy of Denial," *First Things* (October 2022), available at https://www.firstthings.com/article/2022/10/the-morality-of-a-strategy-of-denial (accessed April 6, 2023).

Ultima Ratio: Papal Statements on Nuclear Weapons and Just War Doctrine

Heather Williams

On his return flight from a visit to Nagasaki in 2019, Pope Francis told a group of journalists, "The use of nuclear weapons is immoral, which is why it must be added to the catechism of the Catholic Church."[27] The Catechism serves as the Church's primary teaching document, and changing it could present challenges for the millions of Catholics working in the governments and militaries of countries that rely on nuclear weapons for their security. On other occasions, Francis condemned nuclear possession and deterrence, calling it "immoral."[28] These statements, along with others, suggest Francis is adopting a more critical approach to nuclear weapons than his predecessors by condemning deterrence and prioritizing nuclear abolition.[29] For example, in 1982 John Paul II said that nuclear deterrence "may still be judged morally acceptable,"[30] and the following year the U.S. Council of Catholic Bishops echoed the Pope in a letter stating, "In current conditions 'deterrence' based on balance… may still be judged morally acceptable."[31] While at first glance Francis's views on nuclear weapons might seem revolutionary, they deserve closer examination not only in the context of Francis's papacy, but also in the context of the Church's evolving attitudes on nuclear weapons and warfare more broadly.[32]

This paper uses discourse analysis to compare Pope Francis's statements to those of previous popes from the nuclear age, and puts them in the wider context of the Church's acceptance of just war doctrine. Just war doctrine has been the foundation of the Church's teachings on war and violence for over 1,700 years, based on the principles of just cause, legitimate authority, proportionality, and discrimination. As a 2,000-year old institution, change often comes slow to the Catholic Church, and the Church's position on just war doctrine has evolved over the centuries, particularly

27 Maryann Cusimano Love, "The Papal Vision: Beyond the Bomb," *Arms Control Today* (May 2020). https://www.armscontrol.org/ act/2020-05/features/papal-vision-beyond-bomb. Accessed May 3, 2023.

28 Pope Francis, "Address of the Holy Fathers on Nuclear Weapons," Hiroshima (November 24, 2019). https://www.vatican.va/content/francesco/en/messages/pont-messages/2019/documents/papa-francesco_20191124_messaggio-incontropace-hiroshima. html. Accessed May 3, 2023.

29 Aaron Bateman, "The Vatican's Nuclear Diplomacy from the Cold War to the Present," War on the Rocks (December 6, 2019). https://warontherocks.com/2019/12/the-vaticans-nuclear-diplomacy-from-the-cold-war-to-the-present/. Accessed May 3, 2023.

30 Pope John Paul II, "Message of His Holiness Pope John Paul II to the General Assembly of the United Nations," The Vatican (June 7, 1982). https://www.vatican.va/content/john-paul-ii/en/messages/pont_messages/1982/documents/hf_jp-ii_mes_19820607_disarmo-onu.html. Accessed May 3, 2023.

31 U.S. Council of Catholic Bishops, "The Challenge of Peace: God's Promise and Our Response," A Pastoral Letter on War and Peace by the National Conference of Catholic Bishops (May 3, 1983). https://www.usccb.org/upload/challenge-peace-gods-promise-our- response-1983.pdf. Accessed May 3, 2023.

32 I am grateful to Brad Roberts not only for organizing this volume and organizing the CGSR workshop on ethics and nuclear weapons, but also for encouraging me to pursue this thorny and personal subject. Thank you to Linton Brooks, Elbridge Colby, Charlie Goetz, Rose Gottemoeller, Jessica Link, Frank Miller, and George Weigel for their feedback on this project at various stages.

since the rise of nation-states and since the Vatican lost its military forces in 1870.[33] It was during the Potsdam conference in 1945 that Stalin is believed to have flippantly asked, "The Pope. How many divisions does he have?"[34] This quip betrays an enduring question about the influence of the Catholic Church in military affairs and geopolitics. The 2013-2014 humanitarian impacts of nuclear weapons initiative and the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW) have demonstrated the potential political power of smaller states and moral authorities, such as the Catholic Church, over NATO allies and states in the Global South. The Church carries a unique normative and moral authority, and this is not just a matter for Catholics. Historical research shows that popes have not only shaped international norms and attitudes around nuclear weapons, but also advocated for arms control initiatives, such as the Limited Test Ban Treaty and the Intermediate-range Nuclear Forces (INF) Treaty.[35] If the Pope does change the Catechism, this could undermine nuclear deterrence policies in nuclear possessor states and harken changes in international law on nuclear weapons.

This essay finds that Francis's statements on nuclear deterrence are not a major departure from his predecessors. He is slightly more skeptical about the effectiveness of deterrence and is more interested in multilateral disarmament efforts than strategic arms control between the superpowers, especially compared to John Paul II; but fundamentally, Francis's statements are not at odds with other popes of the nuclear age. Importantly, however, Francis's statements are symptomatic of wider efforts inside and outside the Church to turn it away from just war doctrine. For the past century, a growing number of Church leaders have called for a move away from "just war" toward "just peace," which often includes questioning the authority of states to use force, even *ultima ratio*, as a last resort in self-defense. Francis's statements on nuclear weapons and other matters of geopolitics represent a decades-long evolution in Church attitudes towards pacifism and away from just war doctrine, which has been tied to Catholicism since St Augustine in the 4th century and Thomas Aquinas in the 13th century. My argument that Francis represents more continuity than change differs from others who see his views as a radical departure from previous papal statements on nuclear weapons,[36] or a unique rejection of just war.[37] Instead,

33 Robert L. Phillips, "Nuclear Deterrence and Just War Theory," *Analyse & Kritik* 9 (1987), pp1-2.

34 U.S. Department of State, Office of the Historian, "Foreign Relations of the United States: Diplomatic Papers, the Conference of Berlin (The Potsdam Conference), 1945, Volume II," Thompson Minutes, Potsdam (July 22, 1945). https://history.state.gov/historicaldocuments/frus1945Berlinv02/d710a-65. Accessed on May 3, 2023.

35 Popes Pius XII, John XXIII, and Paul VI all advocated for a test ban treaty, and John XXIII became particularly active in lobbying for arms control following the Cuban Missile Crisis. See, for example, Pope John XXIII, *"Pacem in Terris, Encyclical of Pope John XXIII on Establishing Universal Peace in Truth, Justice, Charity, and Liberty"* (April 11, 1963).

36 Bateman, "The Vatican's Nuclear Diplomacy from the Cold War to the Present."

37 William Werpehowski, "From Deterrence to Abolition: The Evolution of Roman Catholic Nuclear Ethics," in Drew Christiansen and Carole Sargent (eds.), *Forbidden: Receiving Pope Francis's Condemnation of Nuclear Weapons* (Washington, DC: Georgetown University Press, 2023), p32.

I demonstrate that Francis is continuing a gradual shift away from "just war" towards "just peace" within the Catholic Church, albeit a contested shift, with potential implications for nuclear deterrence.

The Catholic Church and the Just War Tradition

In a 2022 pastoral letter, the Archbishop of Santa Fe, John C. Wester, called for peace, disarmament, and dialogue. In the letter, he points to Jesus's teachings on universal nonviolent love, and emphasizes, "There are no exceptions, no justifications for warfare, and no 'just war theory.'"[38] This call to turn away from just war theory and towards a "just peace" theory has been evolving within the Church for decades, and it is particularly noticeable on the issue of nuclear weapons. "Just peace" became prominent in the 1980s as a multi-faith effort and is based on seeking non-violent alternatives to war. As described by Maryann Cusimano Love, a professor at Catholic University, "To get to deeper disarmament we need to build deeper relationships. When I talk about just peace, I'm talking about how do you build right relationships based on participation, based on reconciliation, restoration, to build a sustainable peace."[39] In April 2016, the Vatican convened the *Conference on Nonviolence and Just Peace: Contributing to the Catholic Understanding of and Commitment to Nonviolence*, consisting of theologians, priests, bishops, religious sisters, and activists.[40] In his opening remarks to the conference, Francis asked the participants to revitalize the tools of non-violence, whereby the gathering's "basic premise is that the ultimate and most deeply worthy goal of human beings and of the human community is the abolition of war."[41] Just peace does not necessarily equate to pacifism, but it does create some confusion around Church teachings about war, which Francis himself acknowledged in the speech. Given the long-standing Church position on just war doctrine, the conference, and Francis's remarks point to an ongoing trajectory away from the tradition. While the principles of just war represent the Church's history over 2,000 years, they have consistently been contested in favor of pacifism.[42]

The principles of just war date to the early days of Christianity along with medieval theology, but have been adapting over the millennium to political realities. St. Augustine was the originator of just war principles. He identified peace as the ultimate

38 John C. Wester, "Living in the Christian Light of Peace: A Conversation Toward Nuclear Disarmament," A Pastoral Letter by Most Reverend John C. Wester Archbishop, Santa Fe (2022).

39 Maryann Cusimano Love, "From Nuclear Deterrence to Disarmament: Evolving Catholic Perspective", Carnegie Council for Ethics and International Affairs (June 1, 2015). https://www.carnegiecouncil.org/media/podcast/20150507b-from-nuclear-deterrence-to- disarmament-evolving-catholic-perspectives. Accessed May 3, 2023.

40 Maria J. Stephan, "What Happens When You Replace a Just War With Just Peace," *Foreign Policy* (May 18, 2016). https://foreignpolicy.com/2016/05/18/pope-francis-just-peace-catholic-vatican-africa-isis/. Accessed May 3, 2023.

41 Pope Francis, "Message of His Holiness Pope Francis to Cardinal Peter K.A. Turkson on the Occasion of the Conference on Nonviolence and Just Peace: Contributing to the Catholic Understanding of and Commitment to Nonviolence," Rome (April 11-13, 2016). https://www.vatican.va/content/francesco/en/messages/pont-messages/2016/documents/papa-francesco_20160406_messaggio-non-violenza-pace-giusta.html. Accessed May 3, 2023.

42 Hollenbach, p11.

goal, whereby war was only justified as a means of righting wrongs, such as imposing justice or in self-defense.[43] Nonetheless, Augustine also saw war as unavoidable because of the endurance of human sin. Nine hundred years later in the 13th century, Thomas Aquinas built on Augustine's criteria for the justification of war by highlighting the importance of a legitimate authority to wage war. This was subsequently adapted to support the right of states as the primary actor in matters of war and peace—and the survival of the state, self-defense, and protection of the population became ingrained in just war doctrine as a just cause for war. Importantly, both Augustine and Aquinas objected to absolute pacifism on the grounds that it was essential to combat sin for the sake of the common good. To summarize, some things are worth fighting for: the survival of the state, human dignity, and combatting evil being three such justifications.

Just war doctrine over the centuries evolved to entail two main components. *Jus ad bellum* refers to principles justifying the use of force, to include that war must be a last resort when all other options have been exhausted. The cause must be just, it must be conducted by a legitimate authority, there must be a good chance of success, and it must be proportionate, whereby the good to be obtained must outweigh the potential harm.[44] *Jus ad bellum* essentially authorizes a state to use force to right a wrong, such as in self defense against an act of aggression. *Jus in bello* are principles for conduct during war and include discrimination between combatants and non-combatants and proportionality, whereby the amount of force used is appropriate for the threat.[45] But these principles should be seen as a framework, rather than as a checklist, for collaborative moral reflection by religious and political leaders.[46]

The Catechism echoes these principles in providing guidance to practicing Catholics, but according to Joseph Ratzinger (which he expressed prior to being named Pope Benedict), just war was one of the two most contentious topics in the completion of the Catechism in 1992.[47] Four points from the Catechism are worth highlighting. First, any act of war must be taken with right intent, with the objective of pursuing peace and without hatred or anger. The Catechism states, "*Anger* is a desire for revenge….To desire vengeance in order to do evil to someone who should be punished is illicit," but it is praiseworthy to impose restitution "to correct vices and maintain justice. If anger reaches the point of a deliberate desire to kill or seriously wound a neighbor, it is gravely against charity; it is a mortal sin."[48] Any action taken

43 Christian Nikolaus Braun, "The Catholic presumption against war revisited," *International Relations* 34, no. 4 (2020), pp583-602.

44 See, for example, Phillip Acton, "The Just War Tradition and the Moral Character of Nuclear Deterrence," *Political Studies* (1991), pp5-18; Braun, "The Catholic presumption against war revisited;" and Phillips, "Nuclear Deterrence and Just War Theory."

45 Phillips, "Nuclear Deterrence and Just War Theory."

46 I am grateful to George Weigel for this point of clarification.

47 Carneiro; the second topic was the death penalty.

48 Catholic Church, *Catechism of the Catholic Church*, 2nd edition, (Huntingdon, PA: Our Sunday Visitor, 2000), p2302.

with ill intent, even if done discriminately and proportionately, would be unjust, and the state's objectives and the intent behind them is of primary import.[49]

Second, the Catechism clarifies that the use of force is only justified in cases of legitimate self-defense. Indeed, the Catechism sees legitimate defense as a "grave duty," including for defense of the common good, and "those who legitimately hold authority also have the right to use arms to repel aggressors against the civil community entrusted to their responsibility."[50] This responsibility extends not only to "states," but also to individuals leading states or serving in the military who may have the means and opportunity to protect civilians. Personal responsibility remains a theme in the Catechism.

Third, the Catechism identifies maintaining human dignity as a just cause for war:

> *Respect for and development of human life require peace. Peace is not merely the absence of war, and it is not limited to maintaining a balance of powers between adversaries. Peace cannot be attained on earth without safeguarding the goods of persons, free communication among men, respect for the dignity of persons and peoples, and the assiduous practice of fraternity. Peace is "the tranquility of order." Peace is the work of justice and the effect of charity.*[51]

Peace is not the absence of war. On the one hand, this could be interpreted as criticizing nuclear deterrence, or "a balance of power," because it is an unstable peace that undermines "the assiduous practice of fraternity." On the other hand, this could be interpreted as rejecting absolute pacifism. Confronting expansionist authoritarian regimes that undermine human dignity and are devoid of justice and charity might be seemingly peaceful and avoid conflict; however, if such a regime threatens to absorb other states, as was the case during the Cold War, this hardly constitutes "the tranquility of order." This point is an exemplar of the Church's ability to be intentionally ambiguous on controversial issues, and it cannot be read definitively one way or another.

Finally, it is also important to stress the unique role and authority of the state within just war doctrine. Again, this is captured in the Catechism, whereby "as long as the danger of war persists and there is no international authority with the necessary competence and power, governments cannot be denied the right of lawful self-defense, once all peace efforts have failed."[52] The right to self-defense is particularly pronounced when the survival of the state is at risk. Catholic scholars, including Ratzinger, acknowledged the absence of an international authority that could regulate states and provide moral guidance on the use of force. Even if such an authority

49 Elbridge A. Colby, "Keeping the Peace: The Role of Nuclear Weapons in War," *First Things* (January 2011). https://www.firstthings.com/article/2011/01/keeping-the-peace. Accessed May 5, 2023.

50 Catechism of the Catholic Church.

51 Ibid., p2304.

52 Ibid., p2308.

existed, states likely would not show deference to it.[53] States, therefore, remain the primary actor with the authority to use force, and their sovereignty and self-defense are protected under just war. Many experts have lamented this situation, whereby, "the just war tradition has become an adjunct to state policies, not a limiting factor for those policies."[54]

But there are numerous debates within just war doctrine, which are particularly apparent when applied to nuclear weapons. Do the principles of *jus ad bellum* supersede those of *jus in bello*? For example, if the survival of the state is at risk and nuclear weapons are to be used as a last resort, but their use will result in the death of civilians, is that use of force justified? In 1954, Pope Pius XII linked nuclear use to extreme self-defense, but with obvious skepticism and caveats:

> *One cannot even in principle ask whether atomic, chemical, and bacteriological warfare is lawful other than when it is deemed absolutely necessary as a means of self-defence under the conditions previously stipulated. Even then, however, every possible effort must be made to avert it through international agreements or to place upon its use such distinct and rigid limitations as will guarantee that its effects will be confined to the strict demands of defence.*[55]

The statement is nuanced and ambiguous, for how are states to know when "every possible effort" has been exhausted or if international agreements are effective? An additional challenge is whether or not the *threat* to commit an act of violence is also subject to just war doctrine, as it does not include the use of force. Essentially, is the political role of nuclear weapons as a deterrent considered unjust on the grounds of potentially threatening to destroy both military and civilian targets, including on the grounds of protecting society? The majority of Catholic critics of nuclear deterrence equate it to mass destruction; but, as Tertrais notes, this is a "questionable intellectual construct" and "outdated," and it is important to differentiate between deterrence and the physical employment of weapons. Tertrais also rightly questions if *any* nuclear use would be non-discriminatory, such as a demonstration shot, and disproportionate, especially if in response to a nuclear strike when faced with the threat of additional harm.[56]

53 Acton, "The Just War Tradition and the Moral Character of Nuclear Deterrence," p17.

54 Ibid.

55 Pope Pius XII, "Address of His Holiness Pope Pius XII to Participants in the VIII Congress of the World Medical Association" (September 30, 1954). https://www.vatican.va/content/pius-xii/en/speeches/1954/documents/hf_p-xii_spe_19540930_viii- assemblea-medica.html#:~:text=One%20cannot%20even%20in%20principle,under%20the%20conditions%20previously%20 stipulated. Accessed May 3, 2023.

56 Bruno Tertrais, *In Defense of Deterrence: The Relevance, Morality and Cost-Effectiveness of Nuclear Weapons*, *IFRI Proliferation Papers* (Fall 2011). https://www.ifri.org/sites/default/files/atoms/files/pp39tertrais.pdf. Accessed May 3, 2023.

The Church's position on nuclear deterrence and just war is also heavily influenced by its wider role in geopolitics. During the Cold War, some popes took a more active role in advocating for human dignity and rights in the context of fighting communism, particularly Pius and John Paul II. But others sought to situate the Church as an unbiased arbiter. Francis has noticeably embraced the latter stance, such as by maintaining relations with the Russian Orthodox Church throughout Russian aggression against Ukraine, which Catholic scholar George Weigel observed about the 2014 conflict, "merely reinforces the damage being done by aggressors and their clerical allies."[57] Francis has also focused, perhaps more than any previous pope, on transnational issues, such as climate change, with the Global South as his target audience, rather than great powers.

Francis's Statements in Context: Deterrence, Arms Control, and Disarmament

With the Church's evolving position on just war doctrine in mind, we can now turn to examining Francis's statements on deterrence, arms control, and disarmament in context and comparing them to his predecessors. Since the first use of nuclear weapons, popes have condemned their existence and use. Three years after the bombings of Hiroshima and Nagasaki, Pope Pius XII called nuclear weapons "the most terrible arms which the human mind has thus far conceived."[58] Pius was hardly a pacifist and strongly opposed the Soviet Union and communism on moral grounds, but nonetheless saw nuclear weapons as inhumane. His successor, John XXIII, took an even stronger approach in opposition to nuclear weapons, partially informed by the Cuban Missile Crisis and later captured in the outcomes of the Second Vatican Council. In 1963 he stated, "Nuclear weapons should be banned." His encyclical, *Pacem in Terris*, acknowledged that nuclear weapons might act as a deterrent, but condemned their testing and arms racing because they could contribute to "the calamity of a world war."[59] Following John's death, Pope Paul VI assumed leadership of the Church and the Second Vatican Council, which released a series of Church documents in 1965. One of these documents, *Gaudium et Spes*, directly addressed questions of deterrence, calling it "not a safe way to preserve a steady peace, nor is the so-called balance resulting from this race a sure and authentic peace."[60] To summarize the views of the popes in the early nuclear era: while nuclear weapons

57 George Weigel, *The Fragility of Order* (San Francisco, CA: Ignatius Press, 2018), p73.

58 Pope Pius XII, "Pope for Ban on Atom Bomb as 'Most Terrible' Weapon: Address to Pontifical Academy of Sciences" (February 9, 1948).

59 Pope John XXIII, *Pacem in Terris: Encyclical of Pope John XXIII on Establishing Universal Peace in Truth, Justice, Charity, and Liberty* (April 11, 1963), p59. https://www.vatican.va/content/john-xxiii/en/encyclicals/documents/hf_j-xxiii_enc_11041963_pacem.html. Accessed May 3, 2023.

60 Pope Paul VI, Gaudium et Spes, Pastoral Constitution of the Church in the Modern World (December 7, 1965). https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19651207_gaudium-et-spes_en.html. Accessed May 3, 2023.

might have some deterrent value, they were inhumane, their development could exacerbate tensions and lead to war, and they should be banned.

John Paul II proved the power of the papacy and statecraft. He insisted he was neither politician nor diplomat, but instead played a pastoral role in advancing a "culture-first" approach during the Cold War to both witness and advocate for human dignity and rights, including freedom of religion.[61] Two years after assuming the seat of St Peter, the Polish pope visited Hiroshima and issued his "Appeal for Peace": "To remember Hiroshima is to abhor nuclear war. To remember Hiroshima is to commit oneself to peace."[62] This language was not as dramatic as John's calls to "ban" nuclear weapons or Paul's warnings about the dangers of deterrence. It nonetheless represented a continuity in the Church's opposition to continued reliance on nuclear weapons. John Paul II's 1982 statement on deterrence is perhaps the most-cited example of the Church's supposed support for nuclear deterrence: "In current conditions 'deterrence' based on balance, certainly not as an end in itself but as a step on the way toward a progressive disarmament, may still be judged morally acceptable."[63] At first glance, this does indeed seem to be support for nuclear deterrence. Aaron Bateman for example has argued, "The Cold War environment created a willingness among popes, John Paul II in particular, to accept nuclear deterrence."[64]

But read in context, John Paul II's statements can hardly be seen as a wholesale acceptance of nuclear possession or deterrence. This "acceptance" of deterrence comes with important caveats. Immediately following the oft-cited sentence, John Paul II continued, "Nonetheless, in order to ensure peace, it is indispensable not to be satisfied with this minimum which is always susceptible to the real danger of explosion." Elsewhere in the same speech he criticizes deterrence and the "balance of terror."[65] John Paul's position on nuclear weapons, therefore, was indeed influenced by the context of the Cold War, but that hardly equated to support for nuclear deterrence or continued reliance on nuclear weapons. Rather, deterrence was only acceptable as a step towards disarmament. Benedict's views largely reflected those of John Paul II and in 2006 he referred to nuclear weapons as "baneful" and "completely fallacious."[66] Like John Paul, he saw the current nuclear landscape as unsustainable and called for a path to peace wherein all actors "agree to change their

61 George Weigel, "Lessons in Statecraft," *First Things* (May 2015). https://www.firstthings.com/article/2015/05/lessons-in- statecraft. Accessed May 3, 2023.

62 Pope John Paul II, "Appeal for Peace," *Hiroshima* (February 25, 1981). https://peace-tourism.com/en/spot/entry-79.html#:~:text=During%20his%20February%2025%2C%201981,and%20end%20to%20all%20wars. Accessed May 3, 2023.

63 Pope John Paul II, "Message of His Holiness Pope John Paul II to the General Assembly of the United Nations" (1982).

64 Bateman, "The Vatican's Nuclear Diplomacy from the Cold War to the Present."

65 Love, "The Papal Vision: Beyond the Bomb" (2020).

66 Pope Benedict XVI, "Message of His Holiness Pope Benedict XVI for the Celebration of World Peace Day" (January 1, 2006). https://www.vatican.va/content/benedict-xvi/en/messages/peace/documents/hf_ben-xvi_mes_20051213_xxxix-world-day-peace.html#:~:text=39th%20World%20Day%20of%20Peace,In%20Truth%2C%20Peace%20%7C%20BENEDICT%20XVI&text=1.,of%20violence%20and%20armed%20conflicts. Accessed May 3, 2023.

course by clear and firm decisions, and strive for a progressive and concerted nuclear disarmament."[67] The positions of popes before Francis, therefore, show consistent rejection of reliance on nuclear weapons.

Francis's statements largely align with those of his predecessors. In a 2022 letter to the TPNW Meeting of States Parties, for example, he stated, "Trying to defend and ensure stability and peace through a false sense of security and a 'balance of terror,' sustained by a mentality of fear and mistrust inevitably ends up poisoning relationships between peoples and obstructing any possible form of real dialogue."[68] His calls to "go beyond nuclear deterrence" and to "adopt a long-term process, based on the awareness that everything is connected"[69] resonate with John, Paul, John Paul II, and Benedict's warnings about the unsustainability of the nuclear status quo and need for a deeper and more meaningful peace. The Holy See itself has stressed continuity in papal statements, such as in 2015 when a representative of the Vatican to the Conference on Disarmament said, "From very early on, the Catholic Church has consistently rejected deterrence as a reliable or, much less, permanent basis for peace."[70]

There is one nuance in Francis's statements on deterrence that differentiates him from his predecessors, namely that he questions whether or not nuclear weapons actually deter. Even John XXIII had acknowledged the deterrent value of nuclear weapons. In *Pacem in Terris* he wrote, "the monstrous power of modern weapons does indeed act as a deterrent."[71] And popes consistently acknowledged the "balance of terror" that nuclear weapons imposed on the international system, albeit a balance they were eager to move away from and towards a more lasting peace. Francis differs, however, in raising doubts about nuclear weapons' ability to deter, such as a 2017 statement, which stated that "regarding the inadequacy of nuclear deterrence as an effective response to such challenges (e.g. cybersecurity, asymmetric threats, climate change)."[72] This tracks with a growing body of scholarship questioning the deterrent value of nuclear weapons,[73] and whether or not they have sustained great power

67 Ibid.

68 Pope Francis, "Message of His Holiness Pope Francis to His Excellency Alexander Kmentt President of the First Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons" (2022). https://www.vatican.va/content/francesco/en/messages/pont-messages/2022/documents/20220621-messaggio-armi-nucleari.html. Accessed May 3, 2023.

69 Pope Francis, *Laudito Si: On Care for Our Common Home* (May 24, 2015). https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html. Accessed May 3, 2023.

70 Archbishop Bernadito Auza, "The Holy See on the Abolition of Nuclear Weapons" (May 7, 2015). https://holyseemission.org/contents/statements/55e34d381107a0.55385271.php. Accessed May 3, 2023.

71 Pope John XXIII, *Pacem in Terris*.

72 Pope Francis, "Message of His Holiness Pope Francis to the United Nations Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards Their Total Elimination," New York (March 27-31, 2017). https://www.vatican.va/content/francesco/en/messages/pont-messages/2017/documents/papa-francesco_20170323_messaggio-onu.html. Accessed May 3, 2023.

73 See, for example, Ward Wilson, "The Myth of Nuclear Necessity," *The New York Times* (January 13, 2013).

stability through deterrence or through luck.[74] Aside from this caveat, however, the Church's position and statements by popes have been largely consistent in stating nuclear weapons are inhumane, deterrence is unsustainable as a means for peace and stability, and states should work towards a more meaningful peace.

Turning to papal statements on arms control and disarmament, the Catholic Church has consistently sought to promote dialogue and negotiation as an alternative to deterrence. In 1955, Pius XII referred to an agreement on nuclear testing as "a duty of conscience" of the "people and their rulers." He went so far as to get into the technical details of what such an agreement might entail:

> *There are those who have suggested inspections with planes specially equipped for the purpose of monitoring large territories in respect of atomic explosions. Others might perhaps think of the possibility of a worldwide network of observation centers, each run by scholars from different countries and guaranteed by solemn international commitments. Such centers should be equipped with delicate and precise tools for meteorological observation, seismic observation, chemical analyses, mass spectrographies, and the like, and would make it possible to have real control over many of the activities—sadly not all—which had previously been forbidden in the field of experiments by atomic explosions.*[75]

During the Cuban Missile Crisis, which aligned with the opening of the Second Vatican Council, John XXIII offered to mediate between Kennedy and Khrushchev and the crisis inspired John to write *Pacem in Terris* the following year.[76] Throughout the final decade of the Cold War, John Paul II consistently lobbied Ronald Reagan to pursue arms control efforts, often using the Pontifical Academy to help make the case by drawing on their research on the consequences of nuclear weapons use.[77] Influence worked both ways, and there is evidence to suggest that the Vatican softened the language in the 1983 Catholic Bishops Letter because of the pope's close relationship with Reagan.[78] The letter would ultimately conclude, "Nuclear deterrence should be used as a step on the way to progressive disarmament," similar to John Paul's 1982 statement, but it expanded on this idea of the pathway to

74 See, for example, Benoit Pelopidas, "The unbearable lightness of luck: Three sources of overconfidence in the manageability of nuclear crises," *European Journal of International Security*, 2:2 (July 2017), pp240-262.

75 Pope Pius XII, "Radio Message from His Holiness Pius XII to the Whole World on the Occasion of Christmas" (December 24, 1955).

76 It is worth noting, however, that there is no historical evidence that John XXIII did play any mediatory role in the resolution of the Cuban Missile Crisis.

77 See, for example, Abigail Skalka, "Scientists on Crusade: Vatican Nuclear Advocacy and the Holiness of the Cold War," Harvard Davis Center (August, 25, 2022). https://daviscenter.fas.harvard.edu/insights/scientists-crusade-vatican-nuclear-advocacy-and-holiness-cold-war. Accessed May 3, 2023.

78 Jared McBrady, "The Challenge of Peace: Ronald Reagan, John Paul II, and the American Bishops," *Journal of Cold War Studies* 17, no. 1 (Winter 2015), pp129-152.

disarmament arguing "it must not be delayed," citing "an urgent moral and political responsibility to use the 'peace of a sort' we have as a framework to move toward authentic peace through nuclear arms control, reductions, and disarmament."[79]

If previous popes advocated for bilateral strategic arms control as a step on the pathway to disarmament, Francis is taking a more radical approach and skipping the "step by step" pathway to advocate for disarmament with little mention of the security environment, negotiations, or technical factors to reach this end goal. In his encyclical *Laudito Si*, for example, Francis states, "We stand naked and exposed in the face of our ever-increasing power, lacking the wherewithal to control it. We have certain superficial mechanisms, but we cannot claim to have a sound ethics, a culture and spirituality genuinely capable of setting limits and teaching clear-minded self-restraint."[80] This is a far more cynical view on the potential role of arms control than John Paul II or Pius XII. While Francis has repeatedly called for abiding by legal agreements, he often points to the TPNW, which was negotiated without the involvement of any nuclear possessors. On his Nagasaki visit, he stressed the importance of the TPNW and the need to "support the principal international legal instruments of nuclear disarmament and non-proliferation, including the Treaty on the prohibition of nuclear weapons."[81] It is curious he chose to mention the TPNW rather than the NPT, which has near universal membership, including five of the nine nuclear possessors. Elsewhere, however, the Holy See has stressed the importance of the NPT but has warned that the treaty's effectiveness and credibility could be undermined without meaningful progress towards disarmament.[82]

To summarize this discourse analysis, Francis's statements are consistent with his predecessors in condemning nuclear weapons as weapons of war and stressing the need for progress towards meaningful peace and disarmament. Where he differs slightly from his predecessors is in questioning the effectiveness of nuclear deterrence, and in emphasizing disarmament over arms control, particularly the TPNW and similar normative efforts, rather than negotiation between nuclear possessors. In the context of just war doctrine, these statements essentially rule out the use of nuclear weapons even in extreme circumstances of self-defense, invasion, or if the survival of the state is at risk, even when all attempts at negotiation have been exhausted. Interestingly, many Church leaders rely on just war to condemn nuclear weapons, such as referring to their "incalculable and indiscriminate consequences," but this is to focus on just one part of just war doctrine—*jus in bello*—without accounting for the other—*jus ad bellum.*

79 U.S. Council of Catholic Bishops, "The Challenge of Peace," 1983.

80 Pope Francis, *Laudito Si.*

81 Love, "The Papal Vision: Beyond the Bomb" (2020).

82 See, for example, Archbishop Auza (2015).

Indeed, it is often hard to reconcile papal statements on nuclear weapons with the just war principles of the Catechism.[83] While John Paul's statements may be interpreted as begrudgingly accepting deterrence as an interim measure, they should not be interpreted as acceptance or condoning the continued possession of nuclear weapons, threats to use them, or even their use under any circumstances. Some popes involved themselves more directly in geopolitics and the battle against communism, particularly Pius XII and John Paul II, but they have all rejected nuclear weapons and nuclear deterrence as a means of working towards peace. Papal statements on nuclear weapons over the past 75 years are but one manifestation of the Church's contested position on just war doctrine.

Implications for Individuals, States, and the Catholic Church

The impact of the Church's position on nuclear weapons and just war will ultimately depend on if and how Francis or a future pope changes the Church's position. So how does change happen in the Church? As answered by Ross Douthat, "Very carefully, and by overwhelming consensus."[84] The Church itself is defined by its consistency over generations and the continuity of beliefs, regardless of who sits in the chair of St. Peter. Attempting to radically shift Church position within a single papacy would be akin to trying to turn around a cruise ship on a dime. There is also the question of what constitutes the "Church position." On the topic of nuclear weapons, popes, bishops, and cardinals continue to make conflicting statements about the morality of nuclear possession or deterrence, and on diplomatic issues such as the effectiveness of the TPNW. Douthat went so far as to refer to the pope as "the prisoner of the Vatican," because while he has a significant title and responsibility, he actually has very limited room for maneuver or negotiation, with major constraints on his ability to change Church teachings, doctrine, or policy on anything.[85] The Pope has the option of speaking with infallibility, otherwise known as speaking *ex cathedra*; however, this has not been exercised since 1950 with the doctrine of Mary's bodily assumption to heaven. The pope is caught in a Catch-22 whereby he has authority to lead the Church and make changes, but that authority depends on the responsibility of continuing Catholic tradition and faith across generations, which means more consistency than change and certainly no rapid departures from past practice.[86]

With these limitations in mind, what options does Pope Francis or his successors have for changing the Church's position on nuclear weapons? Many of these options might not speak directly to nuclear weapons, but rather could be in reference to a more fundamental change in the Church's position on just war doctrine, which would

83 John Andrews, "The Bishop's Bomb," *National Review* (June 16, 2010). https://www.nationalreview.com/2010/06/bishops-bomb- john-andrews/. Accessed May 3, 2023.

84 Ross Douthat, *To Change the Church: Pope Francis and the Future of Catholicism* (New York: Simon & Schuster, 2018).

85 Ibid.

86 Ibid.

have implications for nuclear weapons, among other issues. The most drastic option would be an *ex cathedra* statement on the moral acceptability of violence even in cases of self-defense, potentially turning the Church away from just war doctrine after nearly 2,000 years. This option would have implications for the authority of states, the right to use force in self-defense. Given the rarity of infallible papal statements, this seems the most unlikely. (John XXIII said, "I am only infallible if I speak infallibly, but I shall never do that."[87]) A second option would be a change to the Catechism. For example, in 2018 Francis changed the Catechism's statements on the death penalty. The Catechism ultimately serves as a statement of faith, outlining norms for teaching. Another option would be that Francis might continue to speak out against nuclear possession and deterrence as he has been, but potentially to be more explicit about the implications for individuals working on nuclear weapons, such as members of the military, or for states that rely on nuclear weapons, such as whether or not deterrence would be immoral if the survival of the state was at risk. This could be done in an encyclical as a follow-on to *Laudito Si* and *Fratelli Tutti*, or in a major statement before the United Nations, as John Paul II did in 1982.

The implications of the Church's position will depend on which path, if any, Francis chooses, but we can nonetheless examine what a turn away from just war and stronger condemnation of nuclear weapons, in various formats, would mean for individuals, states, and the Church itself. For individual practicing Catholics, a change to the Catechism on nuclear weapons could have serious consequences. Devout members of the military, for example, would likely have to request different assignments or change professions, depending on their proximity to working on nuclear weapons. For less strict Catholics, they might justify continuing to work on nuclear issues arguably as long as they would not be individually responsible for any potential nuclear use or in the chain of command. There are questions about how far the individual responsibility would extend beyond members of the military, and the implications for policymakers, academics, or non-governmental experts. Some Catholic scholars have suggested that taxpayers in nuclear possessor states are guilty of an intrinsically evil act by supporting the continued possession of nuclear weapons, albeit indirectly.[88] But ultimately the impact would depend on how the Catechism was changed, and how this change would be reconciled with existing Church teachings on just war.

Francis's statements on nuclear weapons often appeal to individuals and the human conscience, such as his letter to the TPNW MSP in 2022, which questioned, "Whatever our role or status may be, each of us bears various degrees of responsibility: how can we possibly envisage pushing the button to launch a nuclear bomb?"[89] Similarly, in a recent volume of essays on the Catholic Church and nuclear weapons, Drew Christiansen argues that practicing Catholics must ask, "What must *I* do?" By this line of argument, individuals

87 Ibid.

88 Joseph Fahey, "Catholic Conscience and Nuclear Weapons," *The Journal of Social Encounters 4*, no. 2 (2020), p45.

89 Pope Francis, Letter to the TPNW (2022).

should not wait for a change in the Catechism, but rather should ask these questions of nuclear deterrence and look within their souls now to decide how to respond to an "urgent sign of the times."[90] The Catechism essentially calls on practicing Catholics to reflect on their personal responsibility in matters of war, and this would extend to individuals working on nuclear weapons.

The implications for states could also be significant. An *ex cathedra* statement or encyclical on just war doctrine and *ultima ratio* use of force, after all diplomatic options have been exhausted, could be perceived as undermining the "norm" of deterrence as recognized in the 1996 International Court of Justice Advisory Opinion, among other impacts. This normative and moral pressure might appeal to domestic audiences, activist groups, and parliamentarians. The result could increase bottom-up pressure on states to abandon reliance on nuclear weapons, such as NATO members or smaller nuclear states susceptible to normative pressures, such as the United Kingdom. Normative pressure would likely appeal to a large number of non-nuclear weapon states along with states in the Global South. One challenge is that disarmament on normative grounds, without considering the security environment, might just push states to increase reliance on more usable conventional weapons or advanced technologies. Indeed, the morality of nuclear deterrence must be judged in relation to the alternatives.[91] Another obvious challenge of this would be that norms do not stick equally, and many authoritarian states, such as Russia and China, might not be impacted. Essentially, this could lead to unilateral disarmament by democracies. This would potentially allow tyranny to prevail, which is not necessarily the lesser evil, to paraphrase Michael Quinlan.[92]

Finally, what would be the implications of a shift away from just war doctrine and a stricter interpretation of nuclear deterrence for the Catholic Church itself? Ultimately this would depend on how strong a statement the Church sends, and whether that statement applies to just war doctrine writ large or is specific to nuclear weapons. A partial or complete rejection of just war could jeopardize the Church's role as international arbiter and impede its ability to engage states if it is unwilling to recognize the geopolitical realities of the security environment and states' interests.[93] A change in position specific to nuclear weapons might also jeopardize the Church's credibility in advocating for and facilitating arms control negotiations, as John and John Paul II did, along with its role as bridge-builder between nuclear possessors and non-possessors, between the great powers, middle powers, or the Global South. More broadly, changes in the Church's position on just war doctrine would contradict over 1,700 years of teaching and tradition, and could prompt a crisis within the Church.

90 Drew Christiansen and Carole Sargent, eds., *Forbidden: Receiving Pope Francis's Condemnation of Nuclear Weapons* (Washington, DC: Georgetown University Press, 2023).

91 Joseph Nye, *Nuclear Ethics* (New York: Free Press, 1988), pp79-80.

92 Michael Quinlan, *Thinking about Nuclear Weapons: Principles, Problems, Prospects* (Oxford: Oxford University Press, 2009), p24.

93 Bateman sees Francis's position as likely to alienate states from the Vatican, "and actually impede the Vatican's objectives in the realm of nuclear diplomacy."

As an alternative, Francis or his successors could take a more nuanced approach to nuclear weapons in line with Catholic tradition. As a caveat, I offer these suggestions not as a criticism of the Church's position on nuclear weapons, but rather based on key assumptions: the Church must continue to balance between its conservative and liberal tendences, but it also wishes to play the role of a fair and just mediator in international affairs. This will mean avoiding definitive statements on thorny issues, including just war doctrine, and instead positioning itself as an advocate of dialogue and negotiation. Essentially, I am assuming the Pope wishes to maintain the legacy of his title, "pontiff," or "bridge-builder."

With these caveats in mind, I suggest four modest steps Francis, his successors, or other Church leaders might take. First, the pope and other Church leaders might emphasize the importance of *ultima ratio*, whereby all diplomatic pathways need to be pursued and exhausted, before the use of force is justified as a means of last resort. Doing so would be in alignment with Church principles of dialogue and the pursuit of peace, and could be done in such a way as to maintain its signature nuance and ambiguity. This would serve the double purpose of continuing the Church's legacy as an advocate for negotiations, while also implicitly acknowledging that the Church does not embrace absolute pacifism.

Second, the Church could acknowledge *both* the legitimate authority of states and the importance of international society. Thus far, Francis has largely focused on the latter at the expense of the former. But failing to acknowledge the reality of states authority along with their role in making moral choices is to risk the pursuit of individual justice at the cost of survival, as argued by Joseph Nye, which could lead to immoral consequences.[94]

Third, the Church could focus on a wider set of disarmament options, to include the TPNW, NPT, behavior-based arms control, and strategic arms control. As Quinlan argued, "To demand negotiation for which the political conditions simply do not yet exist is mere posturing. But there is genuine work to be done on identifying the conditions that would have to exist and the mechanisms that would need to be put in place, and on getting as much international understanding of all this as possible." Indeed, facilitating negotiation in arms control and working with nuclear possessors is an important Vatican legacy and role. Francis's turn away from strategic arms control and to the TPNW puts that at risk at a time when the world desperately needs negotiation, dialogue, and bridge-builders. Archbishop Tomasi, Secretary of the Holy See's Dicasteryon Integral Human Development, said recently at Catholic University, "There is no illusion that the number of weapons will disappear as if by magic or after moral and legal condemnation. Therefore, the Holy See is equally engaged in a step-by-step dialogue with nuclear-armed states whose commitment remains crucial to the achievement of any serious and realistic discussion of nuclear arms control." A similar statement from the Pope would give greater credibility to this approach.

94 Nye, *Nuclear Ethics*, p33.

Finally, there is a key issue that Francis has thus far been silent about: if nuclear possession is immoral, does he therefore support unilateral disarmament? Both John Paul II and the 1983 Catholic Bishops clarified that they did not support unilateral disarmament. This would be an important gesture in acknowledging the geopolitical realities and the associated risks of disarming democracies in the face of authoritarian nuclear bullying.

Conclusion

Any study of religion and nuclear weapons requires a degree of humility. Religious beliefs are deeply personal but have wider strategic impacts. While some religious beliefs are enshrined as doctrine, others, such as just war, continue to evolve with historical and political experiences.[95] A change in the Church's alignment with just war doctrine would signal an ongoing slide towards pacifism and be more significant than any stand-alone statements on nuclear weapons. Many popes have already expressed skepticism about just war in their public statements or in encyclicals, and yet the Catechism and Church doctrine remain tied to the legacies of Augustine, Aquinas, sovereign states' legitimate authority, and *ultima ratio*, the use of force as a last resort. This tension creates difficult challenges for Francis and other Church leaders going forward.

Essentially, the Church needs to strike a delicate balance, as is often the case, between upholding tradition and just war principles while also continuing on its trajectory of highlighting the unsustainability of deterrence. To abandon the former would simply be too radical a shift for the Church after 1,700 years of belief and tradition, not to mention that it would also undermine the Catechism and the Second Vatican Council. We continue to live in a "fallen world," and to abandon just war would be to concede to those who seek to undermine human dignity and violate international laws and norms, rooted in moral, as well as political, principles. But to abandon the latter position—the unsustainability of deterrence on humanitarian grounds—would be too radical a shift in the Church's recent trajectory of speaking out against nuclear weapons. This leaves very little middle ground, but Francis and his successors might simply open the aperture of their support for arms control and disarmament to return to directly engaging with and supporting bilateral strategic arms control and engaging with nuclear possessors, while continuing its work with the TPNW.

One topic not explored in this essay but worthy of further discussion is the Church's role in bringing nuclear weapons into the public consciousness. With the end of the Cold War and the dissipation of the shadow of nuclear Armageddon, these weapons largely disappeared from public (and even political) debates, with the occasional Hollywood exception. Among many other things, one of the outcomes of Francis's papacy will be his renewed emphasis on nuclear issues, more so than any

95 See, for example, David Hollenbach, "Drew Christiansen on Nonviolence and Just War," Berkley Forum (November 30, 2022). https://berkleycenter.georgetown.edu/responses/drew-christiansen-on-nonviolence-and-just-war. Accessed May 3, 2023.

pope since the 1980s. And while Francis's views represent one side of a complex issue, they have acted as a call to engagement, to dialogue with the ethics of nuclear weapons. For none of these questions are easy: is it more moral to refrain from counterforce strikes at the risk of losing hundreds of thousands of civilians, or to launch limited counterforce strikes at the risk of nuclear escalation? Is it more moral to "turn the other cheek" in the face of an illegal invasion that might threaten the survival of the state, or to use whatever means necessary, if all diplomatic options have been exhausted? And assuming Aristotle is right, and "only the dead have seen the end of war," is it more moral to continue to rely on nuclear deterrence, despite its ethical challenges, or to return to an era of conventional wars? There are no easy answers to these questions, and Francis, among others, has done an important service in bringing them back to public political discourse.

Russia's War on Ukraine: Implications for Moral Arguments about Nuclear Deterrence

Peter Watkins

Russia's war on Ukraine is the largest war in Europe since World War II. It has involved the infliction of both military and civilian casualties—as well as scenes of destruction on a scale not seen since then. The conflict and its impact on the lives of combatants and non-combatants are being extensively reported in near real time. And it has been accompanied from the outset by threats of the use of nuclear weapons. How has the war affected the arguments around the morality of nuclear deterrence? In addressing this question as a (former) practitioner, I have focused on how practitioners—especially British ones—have framed these arguments and considered the extent to which the war has reinforced or weakened that framing.

Practitioners work within a context—operational, institutional, and political. Their views on the morality of nuclear deterrence will reflect their personal convictions—but also within that context. There is also a degree of self-selection: In the countries represented by the authors in this volume, officials have some choice with respect to the departments and roles to which they are assigned. If they have significant personal reservations about nuclear deterrence, they will work in other departments or in roles within the Ministries of Defence which are safely distant from nuclear decisionmaking.

There is some evidence that, institutionally, the United Kingdom (UK) has always been a slightly reluctant nuclear power. In documents from the 1950s and before, officials were very aware of the sheer destructive power of nuclear weapons. Then and subsequently, there appears to have been a lot of agonizing over the possession of nuclear weapons—more perhaps than in France. Some of this was driven by financial pressures which have persisted since the end of World War II: the UK defense establishment was always very conscious of the cost of the nuclear enterprise and the fact that this squeezed the funding available for conventional forces, not least those deployed outside the Euro-Atlantic area. But this agonizing was also driven by moral considerations.

Institutional thinking in the UK about nuclear deterrence was, of course, heavily influenced by Michael Quinlan, a senior official who held key posts at certain decisive moments, particularly in the late 1970s/early 1980s. Quinlan was deeply engaged in the ethical dimension of nuclear deterrence. His thinking imbued the main policy documents of the time and remains traceable in current ones.

In terms of the political context, nuclear deterrence has been politically disputed territory since at least the early 1960s—although seen by British politicians and activists mainly through the lens of the UK's possession of its own independent nuclear force. For much of this period, the extent of the debate has been contained by the fact that both main parties, Conservative and Labour, had been complicit

in the decisions to develop that force—only during the 1980s did one of the main parties (Labour) officially support unilateral nuclear disarmament. Political and public criticism of the UK's nuclear deterrent was partly driven by cost and wider geopolitical considerations (e.g., the dependency on the United States), but also by ethical ones. In essence, the latter were twofold. First, that the expenditure on nuclear weapons could not be justified when people in the UK and elsewhere were homeless or starving, for example. Secondly, and more fundamentally, that the scale of death and destructions caused by nuclear use could not be justified—even to forestall conquest by a totalitarian dictatorship. Although the majority of practitioners in the British governmental system are required to be politically neutral, they have inevitably been mindful of this wider political debate and have often been drawn into it, although generally indirectly.

One of the main arguments, strategic and moral, for nuclear deterrence in the British context has been that it has made a decisive contribution to the prevention of war between the major powers since 1945. The potential destructiveness of such a war, even if fought entirely with conventional means, was vividly illustrated by the World War I and II. One British official document said as early as September 1945: "The main function of our armed forces should be the prevention of major war."[96] The qualifying phrase "between the major powers" or "between the great powers" is often omitted from such formulations, but is arguably implicit in them.

Of course, nuclear deterrence has not prevented all wars. There has been a large number of inter-state wars since 1945, including major ones and ones involving the great powers: the Korean War, Vietnam War, Indo-Pakistan wars, Falklands Conflict, Iran-Iraq War, and the first and second Gulf Wars. In some of these, there were huge numbers of casualties, military and civilian. But there has been no major war involving a direct clash between the great powers and thus—arguably—even the more violent of the wars that took place incurred a toll well short of that witnessed in the World War I and II.

In what respects does the Russia-Ukraine war seem different?

First, its outbreak represented a failure of deterrence. This is a somewhat controversial claim, so let me be clear. I do not mean *NATO's* deterrence strategy—that has not failed, as Russia has not attacked an Allied country. I mean deterrence in a basic sense. The United States, the UK, the Secretary General of NATO and others sought to deter the Russian leadership from invading Ukraine by explicitly threatening severe consequences and high costs, mainly political and economic ones—and reinforcing the credibility of those threats by an unprecedented release of intelligence on Russia's plans. That did not work. In the case of the previous wars that I mentioned, deterrence failure is less apparent, as conflict had already started (e.g., Vietnam) so the issue was compellence, not deterrence; deterrence messaging

96 Quoted in Gregory Giles et al., *Minimum Nuclear Deterrence Research Final Report, Section Two United Kingdom*, ppII-18, Defence Threat Reduction Agency Advanced Systems and Concepts Office (May 15, 2003).

was weak and contradictory (e.g., the Falklands); or the main factor was surprise (e.g., Iraq's invasion of Kuwait in 1990).

Secondly, one of the supporting arguments for nuclear deterrence deployed by Michael Quinlan and others is that it imposes restraint on the great powers. But clearly Russia has not acted with restraint—it recklessly attacked a large, well-armed neighboring country. And it has shown little restraint in the prosecution of the war, as its deliberate attacks on civilian infrastructure flagrantly disregard the principles of the international law of armed conflict.

Thirdly, nuclear deterrence has provided an umbrella under which Russia has initiated and sustained what it regards as a limited war—but one which has already caused huge human suffering, much greater in simple numerical terms than, say, that in the former Yugoslavia in the 1990s. Fear of escalation has deterred **direct** intervention by other powers on Ukraine's behalf to stop this suffering. From a Russian perspective, deterrence has not worked perfectly either. President Putin said in the early hours of February 24, 2022: "Whoever tries to impede us… must know that the Russian response… will lead to the consequences you have never seen in history."[97] That did not deter significant and growing indirect assistance to Ukraine through the supply of equipment and training.

Fourth, the Russian leadership has repeatedly and publicly hinted at the possibility of nuclear use, not only to deter external intervention but also as part of its information campaign vis-à-vis the Kyiv government and others. Were nuclear use to occur on Ukrainian soil, even if "only" a single tactical device, it is likely that there would be extensive casualties from the release of radiation, if not from the blasts. The "nuclear taboo" would have been broken after almost 80 years. What would happen next must be a matter for conjecture. But were there to be a muted response by the Western powers for fear of escalation, other nuclear-armed revisionist states could be encouraged to act more aggressively in pursuit of their agendas. And currently non-nuclear states could be encouraged to seek to acquire nuclear weapons. Uncontrolled proliferation could increase the risk of further deliberate or accidental nuclear use, with severe consequences if either were to occur.

The core moral argument for nuclear deterrence can perhaps be roughly summarized thus: Although nuclear deterrence involves threatening to use (and potentially having to use) weapons which would cause massive death and destruction, its purpose is to reduce the likelihood of major war between great powers which would be hugely destructive even if fought entirely with conventional means. While nuclear deterrence inherently entails risk (if conflict were to break out, it could escalate quickly to nuclear exchange), there are strong incentives on states to avoid risk. Thus, nuclear deterrence is inherently stable, not precarious. Therefore, while the consequences of actual nuclear use would be dire, the probably of such use is low.

97 Quoted in "Russia Attacks Ukraine as Defiant Putin Warns US, NATO," Associated Press (February 24, 2022).

In the meantime, nuclear deterrence has enabled people to live in greater peace, freedom, and prosperity than would otherwise be the case.

The Russia-Ukraine war appears to weaken the moral argument for nuclear deterrence in two main respects. First, it is a concrete example of nuclear deterrence providing cover under which a rogue regime could conduct limited wars—a risk identified by one of Quinlan's correspondents, Beatrice Heuser.[98] Secondly, the occurrence of such a war—and the state behaviors and rhetoric that have accompanied it—suggests that, as a sort of self-balancing system, nuclear deterrence may be more precarious than its proponents have previously argued, with the massively harmful consequences of breakdown therefore more probable. The essentials of the moral calculus in favor of nuclear deterrence remain, but the elements are softer.

There are other considerations, however.

First, while deterrence failed before February 24, 2022, it was not textbook deterrence. The U.S. leadership in particular had taken the possibility of military response options off the table. And the German government had blocked some of the more far-reaching economic options (e.g., expelling Russia from Swift). Perhaps this made no difference, but we can never know for sure. Perhaps therefore one of the lessons of this episode is to stick to the canons of deterrence theory—that is, maintain certainty that aggression will trigger a response, although there will be ambiguity as to the scope of that response.

Secondly, while Russia's nuclear deterrent provided cover under which it invaded Ukraine, NATO's nuclear umbrella gave Western, and particularly neighboring European, states the confidence to supply Ukraine with weapons despite Russian threats. While Ukraine's own efforts have been key, these supplies have—for the time being at least—helped turn the tide and hold it back. Perhaps deterrence **in** war as well as deterrence **of** war needs to be given more consideration as part of the moral calculus.

Thirdly, Russia's invasion of a sovereign neighbor and the associated brutality indicates that fears of a resurgence of state-on-state aggression—or even the re-emergence of 20th century-style megalomaniacal dictators—are not as far fetched as detractors of nuclear deterrence claim. In particular, it illustrates the folly of creating a situation—as the nuclear disarmers would—in which dictatorships have nuclear weapons but liberal democracies do not.

In short, Russia's war on Ukraine leaves the moral case for nuclear deterrence somewhat bloodied, but as yet unbowed. Indeed, it sharpens the moral paradox at its heart. Against a determined (and possibly paranoid) aggressor such as Vladimir Putin, it appears that "soft" deterrence (e.g., political, economic) measures do not work. This suggests that it is **only** the prospect of inflicting irretrievable damage to such an

98 Quoted in Tanya Ogilvie-White, *On Nuclear Deterrence: The Correspondence of Sir Michael Quinlan*, IISS (New York, NY: Routledge, 2011), p251.

aggressor's own powerbase—which, in turn, entails the near certainty of significant civilian casualties—that reliably deters aggression by the major powers and the horrors of war that accompany it.

Nuclear Weapons Ethics and a Critique of the "Strong Case" for Disarmament

Christopher A. Ford

Nuclear weapons ethics is a challenging field for various reasons. To begin with, the issues are *complicated*, requiring ethical reasoning that is informed by some understanding of—or at least defensible assumptions about—a range of challenging matters on which it sometimes seems almost unreasonable to expect any single person to be particularly expert. These issues include: the actual science of the technologies involved (and their effects); the complexities of geopolitics; murky issues of both individual and collective human psychology and behavior; potential idiosyncrasies in decisionmaking, risk aversion, and politico-moral calculation among national leaders having very different civilizational, institutional, and personal backgrounds; and matters related to the structure, posture, and command-and-control architecture of nuclear arsenals that countries often work very hard to keep secret.

But ethical reasoning in this arena is also difficult simply because of the magnitude of the issues involved—or, more specifically, because of the magnitude of the emotions they arouse and the political heat such topics generate. Questions involving what to do with technologies and systems potentially capable of incinerating millions of innocent people in just a few minutes are matters that inescapably raise profound and immediate moral issues. Yet precisely *because* of the profundity and immediacy of these issues, they are also topics about which it can sometimes be challenging to think clearly and carefully. Simply put, the implications matter so much, and could affect so many, that they raise emotive energies that sometimes risk drowning out the *reasoning* part of "moral reasoning," leaving one with no more than simple *moralism*.

At the same time, paradoxically, issues of nuclear weapons and potential nuclear war are *also* so morally and emotively large and weighty that they can sometimes produce a sort of dazed lethargy—a conclusion that they raise questions *so* heavy and complex as to be overwhelming and unresolvable. This can give rise to feelings of hopelessness or despair, and a disinclination to wrestle with these challenges.

We must resist the alternative temptations of shallow moralism and of resignation, and we need to be willing to grapple seriously with the complexities of nuclear ethics. This paper represents my attempt to follow this advice.

In my view, nuclear weapons ethics have not received the critical and intellectually rigorous attention they deserve. Disarmament advocates tend to take the case *against* nuclear weaponry as a given, and while they often advance moral claims in this respect, their very assumption that this case *is* so clear and inexorable can lead them to neglect actually defending it. ("Must one *really* defend the obvious?") Advocates of nuclear deterrence, by contrast, also take the obviousness of their position as a given, and similarly devote too little attention to the challenge of specifically arguing its moral basis—though perhaps in their case they do so out of distaste for engaging

in moral debates in which the other side assumes pro-deterrence views to be immoral and isn't shy about saying so. ("You just can't *talk* to them!") Too often, therefore, discourse remains stuck in mutual incomprehension and recriminations, caught between one camp that assumes the other to be evil and an opposing camp that assumes its counterparts to be naïve.

As a result, despite their surpassing importance, issues of nuclear weapons ethics have not hitherto been addressed in the sustained and serious ways they deserve. The world deserves better. This is why the present edited volume, sponsored by the Center for Global Security Research at Lawrence Livermore National Laboratory, is of such importance: it helps fill an important need for intellectual rigor and real scholarship in exploring nuclear ethics.

In this chapter, however, I will leave the ethical case *for* nuclear deterrence to others—though by way of full disclosure, I do believe that there is a compelling moral basis for deterrence, at least if practiced responsibly in light of the various wrinkles and details that will be discussed hereinafter. As my contribution to this volume, I will instead offer an outline of the most emphatic possible case that I believe can be made for the abolition of nuclear weapons. I will then examine the assumptions upon which the elements of that argument are premised—assessing their relative strengths and weaknesses—before offering my own thoughts about how to approach these ethical debates and to think morally about nuclear weaponry.

The Abolitionist Case

So what, then, is the most emphatic case that can be made in favor of the absolute and immediate abolition and dismantlement of all nuclear weapons? As best I understand these issues, it sounds more or less like the argument outlined below—which I make based not upon straw man (and potentially cherry-picked) conjectures—but rather upon what I have seen in print or have been confronted with in person for over more than two decades of nuclear weapons-related diplomacy in U.S. government service.[99]

With apologies to those who might insist upon various nuances to the following argument, I would offer the following axioms as being constitutive of the "strong" case against *any* possession (much less use) of nuclear weaponry. I do not endorse these arguments—and indeed, as will be seen below, I contest them in significant ways—but I do think that, together, they constitute the strongest case that can be made for immediate and unconditional nuclear disarmament. This argument has four planks:

1) Any use of nuclear weapons would be a war crime because they are

99 At various points in prior U.S. government service, the author served as assistant secretary of state for International Security and Nonproliferation (also fulfilling the duties of the under secretary for Arms Control and International Security), special assistant to the president and NSC senior director for Weapons of Mass Destruction and Counterproliferation, U.S. special representative for Nuclear Nonproliferation, and principal deputy assistant secretary of state for Verification and Compliance.

inherently indiscriminate and hence both immoral and unlawful;

2) Any use of nuclear weapons against any power *also* possessing nuclear weapons would inevitably result in escalation to a full nuclear exchange involving (more or less) the entire nuclear arsenals of the powers involved;

3) Even a relatively small nuclear exchange would send soot and ash into the upper atmosphere sufficient to obscure solar radiation and thereby cause huge degradation to the global climate through what is known as "nuclear winter;" and

4) Nuclear deterrence is inherently unstable and liable to break down as a result of uncertainties about crisis stability and the fragility of nuclear command-and-control systems in the face of potential accident or miscalculation, so that any sustained deterrent posture will eventually lead to the incineration of millions of innocent civilians.

Together, these points make up an interlocking argument against nuclear weapons. Such weapons, it is claimed, cannot be used morally, any use would quickly lead to civilizational catastrophe, any possession of them will eventually lead to use, no policy of deterrence based upon them can be stable, and any defense posture involving them will thus inevitably lead to mass murder. The argument asserts, therefore, that no possession can be moral.

Let us call this the "Strong Case" against nuclear weapons. The following pages will thus examine the strength and persuasiveness of fourfold foundations that underlie this Strong Case.

A Critique of the Syllogism

On their face, these assumptions might seem together to make an imperative for nuclear weapons abolition the inescapable outcome of moral reasoning. After all, if any effort to construct an architecture of nuclear deterrence will lead to the extinguishment of human civilization, what grounds could possibly justify such a policy? (Would not essentially *any* other outcome—including endemic, full-scale conventional warfare, or societal slavery—be preferable to civilizational extinction?) The seeming inexorability of that chain of moral inferences, however, is precisely what this essay aims to contest, for I believe things are not nearly so simple.

So what should one make—in hard-nosed factual and actuarial terms—of that chain of reasoning? Let us examine each of the four the points that comprise the Strong Case in turn.

No Inherent Prohibition of Nuclear Use

To begin with, it does *not* seem correct to say—per se—that "any" use of nuclear weapons would be "inherently indiscriminate." As the U.S. Defense Department's *Law of War Manual* restates well-established principles of International Humanitarian Law (IHL) (a.k.a. the Law of Armed Conflict, or LOAC), a weapon is "inherently indiscriminate" if it is "incapable of being used in accordance with the [law of armed conflict] principles of distinction and proportionality." This description thus covers weapons that are specifically designed to conduct attacks against the civilian population, as well as weapons that, when used, would necessarily cause incidental harm that is excessive compared the military advantage expected to be gained from their use.[100]

Under IHL/LOAC rules, the principle of proportionality prohibits attacks in which the expected loss of life or injury to civilians would be excessive in relation to the concrete and direct military advantage expected to be gained. These rules seek to protect innocent civilians by requiring that parties to a conflict avoid making purely civilian targets the object of attack, and seek to prevent loss of life or injury to civilians *except* that which cannot reasonably be prevented when pursuing compelling military objectives ("military necessity"). The law of war thus does not prohibit civilian "collateral damage" per se, but it does aim to limit such damage to what cannot feasibly be avoided in prosecuting a military campaign.[101]

The ban on "inherently indiscriminate" weapons flows from this principle. The law prohibits weapons which by their nature *cannot* be used in ways consistent with such rules, either because: (1) they somehow inescapably directly target civilians (rather than having their impact upon civilians a mere byproduct of their effect on the legitimate military targets at which they are directed), or (2) they inescapably offer so little military benefit *relative to* such civilian impact that they run afoul of the principle of proportionality.

Nuclear weapons do not seem to fall into either category. They are certainly *capable* of killing huge numbers of civilians, but they do not *inherently* target them. One could, for instance, use a nuclear weapon against an armored formation in a sparsely-populated desert, a missile silo in a barren stretch of prairie, or a naval unit

100 Office of General Counsel, U.S. Department of Defense, Law of War Manual (June 2015) (updated December 2016), p364, § 6.7. https://dod.defense.gov/Portals/1/Documents/pubs/DoD%20Law%20of%20War%20Manual%20-%20June%202015%20Updated%20Dec%202016.pdf?ver=2016-12-13-172036-190. Accessed March 17, 2023.

101 For more on proportionality, see, e.g., Law of War Manual, *supra*, Ibid., pp60-61, 202, 260, and 1021, §§ 2.4, 2.4.1.2; 5.4.6; § 5.12, and 16.5.1.1. As the U.S. State Department's legal adviser once explained, "[t]here is no requirement in international law that a State exercising its right of self-defense must use the same degree or type of force used by the attacking State in its most recent attack. Rather, the proportionality of the measures taken in self-defense is to be judged according to the nature of the threat being addressed. … A proper assessment of the proportionality of a defensive use of force would require looking not only at the immediately preceding armed attack, but also at whether it was part of an ongoing series of attacks, what steps were already taken to deter future attacks, and what force could reasonably be judged to be needed to successfully deter future attacks." U.S. State Department Legal Adviser William H. Taft IV (commenting on the *Oil Platforms Case* at the International Court of Justice), quoted by Newell L. Highsmith, *On the Legality of Nuclear Deterrence*, Livermore Papers on Global Security, no. 6 (Livermore, CA: Center for Global Security Research, 2019), p64. https://cgsr.llnl.gov/content/assets/docs/CGSR-LivermorePaper6.pdf. Accessed March 17, 2023.

far out at sea, potentially without killing any civilians at all. Precisely because of the destructive power of nuclear weapons, moreover, it would be very difficult to argue that the use of such a weapon is incapable of providing any military benefit. Nuclear weapons are unquestionably capable of destroying military targets, and indeed for some types of legitimate and perhaps high-priority military objective—such as a "hardened" command center buried deep below ground—they are arguably the *only* type of weapon capable of actually destroying the target.[102] There are surely many circumstances in which using nuclear weapons would likely be unlawful, but they cannot be said to be "inherently indiscriminate."

And it is clearly false that "any" use of a nuclear weapon would be an IHL violation. First, in the most elementary example, a nuclear "demonstration shot"—that is, the detonation of a nuclear weapon in order to prove one's nuclear capability without causing either military or civilian casualties (e.g., setting off a weapon on a test range, at sea, or in some other context in which such an explosion would not cause injury to the adversary)—would not violate the laws of war, for there would not be civilian casualties to balance (under the LOAC proportionality principle) against military objectives in the first place.

Second, it is also not hard to imagine nuclear weapons uses that *do* result in civilian casualties, but that are fairly easily justifiable under IHL/LOAC principles. For instance, the use of a nuclear weapon of a yield and at an altitude that produces "prompt radiation" and blast effects against military formations, assets, or installations, but does not simply obliterate vast civilian residential areas—and that damages or destroys those military targets in a way that compellingly contributes to military objectives—would likely be legally unproblematic.

It is also worth remembering that the IHL/LOAC principles requiring that impact upon civilians be "proportionate" to military objectives also necessarily mean that the achievement of sufficiently *significant* military objectives can lawfully be accompanied by considerable civilian casualties. It is a grim but inescapable truth of the law of war that because "military necessity" is the standard against which proportionality is judged, if the objective of hitting a legitimate target is compelling enough in terms of "military necessity," it is permissible to kill a great many civilians in the process,

102 The Biden administration, for instance, recently announced the cancellation of one high-yield nuclear weapon, the B83 gravity bomb, apparently without knowing how it would replace the hard-target kill capability that weapon has hitherto provided. Compare, for example, U.S. Department of Defense, *2022 Nuclear Posture Review*, p20 (announcing cancellation). https://media.defense. gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF (accessed March 17, 2023), with
Patrick Tucker, "Pentagon to Launch New Study on How to Get at Hard, Deeply-Buried Targets," Defense One (November 3, 2022), https://www.defenseone.com/policy/2022/11/pentagon-launch-new-study-how-get-hard-deeply-buried-targets/379326/ (accessed March 23, 2023); and Russell J. Hart, "Defeating Hard and Deeply Buried Targets in 2035," research report submitted to the U.S. Air War College (February 15, 2012), at iii (arguing that "as the U.S. nuclear stockpile is further reduced and underground facilities are constructed at depths and in materials where current and future kinetic weapons are rendered ineffective, the U.S. military may be unable to hold some of the most critical underground targets at risk"), https://apps.dtic.mil/sti/pdfs/AD1018630.pdf (accessed March 23, 2023).

provided that one is not deliberately targeting them. (As a clear legal default, civilians are not in themselves legitimate targets.[103])

From an IHL/LOAC perspective, therefore, it is impossible to declare—as a matter of law—that "any" use of nuclear weapons would be unlawful. It is certainly easy to imagine uses of nuclear weapons that would indeed be war crimes. (This is true, in fact, of any weapon: even a pocket knife or one's fingernails could be used against a noncombatant or a prisoner of war in ways that clearly violate the law.) Yet it is *also* not difficult to imagine scenarios in which nuclear weapons use would pass muster as a lawful use of force under well-understood legal principles.

To be sure, to the extent that nuclear weapons are more destructive than conventional ones, it might take a correspondingly greater degree of "military necessity" to justify using a nuclear weapon against a legitimate military target located in an area heavily populated by civilians. But this is nonetheless conceivable, as the International Court of Justice has recognized in making clear that the use of nuclear weapons is not prohibited "in an extreme circumstance of self-defense, in which the very survival of a State would be at stake."[104]

I recognize that looking at something *legally* is not necessarily the same thing as engaging in moral reasoning, and this discussion of the first plank of the Strong Case against nuclear weapons has so far been based on principles of international law rather than specifically in terms of moral reasoning. Nevertheless, I submit that on these points, the purely moral argument would not differ. The structure of these IHL/LOAC rules, in fact, actually *represents* an exercise of moral reasoning, developed and articulated over many decades by diplomats and international legal scholars.

These rules are grounded in the moral proposition that it is important to minimize civilian suffering in war, but also in a recognition that not all warfare is immoral—since a prohibition upon all fighting would have the immoral result of precluding the use of force to defend oneself against aggression by those who act immorally—as a result

103 This paper takes no position on the question of "reprisals" under the law of war, see, e.g., *Law of War Manual*, *supra*, p1113, § 18.18.2.4, but the author's views on this subject may be found elsewhere. See Christopher Ford, "Correspondence: Are Belligerent Reprisals against Civilians Legal?" *International Security* 46, no. 2 (Fall 2021), pp166-68; see also Christopher Ford, "Are Belligerent Reprisals against Civilians Legal?" New Paradigms Forum website (November 27, 2021), https://www.newparadigmsforum.com/ are-belligerent-reprisals-against-civilians-legal (accessed March 24, 2023).

104 International Court of Justice, "Legality of the Threat or Use of Nuclear Weapons," advisory opinion (July 8, 1996), p41, para. 97, https://www.icj-cij.org/public/files/case-related/95/095-19960708-ADV-01-00-EN.pdf (accessed March 24, 2023). The Court's language may be superficially confusing, for it declared that it "cannot reach a definitive conclusion as to the legality or illegality of the use of nuclear weapons" in such circumstances. Ibid. Nonetheless, the ruling must be seen in light of "the longstanding understanding in international law that unfettered freedom of action for sovereign states is the default mode of the system, and that such freedom will only be limited where a clear legal rule can be identified to that effect. To international law experts, therefore, the International Court of Justice's holding was thus crystal clear, even if its wording may have helped to lead laymen to conclude that something remained ambiguous or unsettled. Since in international law anything not specifically prohibited is legal, to say that one 'cannot conclude definitively' that the threat or use of nuclear weapons would be unlawful in cases of existential threat is thus precisely the same thing as declaring that the threat or use of nuclear weapons is legal in such cases." Christopher Ford, "Law and Its Limits Left of Launch," *Military Law Review* 229, no. 4 (2021) (citing Case of the S.S. "Lotus," 1927 P.C.I.J. (ser. A) no. 10, pp18–19 (September 7, 1927); DOD, *Law of War Manual*, *supra*, p9-10, § 1.3.2.1), https://tjaglcs.army.mil/mlr/law-and-its-limits-left-of-launch- (accessed March 24, 2023).

of which there can be targets that are legitimate to attack in the course of a conflict. Recognizing that the complete prevention of all harm to civilians in wartime is likely impossible, these rules articulate an approach to *using force morally*, which seeks to minimize suffering by regulating *how* it is that war must be conducted.

As noted, this is a reasoning process that can be applied to the use of *any* weapon, either conventional or nuclear. Nor is this moral logic thrown off by the mind-boggling destructive power of nuclear weapons, for the concept of proportionality allows one to reason morally about essentially *any* scale of effect. The larger a weapon's impact upon civilians, the more demanding the factual predicate of military necessity would have to be in order for its use to be moral. (At the conceptual asymptote of a weapon that would inescapably kill everyone everywhere, the "necessity" required to justify employment would essentially become infinite, and that weapon's use would be per se prohibited because nothing could be imagined that would justify it. This is why the subsequent elements of the Strong Case against nuclear weapons need to be examined carefully, for they represent an effort to make any nuclear weapons use *sound* like just that asymptotic case.)

I find this moral reasoning process both useful and compelling. As applied to the first plank of the Strong Case against nuclear weapons, I also find it persuasive. To my eye, this reasoning demonstrates the failure of that first plank: It is not the case that "any" use of nuclear weapons would inherently be unlawful, and (on the basis of the same reasoning) it is *not* the case that "any" use would inherently be immoral. The details matter.

The "Inevitability" of Escalation

The second plank of the Strong Case argues for the inevitability of uncontrollable nuclear escalation to a massive exchange were a nuclear weapon to be used in any confrontation between nuclear weapons-possessing states. But while it is certainly the case that nuclear weapons use in such a context *could* lead to a full exchange—and indeed it is to some degree *inherent* in policies of nuclear deterrence that there be at least *some* risk of escalation to catastrophe, or else a would-be aggressor might not be deterred—it is not at all clear that this is *inevitably* so.

The major nuclear possessors themselves, at least, go to much trouble and expense to build and preserve responsive options to another power's limited nuclear attack that do *not* simply involve an unrestrained unleashing of all their firepower. In the United States, for instance, considerable effort has gone, over several decades, into building "flexibility" into nuclear force posture and resilience into national nuclear command, control, and communications (a.k.a. "NC3") systems. This was done, at least in part, in an attempt to ensure that no U.S. president ever has to confront a grimly binary choice between surrendering upon an enemy's first use of nuclear weapons and immediately firing "everything" at that enemy in ways that could have unspeakable global consequences. Such a posture, for instance, is intended to offer leaders the option of "riding out"

an initial attack, and to preserve maximal decisionmaking flexibility for them in a developing crisis.

It is also a longstanding principle of nuclear force planning to try to ensure that *some* forces—e.g., sea-based ballistic missile submarines—would survive an initial adversary attack of *any* size, and that those forces and the victim's remaining NC3 system would remain sufficiently functional to ensure retaliation against the attacker. This, too, does not merely serve the purposes of overall deterrence (i.e., denying an adversary the ability to preclude catastrophic retaliation by striking first), but also aims to reduce one's own incentive to escalate quickly upon initial engagement, since survivable second-strike options and resilient NC3 capabilities help prevent becoming trapped in a perceived "use them or lose them" situation. The development of national-level missile defense that is effective against small-scale attacks may also make the system more flexible and less rigidly escalatory—again by increasing a power's ability to absorb an initial assault without feeling overwhelming pressure to rush toward massive retaliation.

Postures of responsive flexibility aim to provide leaders with as broad a range of options in a nuclear conflict as possible, generally based upon the concept of a "ladder" of potential escalation, a movement "up" which would—in theory—occur in deliberately risk-calibrated steps as the adversaries confronted each other and attempted each to gauge the other's appetite for *more* risk, as balanced against opportunities to de-escalate. Notably, it is inherent to the concept of an escalation ladder that each party will have multiple chances to take an "off-ramp" before a mutually-suicidal *full* exchange were to occur. And the more "rungs" there are on such a ladder, the more such potential off-ramps there would be.

(There is some irony, therefore, in the disarmament community's opposition to nuclear force postures that allow more "flexible" responses to enemy nuclear use, and that community's general distaste for development of *non-nuclear* global precision strike capabilities that could offer ways to respond to smaller-scale nuclear use without using nuclear weapons in return. The less flexible one's force posture, the fewer rungs there are on the escalation ladder and the *more likely* it would be for leaders of nuclear weapons-possessing states to feel pressure to go quickly to full-scale nuclear use in response to an enemy's nuclear attack. Precious few disarmament advocates, however, support such full-spectrum flexibility.)

As a matter of game theory and force posture incentives, therefore, posture and doctrinal approaches that preserve varied response options seek to offer both sides to a conflict multiple opportunities to have second thoughts *before* a full exchange. This makes the "inevitability" aspect of the second plank of the Strong Case argument harder to sustain.

A better argument from disarmament advocates might be to argue that notwithstanding the existence of an escalation ladder with many rungs, the psychological and emotional pressures generated by a nuclear confrontation would be such that two adversaries would quickly and inevitably move up that ladder to a

full exchange *notwithstanding* their initial intentions. In effect, the idea here would be that the ugly pressures of the moment, exacerbated by the Clausewitzian "friction" of informational ambiguities and potential accidents and misunderstandings, would introduce elements of irrationality and unpredictability into the game-theoretical elegance of the escalation ladder, as a result of which escalation to Armageddon would be inevitable *de facto*, even if not, as it were, *de jure*.

While irrationally uncontrollable escalation is certainly possible, however, that is not to say that it can be treated as a given. Indeed, surprisingly little scrutiny has been directed to pro-disarmament assumptions that it *is* a given. It is not uncommon for disarmament advocates to treat such escalation as axiomatic, and to try to stack the intellectual deck by demanding that proponents of nuclear deterrence prove the negative by demonstrating that uncontrollable escalation *couldn't* ever occur, which is presumably impossible.

In fact, deterrence advocates do not argue that such escalation is impossible. Indeed, as noted earlier, to some extent they rely upon the existence of some risk of uncontrolled escalation—what in 1959 the nuclear theorist Thomas Schelling called the "threat that leaves something to chance"[105]— as *part* of nuclear deterrence. Instead of denying the existence of any risk, they contend merely that: (a) the risk of uncontrollable escalation is not so likely that it entirely overwhelms the benefits sought by *using* nuclear deterrence to prevent the calamities of large-scale war between great powers; and that (b) it is at least *possible* to have a nuclear deterrent stand-off that is stable e*nough* that we can avoid large-scale armed aggression between the great powers without an unacceptable risk of nuclear use.

To such claims, the Strong Case can presumably only offer one or the other of two possible responses. The first would be simply to double down on asserting the categorical inevitability of escalation to a full nuclear exchange in any situation in which initial use occurs. In this case, however, the burden of proof should fairly be on disarmament advocates to demonstrate that there is no way that national leaders would actually choose to take *any* of the off-ramps that an escalation ladder aims to provide. This, so far, they have not compellingly done.

The second possible answer would not be rigidly categorical, but nonetheless would contend that the risk of uncontrolled escalation is "too high"for deterrence to be moral—or, perhaps more specifically, that the *consequences* of a full nuclear exchange would be such that even an extremely small risk of such escalation must be considered unacceptable. But this is a more difficult argument to sustain, especially if such risks needed to be balanced against the claimed benefits of deterring full-scale *conventional* war directly between the great powers. (The last time we had a world

105 See Thomas Schelling, "The Threat That Leaves Something to Chance," RAND Corporation (August 10, 1959), https://www.rand.org/pubs/historical_documents/HDA1631-1.html. Accessed March 24, 2023.

without nuclear weapons, after all, it was one wracked by a global *conventional* war that directly killed upwards of 60 million people worldwide.[106])

Notably, moreover, such a "risk is too high" argument would also be one that necessarily required complex and nuanced argument over facts, for the details would matter greatly. Since this argument hinges on the consequences of a full exchange, for instance, it would be highly relevant whether the major nuclear powers confronted each other at levels akin to those of 1986 (at which point the total number of nuclear warheads in existence may have been over 70,000), 2022 (when the figure was estimated to be less than 13,000), 1956 (when the number was about 5,000), or 1950 (when the number was perhaps 300).[107] (As discussed below, moreover, the question of what the ecological consequences would actually *be* of a nuclear war at any given level of exchange is also quite relevant—and not precisely clear.)

Moreover, since it is commonly felt that some nuclear postures are more "stable" than others—since, for instance, vulnerable forces without survivable second-strike capabilities might both invite adversary preemption in a crisis and create "use or lose" incentives for their possessor, and fragile NC3 systems with widespread pre-delegated launch authority and forward-deployed systems might worsen loss-of-control or unauthorized-use problems once fighting starts—such arguments about *relative risk* would need to consider complex issues of posture and doctrine related to how nuclear arsenals are actually managed. Also highly relevant would be the counterfactual scenario *against* which some continued reliance upon deterrence is impliedly (but necessarily) balanced: What would the risks of massive conventional war between the great powers actually *be* if nuclear weapons were abolished, and what would be the consequences if such war occurred?

Debating such issues is central to assessing the unquestionably important question of whether and how to engage in nuclear deterrence postures at all, but the point to stress here—as will be discussed further below—is that these are not matters soluble by reflexive adherence to some kind of Kantian categorical imperative against nuclear weaponry per se. Rather, they are unavoidably complex issues of equity-balancing based upon details and nuance, and upon probabilistic assumptions made about both facts and counterfactuals that likely cannot be definitively resolved. In this respect, in other words, even if the ultimate balance might perhaps fall against nuclear deterrence under a given set of circumstances, the Strong Case contention fails.

106 See, e.g., National WWII Museum, "Research Starters: Worldwide Deaths in World War II" (undated) (claiming figure of 60 million, plus an additional 25 million battle wounded, as well as noting that these figures may not include a full total of unrecorded civilian deaths in China), https://www.nationalww2museum.org/students-teachers/student-resources/research-starters/research- starters-worldwide-deaths-world-war (accessed March 24, 2023).

107 See, e.g., Federation of American Scientists, "Status of World Nuclear Forces" (updated February 23, 2022), https://fas.org/ issues/nuclear-weapons/status-world-nuclear-forces/ (accessed March 24, 2023). For these purposes, the total number of warheads is assumed to include not only those in operational service but also those that have been retired but not yet actually dismantled.

The "Inevitability" of Climate Catastrophe

The third plank of the Strong Case involves the assumption that even a fairly small nuclear weapons exchange would result in horrific climactic consequences by lofting material from burning cities into the atmosphere in ways that would blot out solar radiation and cause a catastrophic worldwide "nuclear winter." This idea seems first to have been suggested in a 1983 article in *Science*,[108] and it was given further life by work published in 2007.[109] It has become a line of argument with considerable resonance, because it combines longstanding fears of nuclear war with growing modern concerns over the future of the global climate.[110] Of special significance for the Strong Case against nuclear weapons, these arguments stress that disastrous climate consequences would result even from a "small" nuclear exchange.[111]

The strength of this argument, however, lies primarily in this assumption of scale. This author is aware of no one who argues that a full-scale nuclear exchange at the force levels that existed between the United States and the Soviet Union at the time of the original 1983 article could not produce very significant climate effects. But conclusions about how much effect would result from *what level* of exchange are questions of fact, and at the lower levels of conflict where the Strong Case relies most upon climate-based arguments (i.e., in contending that almost any exchange would produce climatological catastrophe), the science is hardly cut and dried.

In fact, a more recent study[112]—conducted in 2018 by scientists at Los Alamos National Laboratory using modern climate modeling techniques (and also having the benefit of better real-world data about upper-atmospheric distribution of black carbon particulates)—has suggested that prior conclusions from 1983 and 2007 may have overstated the likely impact of a small nuclear exchange, especially if the affected cities were to be constructed primarily out of concrete and steel rather than flammable wood products. Such conclusions have not been immune to criticism from disarmament advocates who tend to see anyone holding them as aiding and abetting a U.S. nuclear weapons establishment that "do[es]n't believe in nuclear winter"

108 R.P. Turco, O.B. Toon, T.P. Ackerman, J.B. Pollack, and Carl Sagan, "Nuclear Winter: Global Consequences of Multiple Nuclear Explosions," *Science 222*, no. 4630 (December 23, 1983). https://www.science.org/doi/10.1126/science.222.4630.1283 (accessed March 24, 2023).

109 A. Robock, L. Oman, G.L. Stenchikov, O.B. Toon, C. Bardeen, and R.P. Turco, "Climatic consequences of regional nuclear conflicts," *Atmospheric Chemistry and Physics* 7, no. 8 (2007). https://acp.copernicus.org/articles/7/2003/2007/ (accessed March 24, 2023).

110 It is true that concerns over *falling* global temperatures as a result of "nuclear winter" coexist with concerns over rising global temperatures due to fossil fuel emissions, but for present purposes the point is merely that fears of deleterious anthropogenic climate impact have considerable power in the contemporary context.

111 See, e.g., O.B. Toon, R.P. Turco, A. Robock, C. Bardeen, L. Oman, and G.L. Stenchikov, "Atmospheric effects and societal consequences of regional scale nuclear conflicts and acts of individual nuclear terrorism," *Atmospheric Chemistry and Physics* 7, no. 8 (2007). https://acp.copernicus.org/articles/7/1973/2007/. Accessed March 24, 2023.

112 Jon Reisner, Gennaro D'Angelo, Eunmo Koo, Wesley Even, Matthew Hecht, Elizabeth Hunke, Darin Comeau, Randal Bos, and James Cooley, "Climate Impact of a Regional Nuclear Weapons Exchange: An Improved Assessment Based on Detailed Source Calculations," *Journal of Geophysical Research: Atmospheres* 123, no. 5 (February 13, 2018). https://agupubs.onlinelibrary.wiley.com/doi/10.1002/2017JD027331. Accessed March 24, 2023.

and is "sleepwalking towards nuclear war."[113] Presumptions of scientific bias based upon the the alleged politics of the scientists involved, however, are not a persuasive reason to discount the actual conclusions of the 2018 study, any more than one should necessarily discount the original 1983 "nuclear winter" article simply because it was co-authored by Carl Sagan, who was a prominent disarmament advocate,[114] or because one of Sagan's colleagues in the original research was a Soviet scientist secretly sent by the KGB to promote exaggerated "nuclear winter" dangers in the hope that this would undermine support for U.S. nuclear weapons programs.[115]

My point is not to advocate for any particular position on the ongoing "nuclear winter" debate here, but rather merely to point out that the actual *science* is (or ought to be) the real question, and that it is important to get that science right. (Fortunately, debates over these matters—and among actual scientists!—quite properly continue.[116]) As with the "inevitability" argument we saw above in connection with the second plank of the Strong Case, the real issues here in connection with the third plank are ones of fact and detail, and they are not nearly as clear cut as Strong Case proponents would have one believe.

The "Inevitability" of Deterrence Breakdown

The fourth plank of the Strong Case contends that nuclear deterrence is inherently unstable and will inevitably break down at some point, even if for no other reason than that complex command-and-control and early-warning systems are to some degree

113 See, e.g., Bryan Dyne, "Nuclear winter – the long-suppressed reality of nuclear war," interview with Steven Starr, World Socialist Web Site (March 13, 2022). https://www.wsws.org/en/articles/2022/03/14/nuc-m14.html. Accessed March 24, 2023.

114 See, e.g., Carl Sagan, "The Great Peace March," Waging Peace Series, no. 11 (Santa Barbara: Nuclear Age Peace Foundation, 1986). https://www.wagingpeace.org/wp-content/uploads/2014/03/wp11_sagan.pdf. Accessed March 24, 2023.

115 This remarkable set of circumstances is recounted by Thomas Rid, a professor at the John Hopkins University's School of Advanced Strategic Studies and director of the Alperovitch Institue for Cybersecurity Studies. In fairness, Rid believes that this Soviet scientist—Vladimir Alexandrov—contributed little to the work of Sagan's team, and that the KGB later overestimated his influence in congratulating itself for a successful disinformation operation. Nevertheless, Alexandrov apparently did promote exaggerated versions of these scientific findings to audiences around the world, and even testified jointly with Carl Sagan before the U.S.
Congress. Thomas Rid, *Active Measures: The Secret History of Disinformation and Political Warfare* (New York: Picador, 2020), pp291-97. This KGB effort involving Alexandrov and the anti-nuclear Western scientists was but one part of the Soviet Union's longstanding disinformation efforts aimed at undermining support for nuclear deterrence in Western nations. Rid describes "the subversion of the peace movement in the West" as "by far the largest, longest, and most expensive disinformation campaign in intelligence history." Ibid. p197; see also, generally, Alvin A. Snyder, *Warriors of Disinformation: American Propaganda, Soviet Lies, and the Winning of the Cold War* (New York: Arcade Publishing, 1995), p100; Rid, *supra*, pp263-86.

116 See, e.g., G.D. Hess, "The Impact of a Regional Nuclear Conflict between India and Pakistan: Two Views," *Journal for Peace and Nuclear Disarmament* 4, Issue supplement 1 (May 28, 2021), https://www.tandfonline.com/doi/full/10.1080/25751654.2021.1882772 (accessed March 24, 2023); Alexandra Witze, "How a Small Nuclear War Would Transform the Planet," *Nature* 579 (March 26, 2020), https://climate.envsci.rutgers.edu/pdf/WitzeNature.pdf (accessed March 24, 2023); Jon Michael Reisner, Eunmo Koo, Elizabeth Clare Hunke, and Manvenda Krishna Dubey, "Reply to Comment by Robock et al. on 'Climate Impact of a Regional Nuclear Weapon Exchange: An Improved Assessment Based on Detailed Source Calculations,'" Los Alamos National Laboratory, LA-UR-19-26224 (December 24, 2019), https://www.osti.gov/servlets/purl/1581574 (accessed March 24, 2023); Rachel Becker, "Nuclear winter is still a hot topic as a new arms race heats up," The Verge (February 8, 2019), https://www.theverge.com/2019/2/8/18212021/nuclear-war- winter-climate-changes-russia-north-korea-tactical-nuke-inf-treaty (accessed March 24, 2023).

inherently subject to accident or failure.[117] Accordingly, the claim goes, it is immoral to employ nuclear deterrence at all.

Yet parts of a response to this fourth plank have already been provided, albeit implicitly, in our discussion of the second. Leaders of nuclear weapons-possessing states—or at least the most responsible of them, and most obviously and transparently in U.S. nuclear weapons practice—have devoted considerable time, energy, and money to making the systems upon which they rely for deterrence as error-resistant, redundant, survivable, and resilient as possible, and to giving decisionmakers as much time as possible to make nuclear decisions on the basis of as much information as possible without foreclosing a broad and flexible range of nuclear use options.[118]

Nuclear weapons themselves have also been made ever more resistant to accidental detonation or unauthorized use over the years, even as the simultaneous post-Cold War reduction in superpower arsenals (reducing the outer limit of potential attack size) and the development of limited ballistic missile defense systems (increasing the ability to "absorb" small attacks) has increased the world's ability to manage smaller-scale mishaps or misunderstandings, at least between the largest possessors. This does not mean, of course, that such systems *cannot* break down, but such developments both can and do materially change the factual circumstances, and thus also the presumptive balance of probabilities and consequences over any given period of time against the backdrop of which moral reasoning about disarmament policy should occur.

It is surely true that if one were to hold the parameters of the security environment constant and run an infinite series of crises against a policy of nuclear deterrence, such a deterrent system would inevitably break down eventually. But it is also the case that the security environment is *not* static, and that both the relevant risk factors and the odds of breakdown probably change signficantly in the face of various developments in the security environment. The end of the Cold War, for instance, was presumably a positive development in this regard, leading to vast reductions in nuclear arsenals[119] as well as ameliorating the nuclear superpowers' reciprocal threat assessments and reducing the likelihood of their concluding that they were under attack in the face of some kind of nuclear incident. More recently, by contrast, the re-emergence of systemic dynamics of increasingly intense great power competition—

117 See, e.g., Scott Sagan, The Limits of Safety (Princeton, NJ: Princeton University Press, 1991); Bruce Blair, "Command, Control, and Warning for Virtual Arsenals," *Nuclear Weapons in a Transformed World*, Michael J. Mazarr, ed. (New York: St. Martin's Press, 1997), p55.

118 See generally, e.g., Christopher Ford, "Playing for Time on the Edge of the Apocalypse," Hudson Institute briefing paper (November 2010). https://irp-cdn.multiscreensite.com/ce29b4c3/files/uploaded/Ford%20on%20Nuclear%20Decision%20Time.pdf (accessed March 24, 2023).

119 See, e.g., Christopher Ford, "Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons," *Nonproliferation Review* 14, no. 3 (November 2007), p417 (describing U.S. disarmament progress since end of Cold War). https://www.nonproliferation.org/wp-content/uploads/npr/143ford.pdf. Accessed March 24, 2023.

including China's rapid expansion of its nuclear forces[120] and Russia's use of nuclear weapons threats to create an "offensive nuclear umbrella"[121] or "shield"[122] behind which to undertake aggression against its neighbors—may be making the deterrent system less stable by heightening tensions and increasing parties' propensity to assume the worst.

Moral reasoning about the likelihood of deterrence breakdown must consider all such factors—e.g., how much risk is there of breakdown, over how long a period of time, entailing what consequences, and measured against the likely risks entailed by what alternatives?—if it is to be able to provide a compelling response to the problems of nuclear disarmament. Once again, this necessarily entangles such reasoning in questions of fact and detail that complicate the simple assumptions the Strong Case makes in driving toward conclusions about the inerrant rectitude of immediate disarmament.

Even to the degree that such reasoning were to point one not merely toward conclusions about the growing risk of some breakdown in deterrence but also toward the *reason* for such increased danger, moreover, this might *itself* cut against the absolutist logic of the Strong Case. For instance, if the most salient source of growing risk in the system today is nuclear weapons-empowered revisionism by bellicose authoritarian dictators in Moscow and Beijing,[123] it is far from obvious—to say the least—that the answer to this problem is to conclude that Western democracies possessing nuclear weapons have a moral obligation to disarm themselves as quickly as possible.[124] Here too, the Strong Case seems both incomplete and uncompelling.

What I've Not Addressed

I recognize that I have so far left out of this discussion various other strains of argumentation that have from time to time featured in the case against nuclear

120 See, e.g., *Military and Security Development Involving the People's Republic of China 2022: Annual Report to Congress* (Washington, DC: Department of Defense, 2022), pp94-101. https://media.defense.gov/2022/Nov/29/2003122279/-1/-1/1/2022- MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF.

121 See, e.g, Christopher Ford, "Offensive Nuclear Umbrellas and the Modern Challenge of Strategic Thinking," remarks to a Nuclear Security Working Group Congressional Seminar (February 10, 2016). https://www.newparadigmsforum.com/p2007. Accessed March 24, 2023.

122 See *2022 Nuclear Posture Review*, *supra*, p1.

123 See, e.g., U.S. Department of Defense, *Nuclear Posture Review* 2018 (February 2018), p6-7, https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF; *2022 Nuclear Posture Review*, *supra*, p4.

124 Given that civil society activism is the principal means of advancing TPNW accession in democratic countries, the risk that such activism will by definition fail to affect the decisions of nuclear weapons-possessing dictatorships—with the result that successful anti-nuclear activism could have the de facto result of disarming democracies faced with threats from bellicose nuclear dictators. See, e.g., Assistant Secretary Christopher Ford, "The Treaty on the Prohibition of Nuclear Weapons: A Well-Intentioned Mistake," remarks at the University of Iceland (October 30, 2018), https://www.newparadigmsforum.com/p2290 (accessed March 24, 2023)— represents an ethical challenge to the disarmament movement for which its advocates have yet to develop a compelling response. The asserted logic of the Strong Case would indeed seem to suggest that national surrender *is* actually a moral obligation in the face of nuclear aggression, on the grounds that even slavery is preferable to civilizational suicide, but disarmament activists generally shy away from stating this so baldly.

weapons. These include some claims made in the debates that led to the drafting and eventual entry into force—at least among some states that neither possess nor rely for their security upon nuclear weapons, and who were already legally bound not to possess nuclear weapons by Article II of the Nuclear Nonproliferation Treaty[125]—of the Treaty for the Prohibition of Nuclear Weapons (TPNW).[126]

I have offered the abovementioned four planks of the Strong Case based upon the anti-nuclear arguments that I consider to be the strongest and most potentially persuasive. There are additional arguments that have been made against nuclear weapons; it is merely that I do not consider these other claims as compelling as the four addressed in the foregoing pages.

For instance, I have not discussed the claim that the use of nuclear weapons would inherently produce dire humanitarian effects of a nature and on a scale that cannot be mitigated and that would inevitably overwhelm any effort to respond to civilian suffering with medical care and humanitarian relief. I do not consider this claim to be a part of the Strong Case, because *any* large-scale nuclear or conventional conflict is capable of producing such overwhelming effects.

As discussed earlier, it is certainly possible to imagine nuclear weapons being used against some military targets in ways that would cause less civilian death and suffering than would the large-scale use of conventional weaponry. If nuclear weapons can in some circumstances overwhelm any humanitarian response—which is presumably quite true—the same can surely also be said of conventional munitions used at scale. One must remember, for example, that the U.S. atomic bombings of Hiroshima and Nagasaki in August 1945 each killed *fewer* people than the Operation Meetinghouse raid against Tokyo on the night of March 9 of that year, in which incendiary munitions produced a catastrophic firestorm that killed over 100,000 persons and burned 15 square miles of Japan's capital city to the ground. Such raids against Japan over the last nine months of the World War II, in fact, are estimated to have caused about 806,000 casualties, including 330,000 deaths.[127]

Civilian casualties on such a scale certainly must indeed have essentially overwhelmed any imaginable humanitarian response on the ground, but this is in no way, alas, a nuclear-specific problem. Far from adding to the Strong Case against nuclear weapons, moreover, to the degree that such epic suffering creates a moral

125 See Treaty on the Non-Proliferation of Nuclear Weapons (July 1, 1968), at Art. II ("Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices."). https://www.un.org/disarmament/wmd/nuclear/npt/text/. Accessed March 24, 2023.

126 Treaty on the Prohibition of Nuclear Weapons (August 8, 2017). https://treaties.un.org/doc/Treaties/2017/07/20170707%20 03-42%20PM/Ch_XXVI_9.pdf. Accessed March 24, 2023.

127 See, e.g., Tony Reichhardt, "The Deadliest Air Raid in History," *Smithsonian Magazine* (March 9, 2015), https://www.smithsonianmag.com/air-space-magazine/deadliest-air-raid-history-180954512/. Accessed March 24, 2023. By contrast to the 100,000 killed by Operating Meetinghouse, it has been estimated that some 66,000 persons died at Hiroshima and 39,000 at Nagasaki. See, e.g., "The Atomic Bombings of Hiroshima and Nagasaki," The Atomic Archive (undated). https://www.atomicarchive.com/resources/documents/med/med_chp10.html. Accessed March 24, 2023.

argument against large-scale war *of any sort*, this logic might actually turn back in upon itself by providing ethical support for the idea of relying to some degree upon nuclear deterrence to help prevent global conventional war from recurring.

I also do not directly address here the claim that any use of nuclear weapons would inherently have cross-border effects severe enough to inevitably make it a problem for (and challenge to) the international system as a whole rather than simply an issue between the belligerent powers. Potential cross-border impact as a result of nuclear winter has already been addressed above, in connection with the third plank of the Strong Case. I have not focused upon the separate and additional question of radioactive "fallout," however, because it is clear that *not* all uses of nuclear weapons necessarily produce fallout in ways that would create significant adverse effects across international borders.

Even if there is fallout from a nuclear explosion, after all, specific questions of how much there is and where it goes are matters of highly idiosyncratic detail. More importantly, not all nuclear detonations produce meaningful fallout at all. Defense Department studies of nuclear weapons effects based upon the United States' considerable record of nuclear testing, for instance, make clear that fallout is largely a function of yield and altitude. A high-yield explosion at ground level can indeed produce considerable radioactive fallout that could stretch over a large area downwind. A small detonation at some altitude, however, could potentially still produce militarily significant results (e.g., against an invading mechanized division on the ground, ships at sea, or aerial targets) *without* churning up and irradiating massive amounts of rock and soil and thereby creating significant fallout hazards distant from the immediate area of the explosion.[128] Nuclear weapons certainly *can* produce major cross-border effects, in other words, but it is not a given that they *will*. Here again, details matter.

128 In a nuclear explosion, the particular residue of the weapon itself can condense into minute particles that are capable of being carried for some distance in the atmosphere, but this represents only a very small amount of material and a detonation above a certain altitude (relative to weapon yield) will not result in the admixture of surface materials into a pattern of radioactive fallout. Below such an altitude, however, fallout is capable of becoming quite significant, though predicting its pattern of intensity and distribution is extremely difficult. See U.S. Department of Defense and U.S. Department of Energy, *The Effects of Nuclear Weapons* (Samuel Glasstone and Philip J. Dolan, eds.) (Washington, DC: 1977), pp387-410 (§§ 9.01-9.51), 414-18 (§§ 9.59-9.74), 422-39 (§§ 9.79-9.112), and 442-67 (§§ 9.121-9.166). https://www.osti.gov/servlets/purl/6852629. Accessed March 24, 2023. When tests occur at or near the ground, fallout can indeed be considerable. According to the U.S. Centers for Disease Control and Prevention (CDC) and the National Cancer Institute (NCI), all persons born in the United States since 1951 have received at least some radiation exposure as a result of the more than 500 above-ground nuclear weapons tests conducted by various countries before 1963. Nevertheless, "CDC and NCI scientists believe th[e] [resulting cancer] risk is small for most people." Centers for Disease Control, "Radioactive Fallout from Global Weapons Testing" (January 6, 2014). https://www.cdc.gov/nceh/radiation/fallout/rf-gwt_home.htm. Accessed March 24, 2023.

Additionally, I have not addressed claims that are sometimes made to the effect that nuclear weapons have a special and morally repugnant impact upon women and children. I have not done so, however, because I do not believe this to be the case. For better or for worse, nuclear weapons are weapons of *mass* destruction, and there is nothing about their blast and radiation effects that singles out any particular category of persons for extra harm. To my eye, therefore, such an argument is simply factually unfounded. Moreover, even if it *were* true, it would seem to cut somewhat against the first plank of the Strong Case, which is grounded in the allegedly *indiscriminate* nature of the effects nuclear weapons produce. (One surely cannot intelligibly advance both "discriminatory impact" and "inherently indiscriminate" arguments at the same time!) Accordingly, I do not believe this contention merits inclusion in the Strong Case against nuclear weapons.

Finally, I have not addressed the moral implications of the pregnant question of whether or not it is actually *possible* to achieve a world in which all of today's nuclear weapons possessors have relinquished them—and in which no future power would ever be able to reconstitute a nuclear arsenal to intimidate or defeat a rival.[129] The question of "How do we actually get to 'Zero'?" is not merely a practical one. If no realistic pathway to a disarmed future can be identified, it is hard to see how there could be a compelling moral case for disarmament. One surely cannot truly have a moral obligation, after all, to achieve something that is *impossible.*

It is critical to nuclear ethics, therefore, to consider *how* it is proposed to get to abolition. The burden, moreover, would seem to lie upon disarmament advocates to demonstrate at least enough real-world feasibility that the question of a potential moral obligation to pursue it could arise in the first place. The present chapter, however, will leave such debates for another day, assuming *arguendo* the existence of a genuine moral question and confining itself to an exploration of the aforementioned Strong Case for abolition.

Conclusion: Living in the Realm of Policy

It is not the purpose of this chapter to argue *against* nuclear disarmament per se, such as by contending that such disarmament is either impossible or undesirable, or perhaps both. (The reader who would like this author's views on nuclear disarmament

129 This is not a trivial question. Thomas Schelling, for instance, worried that a world in which existing nuclear weapons had been dismantled would still be an unstable one *even in terms of nuclear war risks*. For so long as people remembered that building a nuclear weapon was *possible* and nations had access to fissile materials, any sufficiently severe crisis or conflict between sophisticated states would provide each with some incentive to reconstitute a nuclear arsenal. Indeed, since the *first* state to get nuclear weapons in a world otherwise without them could thereby come to enjoy a decisive military advantage over its rivals—and because such a state would also have powerful reasons to prevent any adversary from also aquiring such weaponry—such a disarmed world might create powerful incentives not merely for reconstitution but also preemptive nuclear use. As a result, Schelling cautioned, "[e]very crisis would be a nuclear crisis, and every war could become a nuclear war. The urge to preempt would dominate; whoever gets the first few weapons will coerce or preempt." Thomas Schelling, "A World Without Nuclear Weapons?" *Daedalus* (Fall 2009), pp124-26; see also, generally, e.g., Christopher Ford, "Nuclear Weapons Reconstitution and its Discontents: Challenges of 'Weaponless Deterrence,'" Hudson Institute briefing paper (November 2010), pp15-20. https://irp.cdn-website.com/ce29b4c3/files/ uploaded/Ford%20at%20Hudson%20on%20weaponless%20deterrence.pdf. Accessed March 23, 2024.

would be better advised to consult numerous essays published elsewhere.[130]) The point here is merely that the various elements of the Strong Case against nuclear weapons are not nearly as compelling as they purport to be.

I contend, furthermore, that whatever case *can* be made in favor of disarmament is perforce *not* the cut-and-dried morality tale that so many in the disarmament community claim it to be.[131] Instead, it is a fraught exercise in moral reasoning and the balancing of important equities against each other in a context of complicated fact patterns and causal suppositions about which we are all, in important ways, largely guessing. A rigorous look at the Strong Case, I would argue, demonstrates not the simplicity of this issue but rather the challenges and complexities of moral reasoning and moral action in the real world. The Strong Case may make such reasoning *sound* easy, but it is not.

It is also worth emphasizing that none of my reasoning here should be taken to suggest that the potential perils I discuss and that are so relevant here—e.g., nuclear weapons use, uncontrollable escalation, or anthropogenic nuclear climate catastrophe—*could not* occur. I take it as given that they could. But I do not believe that the mere fact that such things are possible, in itself, dictates the moral necessity of disarmament without further consideration of factors such as: how likely these things are today, what their actual impact would be, what alternatives are available to facing whatever degree of risk we face today, the feasibility and stability of a world that lacked the ability to rely upon nuclear deterrence to keep the peace between its greatest powers, and the potential consequences if conflict were to ensue in such a post-nuclear world.

The most immediate lesson of the frailty of Strong Case absolutism is thus simply that details matter. A lot. We are *not* in a realm of Platonic moral forms, but rather in

130 See, e.g., Christopher Ford, "Assessing the Biden Administration's 'Big Four' National Security Guidance Documents," National Institute for Public Policy *Occasional Paper* 3, no. 1 (January 2023), https://nipp.org/wp-content/uploads/2022/12/OP-Vol.-3-No.-1. pdf (accessed March 24, 2023); Christopher Ford, "Arms Control and Disarmament Through the Prism of Complexity: Advent of a New Research Agenda?" remarks to the Hoover Institution and American Association for the Advancement of Science (October 1, 2021), https://www.newparadigmsforum.com/arms-control-and-disarmament-through-the-prism-of-complexity-advent-of-a-new- research-agenda; Assistant Secretary of State Christopher Ford, "Reframing Disarmament Discourse," remarks at the Creating an Environment for Nuclear Disarmament (CEND) Initiative (September 3, 2020), https://www.newparadigmsforum.com/p2755 (accessed March 24, 2023); Assistant Secretary of State Christopher Ford, "Arms Control and Disarmament: Adjusting to a New Era," *Arms Control and International Security Papers* 1, no. 7 (May 20, 2020), https://irp-cdn.multiscreensite.com/ce29b4c3/files/uploaded/ACIS%20Paper%207%20-%20Adjusting%20to%20New%20Era%20in%20Arms%20Control.pdf (accessed March 24, 2023); Assistant Secretary of State Christopher Ford, "Getting Beyond Post-Cold War Pathologies and Finding Security in a Competitive Environment," remarks at the International Institute for Strategic Studies (February 12, 2020), https://www.newparadigmsforum. com/p2488 (accessed March 24, 2023); Special Assistant to the President Christopher Ford, "NPT Wisdom for a New Disarmament Discourse," remarks to the Ploughshares Fund (October 26, 2017), https://www.newparadigmsforum.com/p2041 (accessed March 24, 2023); Ford, "The Treaty on the Prohibition of Nuclear Weapons," *supra;* Christopher Ford, "Weapons Reconstitution and Strategic Stabilty," remarks at Hudson Institute (May 17, 2011), https://www.hudson.org/national-security-defense/weapons-reconstitution- and-strategic-stability (accessed March 24, 2023).

131 Cf., e.g., Christopher Ford, "Devil in the Details: Nuclear Command and Control in a Nuclear Armed Middle East," remarks at Hudson Institute (February 24, 2010) ("As [the nuclear weapons strategist] Herman Kahn … was fond of noting, when it comes to issues of nuclear warmaking, we are all amateurs."). https://s3.amazonaws.com/media.hudson.org/files/publications/Ford%20 Remarks%20-%20Devil%20in%20the%20Details.pdf. Accessed March 24, 2023.

an Aristotelian world of complicated choices that require engagement with a reality lived between extremes. How one assesses the various complicated equities that it is necessary to balance here will naturally affect the degree to which one is willing to live with a system of nuclear deterrence, and reasonable people can (and do!) disagree on such matters.

The crucial point, however, is to remember that this *is* a challenging question of equity-balancing on the basis of complex, ambiguous, and contested facts, not one of simplistic moralistic absolutism. It is about finding wisdom and balance amidst complexity—which is to say, it is about the difficult and sometimes tragic choices of *policymaking* rather than about simple fidelity to a fundamentalist ethics.

The ancient Latin legal phrase fiat *justitia ruat caelum*—or "Let justice be done though the heavens fall!"—has an undeniable aesthetic beauty, and may feel morally appealing. When it comes to various alternative ways of gambling with the lives and welfare of millions or billions of people in the context of policymaking about large-scale war and weapons of mass destruction, however, it does not seem like genuinely moral reasoning to be willfully heedless of or indifferent to matters of nuance, detail, and complexity. One should want justice, after all, but there is nothing wrong with actually *also* caring whether or not the heavens fall.

For my part, I first publicly tried to explore the issue of nuclear weapons morality back in 2009, in an essay entitled "Nukes and the Vow."[132] This was an exploration of how I saw these questions through the admittedly perhaps somewhat idiosyncratic prism of Buddhist ethics. Looking back more than a decade later, however, I think much of its reasoning can still stand up through a wider lens. In that essay, I urged attention to just the sort of factual and counterfactual details that I have emphasized in the pages above:

> *If a disarmed world cannot be made reasonably secure against large-scale conventional conflict and against 'breakout' by countries seeking nuclear weapons, for example, such a nuclear weapons-free world should not necessarily be preferred to today's world [of 2009] – in which there has not been a full-blown Great Power war for many decades, and in which proliferation still faces at least some constraints. And an insecure world free of nuclear weapons should surely not be preferred to a future world in which such weapons continue to exist, but in which possessors have only quite small arsenals and have reduced the salience of nuclear weapons in their defense planning, in which limited missile defenses and early-warning data-sharing help reduce the risk from proliferation and from false alarms, in which nonproliferation obligations have become universal, proliferation-facilitating technologies are carefully controlled, and violations are deterred by a high probability of swift negative consequences, and in which all major*

132 Christopher A. Ford, "Nukes and the Vow: Security Strategy as Peacework," Upaya Zen Center (July 2009). https://www.upaya.org/uploads/pdfs/NukesandtheVowfinal.pdf. Accessed March 24, 2023.

weapons-possessors benefit from some kind of general transparency and confidence-building treaty regime.

… [O]ur lodestar should be fundamental human security, rather than the talismanic presence or absence of nuclear devices per se. If we cannot be reasonably confident of real security in a nuclear-weapon free world, it might be better to have a world with nuclear weapons but in which we can have more such confidence. Depending upon our assessment of the anticipated conditions, in other words, it might be possible to make a[n] … argument for the retention of nuclear weapons as one constituent element of the global security system. … As the saying goes, the devil is in the details; we should not let either pro- or anti-nuclear knowing get in the way of our employment of skillful means for the alleviation of suffering in this complicated and messy world ….[133]

This chapter's critique of the Strong Case against nuclear weapons should not necessarily be taken as a repudiation of the disarmament dream, nor certainly of the possibility of doing profoundly useful—and moral—things to reduce nuclear risks in various ways. Precisely *because* not all nuclear force postures are likely to be equally stable, because some types of state behavior create greater risks of war than others, and *because* the aggregate risk to humanity from nuclear weapons-related factors depends upon a whole host of variables and dynamics in this complex world, even a diehard *opponent* of disarmament would surely agree that there is much upon which hawks and doves can cooperate to make this world a safer place even if they continue to disagree about the idea of an endgame of "Zero." Would not making such progress in reducing nuclear risks be profoundly moral indeed?

133 Ibid., p5.

Nuclear Disarmament Dilemmas from the Perspective of the Ethics of Responsibility

Mélanie Rosselet

From the outset, the development of nuclear weapons has provoked a moral and philosophical movement, notably among the scientists, calling for their "dis-invention" or elimination. In France in 1950, Frédéric Joliot-Curie initiated the Stockholm Appeal, whereby the signatories demanded "the outlawing of atomic weapons as instruments of intimidation and mass murder of peoples" and "strict international control to enforce this measure."[134] Frédéric Joliot, a nuclear physicist, a 1935 Nobel laureate for his findings on artificial radioactivity, played a pioneering role in the work on the military applications of nuclear energy.[135] After World War II, he had also been the high commissioner of the French Atomic Energy Commission, until his communist and pacifist convictions made it untenable for him to remain in office.

However, this aspiration for a world free of nuclear weapons immediately met overwhelming obstacles. Today's heated debates over the implementation of Article VI of the NPT and over the relevance of the approach that was defined by the Treaty on the Prohibition of Nuclear Weapons (TPNW) are but lasting reflections of this. Just as there is no international consensus on nuclear weapons, there is no consensus on nuclear disarmament and how it can be achieved.

Central to these debates are moral questions. Are all types and processes of disarmament ethically and morally equivalent? Is nuclear disarmament an immediate and unconditional political imperative, regardless of the strategic context and modalities in which it is supposed to be implemented? Is it fair and effective for political action to focus on nuclear disarmament only whilst leaving aside the reflection on the ways and means of achieving it, or without further consideration of the ethical and strategic quandaries facing a state willing to move forward in good faith toward nuclear disarmament today?

To explore these questions, this chapter proceeds as follows. It begins with an examination of the moral perspectives of the advocates of unconditional disarmament. It then contrasts these with the ethical and moral frameworks of practitioners confronting the problem of nuclear disarmament. It closes with an exploration of some possible ways to create or preserve a space for dialogue between approaches to nuclear disarmament in an increasingly polarized context.

134 Michel Pinault, *Frédéric Joliot-Curie* (Paris: Odile Jacob, 2000).

135 Céline Jurgensen, and Dominique Mongin (eds.), *Résistance et Dissuasion. Des origines du programme nucléaire français à nos jours* (Paris : Odile Jacob, 2018), also available in English: https://www.frstrategie.org/en/publications/recherches-et-documents/ france-and-nuclear-deterrence-spirit-resistance-2020. Accessed May 12, 2023.

Ethical Context

Any conversation about ethics should begin with a review of the basics. Drawing on previous reflections on these matters,[136] it will be useful for this analysis to recall an observation made by the sociologist Max Weber a century ago. In "Politik als Beruf" (1919), Weber made a distinction between two "totally different and irreducibly opposed" ethical maxims: the ethics of responsibility and the ethics of conviction.[137] The ethics of responsibility is a teleological ethics. It is characterized by its attention to the means and their effectiveness in reaching the goal and to their consequences. As Raymond Aron explains, "the ethics of responsibility is defined not by indifference to moral values but by the acceptance of reality, by accepting the imperatives of action and, in the most extreme cases, by subordinating the salvation of one's soul to the salvation of the city."[138] The ethics of conviction, in contrast, is a matter of axiology (supreme values). It has to do with not betraying a value or not transgressing a norm. The agent acting in accordance with the ethics of conviction does not have to be concerned about the consequences, as long as the intention is pure, and their values are being observed. Max Weber points out that:

> *This does not mean that the ethics of conviction can be equated with the lack of any sense of responsibility and the ethics of responsibility with the lack of conviction. This is obviously not the case….The ethics of conviction and the ethics of responsibility do not contradict each other but complement each other and are essential for a man who can claim to have a "political vocation."*[139]

The Moral Perspective of Unconditional Disarmament Advocates

At the normative level, nuclear disarmament is governed today by Article VI of the 1968 Non-Proliferation Treaty, a nearly universal treaty (with 191 states parties). The treaty rests on three pillars (non-proliferation, disarmament, peaceful uses of atomic energy) and is considered a cornerstone of collective security. Article VI, which deals with disarmament, states that:

> *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.*

136 In particular: Brad Roberts, *Nuclear Disarmament A Critical Assessment* (New York: Routledge, 2015).

137 As discussed in ibid.

138 Raymond Aron, *Les étapes de la pensée sociologique* (Paris : Gallimard, 1976).

139 See Roberts, *Nuclear Disarmament A Critical Assessment.*

The complex wording of this article shows that it was the result of compromises made by the parties to address the dilemmas raised by the disarmament issue. Among other things, it highlights the need to provide for a comprehensive negotiating process that includes all states parties, i.e., the five nuclear-weapon states and all other non-nuclear-weapon states. It also stresses the importance of the issues of verification and international control, the relationship with general and complete disarmament, and a requirement of means ("to pursue in good faith negotiations"). Much progress has been made on nuclear disarmament in the post-Cold War period, with, as far as France is concerned, an unparalleled record in three respects: the total dismantling of nuclear test sites, the total dismantling of the ground-to-ground nuclear components, and the total dismantling of facilities producing fissile material for weapons. In comparison with the Cold War peak, global nuclear arsenals have been significantly reduced. But renewed tensions, a crumbling security architecture, and other factors have held back further progress. These include, among many other factors, Russia's announcement that it "suspends" the application of the New Start Treaty, its announcement that it will deploy nuclear weapons on the territory of Belarus, the collapse of the Intermediary Nuclear forces Treaty (INF) and other arms control arrangements, the nuclear rhetoric deployed by Russia during its illegal invasion of Ukraine, and its systematic effort to undermine the European security order.

An alternative to the NPT-driven approach to disarmament is now advocated by the promoters of the Treaty for the Prohibition of Nuclear Weapons (TPNW, also known as the Ban Treaty). The TPNW entered into force in January 2021 after being ratified by 50 non-nuclear weapons states, but, contrary to the NPT, by none of the nuclear possessors. This can be described as an unconditional approach to nuclear disarmament.

In comparison to the NPT-driven approach, the Ban approach advances objectives of nuclear disarmament that are both absolute and decontextualized. In ethical terms, this corresponds to the implementation of the Weberian approach of the ethics of conviction. The ethical dimension is central to this approach. The prohibition of nuclear weapons is seen as a moral imperative that could be described as "categorical" in a Kantian sense.

This rationale is based on one premise: because nuclear weapons have catastrophic humanitarian consequences, they are unacceptable at any time and in any place. The humanitarian campaign builds on previous experiences such as the banning of anti-personnel mines and chemical weapons. There is no distinction made between use and threat of use of nuclear weapons. This radical critique of deterrence therefore challenges the very possession of nuclear weapons, regardless of who possesses them, with which doctrines, and regardless of the type of practices

or cases of use, contrary to the state of law and the 1996 advisory opinion of the International Court of Justice.[140]

The Ban approach aims to stigmatize nuclear weapons in a normative framework, as well as to mobilize civil societies to pressure the leaders into abolishing nuclear weapons.[141] "To all nations: choose the end of nuclear weapons over the end of us!"[142] At a recent hearing before the Defense Committee of the French National Assembly, the director of ICAN France argued even more sharply that "deterrence is dishonorable, contrary to what the British researcher Lawrence Freedman claims, since this system is not a war prevention mechanism."[143]

Proponents of the Ban Treaty reject the step-by-step approach to disarmament associated with the NPT-driven approach and even argue that the conditions now exist to safely eliminate these weapons. Thus, the issue of how to get to the stage of elimination is not really addressed. And the question of the consequences of nuclear disarmament on a possible deterioration of collective security is never asked.

How can practitioners consider and accept this ethical argument, originally developed by the NGOs that pioneered the "humanitarian consequences" movement before it was taken up by the promoters of the TPNW?

Practitioners' Perspectives

Weber's ethic of responsibility takes as its starting point realities and dilemmas. It assesses the costs, risks, and benefits of a given action. It evaluates the respective merits of a given solution with regard to its possible alternatives. The contrast with the ethics of convictions is well illustrated by the following two remarks.

In accepting their Nobel Peace Prize in 2017, Beatrice Fihn and Setsuko Thurlow, spoke about ultimate moral obligations:

> *Ours is the only reality that is possible. The alternative is unthinkable. The story of nuclear weapons will have an ending, and it is up to us what that ending will be. Will it be the end of nuclear weapons, or will it be the end of us? One of these things will happen…To all citizens of the world: Stand with*

140 The Court was led to observe that "in view of the current state of international law and of the elements of fact at its disposal, [it] cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake." https://www.icj-cij.org/case/95. Accessed May 12, 2023.

141 "It will certainly require a vigilant citizenry, supportive of peace and disarmament, groups that will settle for nothing less than banning the Bomb," in Thomas E. Doyle II, "Moral and Political Necessities for Nuclear Disarmament," *Strategic Studies Quarterly* 9, no. 2 (2015), pp19-42. https://www.jstor.org/stable/26271073. Accessed May 12, 2023.

142 Nobel Lecture given by the Nobel Peace Prize Laureate 2017, ICAN, delivered by Beatrice Fihn and Setsuko Thurlow, (December 10, 2017). https://www.nobelprize.org/prizes/peace/2017/ican/lecture/. Accessed May 12, 2023.

143 National Assembly of France, "Compte-rendu, n°34, de la Commission de la défense nationale et des forces armées" (January 18, 2023). https://www.assemblee-nationale.fr/dyn/16/comptes-rendus/cion_def/l16cion_def2223037_compte-rendu. Accessed May 12, 2023.

> *us and demand your government side with humanity and sign this treaty. We will not rest until all States have joined, on the side of reason.*[144]

In his 2020 speech on the Defense and Deterrence Strategy at the Ecole de Guerre, President Macron repeatedly invoked the ethics of responsibility:

> *The ultimate goal of the complete elimination of nuclear weapons as part of general and complete disarmament is indeed enshrined in the preamble of the NPT. But given the realities of our world, progress towards this goal can only be gradual, and based on a realistic perception of the strategic context. Since there is no means of quickly eliminating nuclear weapons from our world, the advocates of abolition have attacked the legitimacy of nuclear deterrence—and have especially done so, before anywhere else, where it is easiest, that is to say in our European democracies. Yet I do not believe that the choice is between a moral absolute with no link to strategic realities, and a cynical return to a lawless power struggle…..We have no choice but to accept that we live in an imperfect world and to realistically and honestly face the problems which this brings. I cannot therefore set France the moral objective of disarming our democracies while other powers, or even dictatorships, would be maintaining or developing their nuclear weapons….In fact, disarmament only has meaning if it is part of a historical process to limit violence.*[145]

Nuclear Disarmament from the Perspective of the Ethics of Responsibility

How can the ethical arguments of the unconditional approach to disarmament promoted by the TPNW be analyzed? To use Weberian discourse, anti-nuclear activists "keep the flame alive" for the ideal of a nuclear-weapons free world. From the deontological point of view, this is consistent with the ethics of conviction. However, from the consequentialist and responsibility ethics point of view, such an unconditional approach to disarmament is morally questionable.

To make this point, in this section, we'll examine three questions: how can the consequences of an unconditional and unilateral disarmament be ethically assessed; how does the unconditional approach of disarmament play with the reality that political leaders have a moral obligation to protect the specific political community in which they live; and what ethically questionable unintended consequences is a radical approach of disarmament likely to have.

Promoters of TPNW also seek to place themselves on the ground of the ethics of responsibility by arguing that a nuclear apocalypse is inevitable and therefore nuclear weapons must be eliminated. Further, there is a non-explicit bias for partial (nuclear-

144 Beatrice Fihn and Setsuko Thurlow, Nobel Prize lecture (December 10, 2017).

145 https://www.elysee.fr/en/emmanuel-macron/2020/02/07/speech-of-the-president-of-the-republic-on-the-defense-and- deterrence-strategy.

only) and, if necessary, unilateral disarmament on the part of democratic countries, since that is where the pressure is greatest.

The cost/benefit calculation that is put forward by the promoters of the TPNW is worth examining[146] but is ultimately unpersuasive. In terms of risk analysis, a risk must be dealt with if its probability of occurrence is low but with major potential consequences (gains/losses), or if its probability of occurrence is high even if the potential consequences are moderate. From this perspective, there is no doubt that if deterrence were to fail, it would have major consequences. TPNW proponents ground their arguments on a biased analysis of risks, by refusing the very logic of deterrence and postulating its failure. The probability of deterrence failure is rated as 1 by the promoters of the TPNW, i.e., as inescapable. TPNW promoters thus disregard the logic of deterrence by postulating as a reality an event whose probability of occurrence decreases precisely when it becomes more likely, by virtue of deterrence. This is the whole logic of deterrence—that it is effective because risks are immediately updated, materialized, and made visible to political decisionmakers, making them less likely to actually occur.

The TPNW bans nuclear deterrence, on the grounds that it is on a threat to the security of humanity,[147] even as a transitory measure on the path towards general and complete disarmament. Yet the logic of deterrence has proven to be effective and is still necessary to ward off war, if only as a temporary strategy. Whereas for the activists "nothing proves that nuclear deterrence is what has kept the world at peace since 1945,"[148] it is difficult to account for the 75 years of peace on the European continent since 1945 without considering the change that was brought about by nuclear deterrence, with its paradoxical process of inhibiting violence through fear of the unacceptable damages that would result in the event of an attack. Deterrence has not prevented all wars and forms of violence (compared with the paradox stability/instability), which by the way had not been its original purpose, but still contributes to creating a vault of maximum violence in current conflicts. This assessment is controversial, but cannot simply be dismissed out of hand, lest the reasoning be distorted.

146 Compare Alexander Kmentt's question: "The breadth of consequences and the risks of nuclear weapons should be weighed against the posited security benefit of nuclear weapons. What is the balance of probability between the belief that nuclear weapons deter and prevent large-scale wars and the knowledge that deterrence, including nuclear deterrence, can fail causing measurable humanitarian and other consequences?" Alexander Kmentt, *The Treaty Prohibiting Nuclear Weapons: How it Was Achieved and Why It Matters* (New York: Routledge, 2021). https://www.routledge.com/The-Treaty-Prohibiting-Nuclear-Weapons-How-it-was-Achieved- and-Why-it-Matters/Kmentt/p/book/9780367531959.

147 United Nations, *Report of the first Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons* (June 21-23, 2022). "This highlights now more than ever the fallacy of nuclear deterrence doctrines, which are based and rely on the threat of the actual use of nuclear weapons … ." https://meetings.unoda.org/meeting/57998/documents?f%5B0%5D=document_type_ meeting%3AFinal%20reports. Accessed May 12, 2023.

148 National Assembly of France, "Compte-rendu n°34 de la Commission de la défense nationale et des forces armées" (January 25, 2023). https://www.assemblee-nationale.fr/dyn/16/comptes-rendus/cion_def/l16cion_def2223037_compte-rendu. Accessed May 12, 2023.

On the other hand, while the stakes of a war between nuclear protagonists are well known to all, the example of World War I shows that when risks are not clearly visible, the likelihood of their occurring may be greater. Christopher Clark has this conclusion to his book *The Sleepwalkers: How Europe Went to War in 1914:*[149]

> *Did the protagonists understand how high the stakes were ?…They knew it, but did they really feel it? This is perhaps one of the differences between the years before 1914 and the years after 1945. In the 1950s and '60s, decisionmakers and the general public alike grasped in a visceral way the meaning of nuclear war—images of the mushroom clouds over Hiroshima and Nagasaki entered the nightmares of ordinary citizens. As a consequence, the greatest arms race in human history never culminated in nuclear war between the superpowers. It was different before 1914. In the minds of many statesmen, the hope for a short war and the fear of a long one seem, as it were, to have cancelled each other out, holding at bay a fuller appreciation of the risks.*

In the absence of deterrence, all other things being equal, the probability of a major conventional war happening is much higher. That is why nuclear disarmament is not the sole parameter of Article VI (which also provides for general and complete disarmament) and why a body of work has been generated on the conditions for creating an environment favoring nuclear disarmament.[150] The TPNW is unique in that it removes any prerequisites for disarmament, which is an option that must be made explicit in terms of risk calculation: the risk of a conventional war would be made higher.

When asked about this point at the above-mentioned parliamentary hearing, the representative of ICAN France explained:

> *The probability of waging a conventional war after a nuclear war is quasi nonexistent. Unfortunately, nuclear disarmament does not mean world peace. There will probably always be wars. Nevertheless, the world would feel safer without nuclear weapons, and wars to come would be conventional only, leaving the future open.*[151]

As opposed to this calculus, factoring in the logic of deterrence leads to a wholly different risk assessment. The probability that deterrence fails is not zero, yet the probability of this happening is low due to deterrence itself; it is not a 1-rated risk

149 Christopher Clark, *The Sleepwalkers: How Europe Went to War in 1914* (New York: Harper, 2013).

150 Brad Roberts, "On Creating the Conditions for Nuclear Disarmament: Past Lessons, Future Prospects," *Washington Quarterly* 41, no. 2 (2019).

151 National Assembly of France, "Compte-rendu n°34 de la Commission de la défense nationale et des forces armées" (January 25, 2023). https://www.assemblee-nationale.fr/dyn/16/comptes-rendus/cion_def/l16cion_def2223037_compte-rendu.

for any political community in the foreseeable political future. On the other hand, in today's international context, the risk of a major conventional war in the absence of nuclear deterrence would probably be assessed as high. So, this option would lead us to trade a very serious but unlikely risk ("failure of deterrence") for a serious and very likely one (major conventional war in the absence of nuclear deterrence).

In sum, proponents of the TPNW base their ethical argument on a failed risk assessment.

They also base their ethical argument on a failed prediction—of the inevitable failure of deterrence which, they argue, creates a moral obligation for immediate and unconditional disarmament. The argument of TPNW advocates stops short at this point, as if the alternative of eliminating nuclear weapons were a reality within reach that leaders are simply reluctant to grasp.[152] The question then turns to: Who is this injunction directed at? Who is to make a decision and for whose benefit?

Only the sovereign of a global and universal republic would have the means of implementing this injunction and arbitrating between the risks mentioned above, all of it in a framework close to E. Kant's perpetual peace. It is a respectable utopian vision, but out of touch with the real alternatives politicians who are in charge of implementing an ethic of responsibility have to choose from. The logic of the TPNW is an injunction to address the security of an indeterminate humanity in an infinite time frame.

In Max Weber's philosophy, the political power is the sole holder of the "monopoly of legitimate violence." It is interesting to note, however, that while deterrence can be considered the supreme and last resort tool for exercising the monopoly of legitimate violence, it represents a paradoxical drive. Deterrence is both exercising legitimate violence and converting violence through the way it is exercised.

Thus, as long as a global community and a world government are not in place, it will always remain paradoxical, on behalf of the interests of the non-nuclear-weapon states signatories to the TPNW, to ask the nuclear-weapon states to take their interests into account to the detriment of their own security. The objective is indeed to achieve unimpaired security for all, and enhanced security for all; it is unrealistic to expect weapon states to disarm unilaterally, which would result in reduced security for some—but not others.

Moreover, it is deceptive to present the problem as a divide between weapon-states and non-weapon-states. The issue also touches upon non-weapon states that benefit from positive and negative security guarantees from nuclear weapon states: not all forms of disarmament are equivalent for them either. For example, one state's unilateral disarmament could likely increase the risk of war and violence in its environment and ultimately for itself. The ethics of responsibility applies to all states—it is not possible to claim that disarmament is the only responsibility of nuclear weapons states.

152 Beatrice Fihn, Nobel Prize lecture (December 10, 2017). "Their existence is immoral. Their abolishment is in our hands."

Historical experience shows that some forms of disarmament lead to instability, increase the risk of misleading adversaries in their calculations, and ultimately lead to war and violence. While the dilemma of security and arms acquisition is often used to explain the outbreak of World War I, the example of the interwar period points in another direction.[153] It highlights the consequences of the mistakes made during international negotiations on disarmament and collective security at that time and the great reluctance of democracies to rearm in the face of Germany's aggressiveness and territorial expansionism. "When Hitler decided to remilitarize the Rhineland, France was powerless and could not take action. It did not have the tools it needed to keep Hitler at bay," wrote French historian Maurice Vaïsse.[154] Thus, while Germany progressively violated the clauses of the Treaty of Versailles that provided for its disarmament, France was slow to rearm, due to financial and economic difficulties and political instability—but also to the deep-rooted pacifism of its population and its leaders, traumatized as they had been by the Great War, whose greatest desire was to avoid a new and bloody conflict with Germany.[155] France relied militarily on a strategy of defensive fortifications, the Maginot Line, while being aware that it was in no position to stand alone against Germany. Subsequently, the feeling of being at a serious disadvantage against Germany militarily was to account for the fact that Hitler's successive coups de force left France unresponsive and that it waited until March 1939 before reversing the *appeasement* strategy it had pursued with Great Britain.

From a utilitarian perspective, it is also necessary to revisit an argument often put forward by TPNW proponents—about the virtues of disarmament leadership by example. The unprecedented nuclear disarmament efforts made by France and others in the 1990s did not have the expected virtuous effect on others: it was during that decade that proliferation crises developed in Asia, the Far East, and the Middle East, and in that and the following decade that Russia and China started a trajectory of modernization and arsenal expansion that continues to this day.

With regard to the United States, is there any chance that unilateral disarmament by the United States would not entail a danger of weakening American security guarantees and an increased risk of proliferation (i.e., the opposite of the intended objective)? Is there any chance that France's unilateral disarmament would help Europe cope with Russia's aggressive nuclear rhetoric and ambitions in Europe? As President Macron argued in his 2020 speech "For a nuclear-weapon state like France, unilateral nuclear disarmament would be akin to exposing ourselves as well as our partners to violence and blackmail, or depending on others to keep us safe." Nicolas Roche has echoed this judgment: "Unilateral disarmament then amounts to a risk,

153 Brad Roberts, *Nuclear Disarmament: A Critical Assessment.*

154 Jean Doise and Maurice Vaïsse, *Diplomatie et outil militaire – politique étrangère 1871-2015* (Paris: Points, Points Histoire collection, 2015).

155 Mathias Bernard, et al., Chapter 8. "Extension, crise et résilience des démocraties libérales dans l'entre-deux-guerres," eds., *Histoire du monde de 1870 à nos jours* (Paris : Armand Colin, 2017), pp132-148.

for a political community, of exposing itself naked to the violence of others, instead of being a path to peace."[156]

As their logic does not take into account the reality that political leaders have a moral obligation to protect the specific political community in which they live, the promoters of the TPNW have no other option than to stick to hortatory appeals. As Western publics are the only actors who might be swayed by such appeals, this approach brings with it a heightened risk of war for the democracies.

An additional consideration in this review of the TPNW from the ethics of responsibility is whether the TPNW's existence has any consequences—intended or otherwise—that run counter to the desired objective of general and complete disarmament (Article VI) or are ethically questionable.

A first point of criticism arises from the method deployed by the promoters of the TPNW, which aims at increasing the "costs" of deterrence in democracies through a moral stigma effect. TPNW advocates promote an "observer status," especially with European NATO members, mobilize European banks to "de-finance" nuclear weapons, and lobby municipalities to join the call to "ban" nuclear weapons,[157] among other actions. This strategy, which relies on mobilizing the civil societies, is obviously more likely to bear fruit in France than in North Korea. How many municipalities have "joined the call" to abolish nuclear weapons in the Democratic People's Republic of Korea (North Korea), the People's Republic of China, and the Russian Federation? How likely is it that grassroot movements will influence authoritarian leaders? Only democracies are actually put under pressure by TPNW proponents, while authoritarian states are left off the hook. This is not only morally problematic, but also potentially dangerous. Causing asymmetric erosion of the legitimacy of deterrence could wrongly induce the potential adversaries of democracies to bet on a weaker determination of the latter to defend themselves. Even if this is not the objective of TPNW promoters, disarming democracies against authoritarian regimes would be a very unfortunate consequence. It is a dangerous approach that increases the risk of a nuclear war if it leads the adversaries of democracies to underestimate their determination.

A second point of criticism is that the TPNW weakens the Non-Proliferation Treaty and thus the very framework within which the nuclear-weapon states view further nuclear disarmament efforts. This is the result of the increased polarization between an unconditional and immediate vision of disarmament and a cautious and progressive one, coupled with a deteriorated strategic context. While consensus building is urgently needed, the space for discussion appears to be shrinking. The discussion risks revolving around pro- or anti-ban, leaving the discussion around more realistic and collaborative venues for disarmament underprioritized. Moreover, there is a risk that the TPNW will become a rival or even an alternative treaty to the NPT, even though it is

156 N. Roche and Joubert H. Tardy, "Peut-on réconcilier morale et dissuasion nucléaire?" *Commentaire* 168 (2019), pp795-806.

157 In France, 70 cities have "joined the call" to ban nuclear weapons as of April 2023. ICAN France, "Communiqué de presse." https://icanfrance.org/communique-de-presse-montpellier-devient-la-70e-ville-de-france-a-soutenir-le-traite-sur-linterdiction-des- armes-nucleaires/. Accessed May 12, 2023.

less comprehensive than the NPT in terms of non-proliferation (no obligation to join the NPT, no additional protocol) and has a number of flaws in terms of disarmament (no obligation to ratify the CTBT and no verification regime, for example). The promoters of the TPNW reject this idea and insist that the TPNW and the NPT are complementary. However, some researchers are already raising on their own the prospect of a legitimate withdrawal from the NPT, as a "political instrument to advance disarmament."[158] For the first time, a representative of a state party (Kiribati) raised this prospect at the 2022 NPT review conference.[159] This is a matter for extreme vigilance, for nothing could be more fatal to the international order and the very possibility of disarmament and a safer world.

A third criticism pertains to the unwillingness of the TPNW promoters to differentiate among various deterrence practices and doctrines. Held in June 2022, the final declaration of the first meeting of states parties to the TPNW denounces all forms of deterrence and the threat of using nuclear weapons.[160] However, while Russia engages in irresponsible nuclear rhetoric in support of its war of aggression in Ukraine and is not in the room, Russia's name does not appear in the final document. It is also striking that several of the countries most actively engaged in the TPNW (among them South Africa) did not vote in favor of the UN General Assembly resolutions condemning Russian aggression in Ukraine.[161] What does this tell us about the international security environment to which these countries are willing to consent in a post-nuclear world, if the violation of the most basic norm (respect of territorial sovereignty) cannot be unequivocally denounced? Is this the right message to send to the nuclear weapons states about future confidence in an international order without nuclear weapons but where the new rule is now the absence of them altogether? Is it not risky to replace the risk of using a weapon of mass destruction with the reality of a massive injustice?

This analysis brings me to the conclusion that the ethics of responsibility precludes any unconditional and immediate nuclear disarmament for a nuclear-weapon state such as France, a permanent member of the Security Council with special responsibilities for peace and security in which the role of deterrence is limited to extreme circumstances of self-defense.

158 Joelien Pretorius and Tom Sauer, "When is it legitimate to abandon the NPT? Withdrawal as a political tool to move nuclear disarmament forward," *Contemporary Security Policy* 43, no. 1 (2022), pp161-185. https://www.tandfonline.com/doi/full/10.1080/135 23260.2021.2009695. Accessed May 12, 2023.

159 "I want to tell them [NWS] that Kiribati might pull out of this NPT, I would recommend it to the President. … So I'm going to recommend, to my government, to pull out, as soon as possible, if these important issues for the people, for humans being like you and us are not advanced forward at the end of the NPT Review Conference." United Nations, UN Web TV, "Plenary meeting (Tenth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons" (August 22, 2022). https://media. un.org/en/asset/k1e/k1ek92wza1. Accessed May 12, 2023. Quoted by Emmanuelle Maître in "10e conférence d'examen du TNP : un mois de débat entaché par la guerre en Ukraine" (2022). https://frstrategie.org/programmes/observatoire-de-la-dissuasion/10e- conference-examen-tnp-un-mois-debat-entache-guerre-ukraine-2022. Accessed May 12, 2023.

160 United Nations, *Report of the first Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons.*

161 Margaret Besheer, "UN General Assembly Rejects Russia's 'Referendums,' 'Annexation' in Ukraine," Voice of America (October 12, 2022). https://www.voanews.com/a/un-general-assembly-rejects-russia-s-referenda-annexation-in-ukraine-/6787420.html. Accessed May 12, 2023.

Toward a Responsible Disarmament Ethic

The approach of TPNW must therefore be countered by a responsibility-based disarmament ethic, underpinned by three political and moral requirements:

The first such requirement is for renewed progress toward negotiated, multilateral disarmament. This requires focusing much more sharply on the necessary conditions for creating an environment conducive to nuclear disarmament in accordance with the principle of undiminished security for all. It also requires reviving the progressive disarmament agenda (entering into force of the CTBT; banning the production of fissile material for the production of nuclear weapons; working on the verification of the nuclear disarmament; working on strategic risk reduction). In a way, this calls for a readjustment of the immediate objective in the current context of deteriorated strategic environment, by means of a responsible and clear-sighted attitude on the part of all: preserving the existing instruments, first and foremost the NPT; and avoiding a new arms race. It is of course a question of avoiding a breach of the nuclear taboo, and in the same vein, of supporting all calls for restraint and condemnations of irresponsible behaviors, including from the TPNW community.

This necessary discussion is challenging, but it is overshadowed and hindered by the polarization of the debate on the TPNW. It requires an effort to listen, rather than stigmatize, when security interests are put forward. This applies to both non-nuclear weapon states and nuclear weapon states, with the latter probably having to put more effort into the positive and negative security guarantees granted to non-nuclear states in the context of the war in Ukraine. The discussion will be complicated, however, as long as the promoters of the TPNW refuse to acknowledge that deterrence is needed on the road to nuclear disarmament, even if only as a transitional measure. This means also being ready to discriminate between the different practices and doctrines of the weapon states. Because the first step, before eliminating these weapons, will be to limit the strategic risks, to condemn the offensive practices of deterrence, and to ensure that if nuclear weapons are held, they are indeed associated with responsible practices (in terms of transparency, doctrines, safety and security, communication etc.). They must also be considered as weapons of deterrence whose objective is to prevent war and not designed as tools of intimidation, coercion, or destabilization. The concepts of nuclear restraint and responsibility are key here.

The challenge is therefore, from the point of view of the ethics of consequences, to come up with a form, a framework, a process of disarmament that will contribute to strategic stability, as understood as the absence of incentives for aggression at the lowest possible level of forces.

The second requirement is for disarmament that can be verified. This is a major issue that is technically very delicate and requires further work. The problem was identified early on by the first critics of the weapon, Russell and Einstein, who wrote of nuclear disarmament:

> *This is an illusory hope. Whatever agreements on the non-use of the H-bomb might have been reached in peacetime would no longer be considered binding in wartime, and both sides would rush to build H-bombs as soon as hostilities began.*[162]

At the heart of this difficulty is the question of trust.

The third requirement is an understanding of how to make a world without nuclear weapons a safer world for all. A disarmed world is not a world where the risk of nuclear war no longer exists, since nuclear weapons cannot be dis-invented. To avoid nuclear war, to avoid a higher level of violence sparked by major conventional conflicts, to avoid the injustice that would result from submission to the strongest, most aggressive, and best armed. Possessing nuclear weapons places a historically unprecedented moral responsibility on the leaders of those countries. It obliges them to create a situation in which violence is not simply inhibited but rather in which there is true cooperation and harmony between all parties. The goal must be to work to set up a different international order, with effective global governance which can set up and enforce the law. This goal to transform the international order is not just an ideal—it sets out a political and strategic path which must enable to make concrete progress.

Conclusion

When asked at a parliamentary hearing about alternatives to nuclear deterrence, the director of ICAN France recently replied: "The work of our campaign is not to provide an alternative to the atomic bomb."[163] This understandable position also illustrates the difference in perspective between activists and decisionmakers. From the point of view of the Weberian ethic of responsibility, however, the question is precisely: What is the alternative, and if it does not exist, how can it be patiently developed? It is an ethics of responsibility, undoubtedly more frustrating than an ethics of conviction, but it is the only realistic one. If we talk too much about the objective, we run the risk of losing sight of the path, which is the essential part of the work to be carried out with a view to disarmament.

162 Quoted in N. Roche and J.H. Tardy, "Peut-on réconcilier morale et dissuasion nucléaire?" *Commentaire* 168 (2019), pp795-806.

163 National Assembly of France, "Compte-rendu, no. 34, de la Commission de la défense nationale et des forces armées" (January 18, 2023). https://www.assemblee-nationale.fr/dyn/16/comptes-rendus/cion_def/l16cion_def2223037_compte-rendu. Accessed May 12, 2023.

Mapping the Evolving Debate: A Literature Review

Anna Péczeli

The Origins of the Debate – "Physicists Have Known Sin"

The ethical and moral debate about nuclear weapons is as old as the weapons themselves. Shortly after the bombings of Hiroshima and Nagasaki, Robert Oppenheimer, American theoretical physicist and "father of the atomic bomb," personally delivered a letter to Secretary of War Henry L. Stimson in which he expressed his revulsion and the desire to see nuclear weapons banned. Oppenheimer was upset about the bombing of Nagasaki which he thought was not necessary militarily. In an October 1945 meeting with President Truman, he said that "I feel I have blood on my hands."[164] Later, in a 1947 lecture, he made the following remarks:

> *Despite the vision and farseeing wisdom of our wartime heads of state, the physicists have felt the peculiarly intimate responsibility for suggesting, for supporting, and in the end, in large measure, for achieving the realization of atomic weapons. Nor can we forget that these weapons, as they were in fact used, dramatized so mercilessly the inhumanity and evil of modern war. In some sort of crude sense which no vulgarity, no humor, no overstatement can quite extinguish, the physicists have known sin; and this is a knowledge which they cannot lose.*[165]

After the war, Oppenheimer left Los Alamos National Laboratory and became an advocate of nuclear peace. He strongly opposed the development of the hydrogen bomb. Like many others, he believed that security in the nuclear age can only be achieved through a transnational organization that was empowered to stifle the nuclear arms race. Oppenheimer wrestled with the consequences of his research. During his last years, he thought a lot about ethics and morality in the nuclear age, and the responsibility of scientists. In a 1965 interview, he said the following:

> *Well, I don't want to speak for others because we're all different. I think when you play a meaningful part in bringing about the death of over 100,000 people and the injury of a comparable number, you naturally don't think of that as—with ease. […] Long ago I said once that in a crude sense which no vulgarity and no humor could quite erase, the physicist had known sin, and I didn't mean by that the deaths that were caused as a result of our work. I meant that we had known the sin of pride. We had turned to [affect] …*

164 Ray Monk, *Robert Oppenheimer: A Life Inside the Center* (New York, NY: Anchor Books, 2014), pp475–494.

165 Robert J. Oppenheimer, "Physics in the Contemporary World," Arthur D. Little Memorial Lecture at the Massachusetts Institute of Technology (November 25, 1947).

> *the course of man's history. We had the pride of thinking we knew what was good for man, and I do think it had left a mark on many of those who were responsibly engaged. This is not the natural business of a scientist.*[166]

In fact, Oppenheimer was not the only physicist who was concerned about the ethical and moral implications of their work. Joseph Rotblat, a Polish-British physicist who worked with the British mission to the Manhattan Project, left the program in 1944 and devoted his life to nuclear disarmament and global peace (which was recognized with a Nobel Peace Prize in 1995). He shared many of the concerns that Oppenheimer had, and he decided to leave when General Leslie Groves, the director of the Manhattan Project, told him that the real objective of the program was not to defeat Nazi Germany but to subdue the Soviet Union.[167] As Rotblat noted in his Nobel lecture, "A splendid achievement of science and technology had turned malign. Science became identified with death and destruction."[168] After his return to the United Kingdom, Rotblat became a founding member of the Pugwash Conferences on Science and World Affairs that played an important role in sponsoring discussions between scientists from the United States and the Soviet Union during the Cold War years. The organization was created in response to the 1955 Russell-Einstein Manifesto in which a handful of prominent scientists expressed their ethical concerns about nuclear weapons:

> *There lies before us, if we choose, continual progress in happiness, knowledge, and wisdom. Shall we, instead, choose death, because we cannot forget our quarrels? We appeal, as human beings, to human beings: Remember your humanity, and forget the rest. If you can do so, the way lies open to a new Paradise; if you cannot, there lies before you the risk of universal death. We invite this Congress, and through it the scientists of the world and the general public, to subscribe to the following resolution: In view of the fact that in any future world war nuclear weapons will certainly be employed, and that such weapons threaten the continued existence of mankind, we urge the governments of the world to realize, and to acknowledge publicly, that their purpose cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them.*[169]

166 Robert J. Oppenheimer, "Dr. Oppenheimer Interview with Martin Agronsky," CBS Evening News (August 5, 1965).

167 George Iskander, "*The Manhattan Project Shows Scientists' Moral and Ethical Responsibilities," Scientific American* (March 2, 2022). https://www.scientificamerican.com/article/the-manhattan-project-shows-scientists-moral-and-ethical-responsibilities/. Accessed March 31, 2023.

168 Joseph Rotblat, "Remember Your Humanity," Nobel lecture (1995). https://www.nobelprize.org/prizes/peace/1995/rotblat/ lecture/. Accessed March 31, 2023.

169 Bertrand Russell and Albert Einstein, "The Russell-Einstein Manifesto," (July 9, 1955). https://pugwash.org/1955/07/09/ statement-manifesto/. Accessed March 31, 2023.

In the footsteps of these physicists, many organizations and grassroots campaigns were created to use science to advocate for peace. In the humanitarian impacts of nuclear weapons movement, scientists from many different disciplines have argued against nuclear weapons, based on their effect on the human body and health, the global climate, the environment, the social order, and the global economy. In the past few years, these efforts culminated in the adoption of the Treaty on the Prohibition of Nuclear Weapons (TPNW). The treaty was adopted on July 7, 2017 with 122 states voting in favor of it. The momentum for the ban treaty was underlined by a growing level of frustration with the nuclear weapons states' slow progress in nuclear disarmament. The entry into force of the TPNW in January 2021 renewed the debate about the ethical and moral aspects of nuclear deterrence, and inspired a new wave of analytical work that tackles the different layers of this issue. The following sections provide a few general observations about the literature, and then proceed to showcase the main moral arguments for and against nuclear deterrence with illustrative examples from across the spectrum. These sections group the literature into four main themes: disarmament perspectives, religious perspectives, practitioner perspectives, and legal perspectives.

General Observations about the Literature

As the previous section has shown, the debate about the ethical and moral implications of nuclear weapons goes back to the 1940s. Since then, a large body of literature has emerged about this topic. However, there is some degree of repetition among these sources and the very same arguments have been brought forward several times on both sides of the debate. This literature review does not aim to provide a comprehensive list of every relevant source. Instead it focuses on identifying the most important arguments that add something new to the debate.

A peculiar aspect of this topic is that it is not purely an academic discourse. There are several different communities that shape the debate with their own perspectives, biases, and experience. The Catholic Church, for example, has taken a prominent role in addressing the topic of nuclear weapons, which brings an important religious angle to the table. The community of practitioners is another unique group that provides an insight into the world of policymakers and how ethical and moral dilemmas play out in global politics and everyday decisionmaking. The next influential group is the legal community. Since ethics and morality are so closely intertwined with what is considered to be legal, it is also important to showcase how international law has evolved in this area.

This literature review tries to provide a baseline understanding of the main arguments at play by bringing forward illustrative examples from all of these communities. Regarding the scope, this survey has only assessed English-language sources, recognizing that there is additional good work out there that was beyond the scope of this review. This effort was conducted in conjunction with a Center for Global Security Research (CGSR) workshop that aimed to generate new analysis

by the practitioner community and publish a collection of new materials on ethical perspectives within the deterrence community. Convening this workshop was partly inspired by existing gaps and imbalances in the literature.

The first general impression that emerges from this review is that many of these conversations are happening in silos with nuclear deterrence supporters and opponents generally speaking past each other. These two groups often misunderstand or misrepresent each others' arguments, which leads to a certain degree of animosity and makes bridge-building very difficult.[170] The arguments surrounding the TPNW are great examples of this polarization: both camps argue that the other side is not serious about nuclear disarmament, while they are not even talking about the same thing since the disarmament they envision and the pathway toward it are seen very differently.

The second general impression is that there is an imbalance in the literature. Opponents of nuclear deterrence have made their case forcefully and these arguments have gained a lot of political traction with the inception of the ban treaty. At the same time, the moral case for nuclear deterrence has been made rarely and often without much influence on the overall discourse. Experts and practitioners have addressed this issue only in a sporadic way which led to many gaps in the literature.

Third, the framing of the discourse has generally taken shape in a binary way. Many of the dilemmas surrounding nuclear weapons are presented as black or white choices. This binary logic puts deterrence at odds with disarmament, while in reality, the United States and its allies are actually committed to doing both—advancing nuclear disarmament and also maintaining an effective nuclear deterrent as long as nuclear weapons remain.

Fourth, many sources tend to forget that certain ethical dilemmas are not necessarily specific to the nuclear era. Nuclear weapons did not introduce the problem of how to respond morally in warfare—these dilemmas precede the nuclear age. There has been a lot of discussion about ethics and morality that took place before nuclear weapons were invented, and many of those arguments have relevance in the nuclear age as well.

Lastly, the ongoing war in Ukraine and the erosion of the arms control architecture raises an important question about how absolute these ethical and moral considerations are. A notable gap in the literature is how (and if at all) moral constraints are applicable in highly asymmetric situations, where one side completely disregards existing norms and legal frameworks, and acts in violation of most ethical and moral guidelines of warfare. If one side operates completely outside of a moral framework, what does it mean for the rest of the international community?

170 For more on this point, see Heather Williams, "A nuclear babel: narratives around the Treaty on the Prohibition of Nuclear Weapons," *The Nonproliferation Review* 25, no. 1-2 (2018), pp51–63. https://doi.org/10.1080/10736700.2018.1477453. Accessed March 31, 2023.

Disarmament Perspectives

Core propositions in favor of nuclear disarmament:

- even a limited use of nuclear weapons would have devastating consequences for the environment, climate, health, social order, human development, and global economy
- nuclear weapons by nature are inhumane and indiscriminate, therefore they cannot be legal
- deterrence is too uncertain, therefore we cannot rely on it for safety and security
- nuclear escalation cannot be controlled
- stigmatizing nuclear weapons leads to nuclear disarmament
- it is unjust to divide the world into nuclear haves and have nots, justice in the nuclear domain can only be achieved through disarmament
- on many occasions, nuclear catastrophe was only avoided by luck, this will eventually run out

The following citations are illustrative:

> *These conferences provide an outlet for the latest research looking at the consequences of nuclear weapons explosions on the environment, climate, health, social order, human development and global economy. The research makes a compelling case that these consequences are even greater than we previously understood. Even a so-called "limited nuclear exchange" using a small fraction of today's nuclear arsenals could result in an immediate humanitarian emergency of enormous scale. The images of Hiroshima and Nagasaki would pale by comparison. No national or international capacity exists to deal with such consequences in any adequate manner. Moreover, the global temperature drop as a consequence of smoke and soot in the atmosphere would have devastating consequences on staple food production. Worldwide famine and a breakdown of social order around the globe would ensue. There cannot be a winner in such a scenario; in the words of Ronald Reagan: "a nuclear war can never be won and must never be fought.*[171]

> *The case for prohibiting nuclear weapons is clear: they are by nature inhumane and indiscriminate. The use of a nuclear weapon on a populated*

171 Alexander Kmentt, "Avoiding the Worst: Re-framing the Debate on Nuclear Disarmament," *European Leadership Network* (June 24, 2014). https://www.europeanleadershipnetwork.org/commentary/avoiding-the-worst-re-framing-the-debate-on-nuclear-disarmament/. Accessed March 31, 2023.

area would immediately kill tens – if not hundreds – of thousands of people, with many more injured. […] Negotiating a treaty prohibiting nuclear weapons will codify the stigma against causing such inhumane consequences. Weapons that cause unacceptable harm to civilians cannot remain legal or be considered legitimate options for states in warfare.[172]

Nuclear deterrence is too uncertain a theory to serve as the sole justification for keeping nuclear weapons. Some other, more concrete rationale must be developed. Or else, lacking a rationale, the weapons should be banned. [...] Deterrence intended to protect nuclear weapon states has failed a number of times and seems theoretically problematic. Deterrence that is extended over another state seems likely to be even less reliable. It makes little sense to issue dangerous threats that are unreliable. [...] The military usefulness of nuclear weapons is doubtful enough that it makes little sense to rely on these weapons for safety and security.[173]

The step-by-step approach is replaced by a principled approach, which holds that nuclear weapons are too destructive to be used, just like chemical and biological weapons. A ban on nuclear weapons will turn the tables. The burden of proof will shift from the non-nuclear weapon states to the nuclear weapon states. Those nuclear weapon states that are not eager to eliminate their nuclear weapons will come under growing pressure from worldwide public opinion as well as their own public opinion to follow the logical extension from the accepted norm that nuclear weapons are too destructive to be used and therefore should be banned. It is this stigmatizing effect of nuclear weapons as inhumane and therefore unusable that may bring all states to pursue 'Global Zero'. Once all nuclear weapon states have agreed with the ban, a Nuclear Weapons Convention will stipulate how the nuclear weapon states will go to Zero.[174]

For all of Sir Michael's [Quinlan] wrestling with the moral implications of nuclear weapons and the legitimacy of their possession and potential use, he was unable to make a convincing moral case why a handful of states should possess these weapons and everyone else should not. Strategic and legal arguments can be validly made on this issue, but such arguments do not overcome the feelings of injustice that this double standard arouses in

172 Beatrice Fihn, "The Logic of Banning Nuclear Weapons," *Survival* 59, no. 1 (February-March 2017), pp43–50. https://www.tandfonline.com/doi/abs/10.1080/00396338.2017.1282671. Accessed March 31, 2023.

173 Ward Wilson, "The Myth of Nuclear Deterrence," *The Nonproliferation Review* 15, no. 3 (2008), pp421–439. https://doi.org/10.1080/10736700802407101. Accessed March 31, 2023.

174 Tom Sauer and Joelien Pretorius, "Nuclear Weapons and the Humanitarian Approach," *Global Change, Peace & Security* 26, no. 3 (2014), pp233–250. https://doi.org/10.1080/14781158.2014.959753. Accessed March 31, 2023.

many observers and non-nuclear-weapon states. […] The only sustainable way to resolve these multiple tensions would be to create an order in which no one possesses nuclear weapons and confidence is high that no one could cheat and acquire such weapons. This would meet all the conditions of justice in the nuclear domain.[175]

For example, declassified official documents from the Cold War reveal occasions when nuclear catastrophe was avoided by luck or seemingly random events rather than by the clearly identifiable operation of nuclear deterrence. [...] The long list of nuclear accidents, malfunctions, mishaps, false alarms, and close calls, often initiated by mechanical and human error, continues to grow. Such incidents include crashes of nuclear-armed aircraft and submarines, warning systems mistaking flocks of geese or reflections of sunlight for enemy missile launches, maintenance crews dropping tools and blowing up missile silos, and the temporary loss or misplacement of nuclear weapons.[176]

Did you know that your country has an official policy to develop the capacity to fight and win a nuclear war fought over six-month period–which itself is totally fallacious. For several reasons. Nuclear war is going to take about an hour to complete quite actually, because once a missile is launched, the other satellite sees the attack and they press their button, and it's all over within about an hour. Number one, so it can't last the six months. Number two, if there's a nuclear war now, it will induce nuclear winter and the death of all life on earth. The Pentagon even admits that and I'll explain that in a minute.[177]

Core propositions against banning nuclear weapons (in the current security environment):

- many states continue to rely on nuclear weapons to protect their populations
- in the current security environment, disarmament is not feasible
- nuclear weapons are not inherently immoral
- a ban might actually undermine the gradual and step-by-step disarmament norm

175 George Perkovich, "The Diminishing Utility and Justice of Nuclear Deterrence," in Bruno Tertrais, *Thinking About Strategy—A Tribute to Sir Michael Quinlan* (Paris: Fondation pour la Recherche Stratégique, 2011). https://carnegieendowment.org/2011/11/30/ diminishing-utility-and-justice-of-nuclear-deterrence-pub-46261. Accessed March 31, 2023.

176 James E. Doyle, "Why Eliminate Nuclear Weapons?" *Survival* 55, no. 1 (2013), pp7–34.

177 Helen Caldicott, "Stop the Nuclear Madness," Voices of Democracy, The U.S. Oratory Project (April 17, 1986). https:// voicesofdemocracy.umd.edu/caldicott-stop-the-nuclear-madness-speech-text/. Accessed March 31, 2023.

The following citations are illustrative:

> *A nuclear-weapons ban at this time, though well intentioned, would ignore states' security concerns and has the potential to undermine other disarmament efforts. [...] To ignore security realities is to be ethically irresponsible. For many states, the utility of nuclear weapons has not gone away. Just as the experiences of the victims of nuclear weapons cannot be ignored, neither can the concerns of states relying on nuclear weapons to protect their populations in the event of an existential threat. One should not be subordinate to the other: both must be heard. The wisdom of the past offers a pathway for the future. For NATO, that means strengthening nuclear deterrence and assurance in the face of Russian aggression. For the Humanitarian Impacts Initiative, that means abandoning the specious notion that a nuclear weapons ban is a practical step towards disarmament. Rather, it is an unethical waste of time.*[178]

> *To kill indiscriminately doesn't mean simply to fail to avoid killing civilians; it means to positively desire to kill them—to deliberately target them—say, to terrify an enemy government into submission. Accordingly, a policy of counter-city strikes, where nuclear weapons are deliberately aimed at population centres in order to maximise civilian casualties, would be immoral; whereas a policy of aiming weapons of the minimum necessary power at vital military objectives, with the foreseeable side-effect of probably or certainly massive civilian casualties, would not be. Arguably, much targeting policy during the Cold War was indiscriminate and therefore immoral. But if that was so then, it is so no longer. Nuclear weapons are now far more accurate than they were in the 1970s, and are therefore able to destroy their objectives more efficiently and with less explosive force.*[179]

> *Finally, there is simply no evidence to suggest that the ban's approach to stigmatizing nuclear weapons will be an effective path to disarmament. Research on compliance with norms and laws ranging from tax evasion and other illegal behaviors, to excessive drinking, and on to energy conservation shows that one of the strongest predictors of compliance is an individual's belief about the probability that others in the appropriate reference group will also comply. In the case of the ban, all nuclear weapons states know that the rate of compliance among other nuclear weapons states is zero.*

178 Heather Williams, "Why a Nuclear Weapons Ban is Unethical (For Now)," *The RUSI Journal* 161, no. 2 (2016), pp38–47. https://www.tandfonline.com/doi/abs/10.1080/03071847.2016.1174481. Accessed March 31, 2023.

179 Nigel Biggar, "Living with Trident," *Scottish Review* (May 2015).

Such a ban, therefore, might ultimately do more to undermine the gradual and step-by-step disarmament norm rather than strengthen it.[180]

Religious Perspectives

Core propositions about nuclear weapons by Catholic leaders:

- deterrence is not an adequate strategy as a long-term basis for peace
- deterrence as a step on the way toward a progressive disarmament may still be judged morally acceptable[181]
- the deliberate initiation of nuclear war cannot be morally justified
- the use of nuclear weapons, as well as their mere possession, is immoral
- nuclear weapons have devastating, indiscriminate, and uncontainable effects and cannot be used
- morally in warfare, therefore they have no justifiable use

The following citations are illustrative:

Deterrence is not an adequate strategy as a long-term basis for peace; it is a transitional strategy justifiable only in conjunction with resolute determination to pursue arms control and disarmament. We are convinced that the fundamental principle on which our present peace depends must be replaced by another, which declares the true and solid peace of nations consists not in equality of arms but in mutual trust alone.[182]

In current conditions "deterrence" based on balance, certainly not as an end in itself but as a step on the way toward a progressive disarmament, may still be judged morally acceptable. Nonetheless, in order to ensure peace, it is indispensable not to be satisfied with this minimum which is always susceptible to the real danger of explosion.[183]

We do not perceive any situation in which the deliberate initiation of nuclear war, on however restricted a scale, can be morally justified. Non-

180 Benjamin A. Valentino and Scott D. Sagan, "The nuclear weapons ban treaty: Opportunities lost," *Bulletin of the Atomic Scientists* (July 16, 2017). https://thebulletin.org/2017/07/the-nuclear-weapons-ban-treaty-opportunities-lost/. Accessed March 31, 2023.

181 This position was revisited by Pope Francis, who stated that nuclear deterrence is "inadequate" to address the principal threats to peace and security, and the mere possession of these weapons is immoral.

182 National Conference of Catholic Bishops, "The Challenge of Peace, God's Promise and Our Response—A Pastoral Letter on War and Peace." United States Conference of Catholic Bishops, (May 3, 1983). https://www.usccb.org/resources/challenge-peace-gods- promise-and-our-response-may-3-1983. Accessed March 31, 2023.

183 Pope John Paul II, "Message of His Holiness Pope John Paul II to the General Assembly of the United Nations," *Vatican Pontifical Messages* (June 1982). https://www.vatican.va/content/john-paul-ii/en/messages/pont_messages/1982/documents/hf_jp- ii_mes_19820607_disarmo-onu.html. Accessed March 31, 2023.

nuclear attacks by another state must be resisted by other than nuclear means. Therefore, a serious moral obligation exists to develop non-nuclear defensive strategies as rapidly as possible.[184]

No use of nuclear weapons which would violate the principles of discrimination or proportionality may be intended in a strategy of deterrence. The moral demands of Catholic teaching require resolute willingness not to intend or to do moral evil even to save our own lives or the lives of those we love.[185]

The Holy See has no doubt that a world free from nuclear weapons is both necessary and possible. In a system of collective security, there is no place for nuclear weapons and other weapons of mass destruction. Indeed, "if we take into consideration the principal threats to peace and security with their many dimensions in this multipolar world of the twenty-first century as, for example, terrorism, asymmetrical conflicts, cybersecurity, environmental problems, poverty, not a few doubts arise regarding the inadequacy of nuclear deterrence as an effective response to such challenges. These concerns are even greater when we consider the catastrophic humanitarian and environmental consequences that would follow from any use of nuclear weapons, with devastating, indiscriminate and uncontainable effects, over time and space. […] Nuclear weapons are a costly and dangerous liability. They represent a "risk multiplier" that provides only an illusion of a "peace of sorts." Here, I wish to reaffirm that the use of nuclear weapons, as well as their mere possession, is immoral. Trying to defend and ensure stability and peace through a false sense of security and a "balance of terror," sustained by a mentality of fear and mistrust inevitably ends up poisoning relationships between peoples and obstructing any possible form of real dialogue. Possession leads easily to threats of their use, becoming a sort of "blackmail" that should be repugnant to the consciences of humanity.[186]

We are pastors and teachers, not technical experts. We cannot map out the precise route to the goal of eliminating nuclear weapons, but we can offer moral direction and encouragement. The horribly destructive capacity of nuclear arms makes them disproportionate and indiscriminate weapons that endanger human life and dignity like no other armaments. Their use as

184 National Conference of Catholic Bishops, "The Challenge of Peace, God's Promise and Our Response—A Pastoral Letter on War and Peace."

185 Ibid.

186 Pope Francis, "Message to the first Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons" (June 21, 2022). http://www.vatican.va/content/francesco/en/messages/pont-messages/2022/documents/20220621-messaggio-armi-nucleari.html. Accessed March 31, 2023.

a weapon of war is rejected in Church teaching based on just war norms. Although we cannot anticipate every step on the path humanity must walk, we can point with moral clarity to a destination that moves beyond deterrence to a world free of the nuclear threat.[187]

Core propositions about nuclear weapons in other religions and cultures:

- the Russian Orthodox Church has promoted a "pro-nuclear" worldview within Russian society
- while certain Buddhist teachings might be permissive to the possession of nuclear weapons as a deterrent, Buddhist ethics reject the employment of these weapons
- Chinese nuclear policy is influenced by two contradictory themes: the Confucian-Mencian tradition that rejects the use of force and considers conflicts as deviant, and *realpolitik* that considers the use of force the only effective means to ensure security
- while Hindu ethics argue against any preemptive attack, there is Hindu precedent for arguing that nuclear weapons can be directed against rogue states that use unrighteous strategies
- Islamic views on the ethics of weapons of mass destruction (WMD) may be divided into three categories, all of which accept that violence may be needed, but while Muslim WMD jihadists and terrorists argue for the acquisition and possible use of WMD, Muslim pacifism renounces the acquisition and possible use of WMD
- contemporary Jewish theorists argue against using weapons of mass destruction, but they also believe that WMD can be developed as a deterrent, and unilateral disarmament is immoral for countries such as Israel or the United States, which have declared enemies with the capacity to destroy them

The following citations are illustrative:

Since the collapse of the Soviet Union, religion and nuclear weapons have grown immensely in significance, reaching a peak in Russian ideology and strategy. Faith has a high profile in the president's public and private conduct and in domestic and foreign policy, and it is a measure of national identity. It has also saturated Russian nuclear military-industrial complex. [...] The nuclear priesthood and commanders jointly celebrate religious and professional holidays, and catechization is an integral part of the military

187 Cardinal Francis George, "Message to President Barack Obama," United States Conference of Catholic Bishops (April 8, 2010). https://www.usccb.org/issues-and-action/human-life-and-dignity/war-and-peace/nuclear-weapons/upload/letter-to-president- obama-from-cardinal-george-supporting-start-treaty-2010-04-08.pdf. Accessed March 31, 2023.

and civilian higher nuclear education. A similar situation prevails within the nuclear weapons industry. [...] The Russian Orthodox Church (ROC) has systematically and openly supported the Kremlin's foreign policy gambits involving nuclear weapons. For these moves by the Kremlin, the ROC has steadily generated social backing through its indoctrination and educational activities, among both the general public and the military.[188]

In sum, we are left with two major models of Buddhist ethics. One involves political responsibility based on the galactic model of the universal monarch who marshals military strength and moral influence to control and channel disruptive elements in society. This model will use force when necessary for the greater good, guided by utilitarian ethics and motivated by compassion. The other model separates religious and political roles into the two wheels of the dharma, the sage and the ruler. The Buddha left his father's palace and political responsibility to find a way to end individual suffering and attain peace based on virtue ethics. Under this model, Buddhists relinquish power politics as beyond their control and counterproductive. […] The first model may justify WMD as a deterrent in an extreme emergency, but not their use under any circumstances. The second model rejects WMD, not only because of the risk to the planet, but also because all weapons destroy the root causes of peace at both the individual and communal level. Today, both models of Buddhist ethics reject the deployment of WMD.[189]

One is the Confucian-Mencian world-view that essentially sees the world as harmonious, orderly and hierarchically structured. Conflicts are regarded as largely deviant phenomena rather than the nature of things and should/ can be managed through means other than the use of brute force. The other theme is what has come to be called parabellum or realpolitik view of the world, which holds that conflicts are perennial and zero-sum, and which regards the use of force as the only effective means to ensure security, stability and peace. […] The way in which Chinese decision-makers define their national security interests remains strongly influenced by a deep-rooted cultural, historical, and social experience. This in turn guides the formulation of Chinese arms control and disarmament policies. […] There is an inherent contradiction or conflict between normative and geostrategic concerns. The former can be regarded as image while the latter security considerations.[190]

188 Dimitry Adamsky, *Russian Nuclear Orthodoxy: Religion, Politics, and Strategy* (Stanford, CA: Stanford University Press, 2019), pp1–3.

189 David W. Chappell, "Buddhist Perspectives on Weapons of Mass Destruction," in Sohail H. Hashmi and Steven P. Lee, *Ethics and Weapons of Mass Destruction–Religious and Secular Perspectives* (Cambridge, MA: Cambridge University Press, 2004), p232.

190 Jing-Dong Yuan, "Culture matters: Chinese approaches to arms control and disarmament," *Contemporary Security Policy* 19, no. 1 (1998), pp85–128.

It is possible to discern two emerging positions among Hindus. One is the realist tradition of the Artha-sastra: Self-defense is absolutely necessary for the state, dictated by the policies of others. A second perspective, perhaps the one that will prevail in the long run, is a modern version of the just war tradition, with emphasis on nuclear weapons for deterrence. It is important to remember that Hindu thinkers have had a long history of reflection on the ethics of violence and nonviolence, and we can rest assured that principled Hindu positions (and there could be several) will be forthcoming. […] Short of a last resort, there is Hindu precedent for arguing that these weapons can be directed against rogue states that use unrighteous strategies or resort to war for unrighteous reasons according to the distinction of dharma-yuddha and kuta-yuddha. […] The permission for using extraordinary weapons in the above cases comes in the midst of battle, once the war has already begun. Because traditional rules of righteous warfare exclude fighting those who have not announced their intention to fight, there are Hindu precedents for arguing against any preemptive attack.[191]

Contemporary Islamic views on the ethics of WMD may be divided into three broad categories, mirroring those found in other religious traditions. First, the WMD jihadists argue for the acquisition and possible use of—given the right circumstances—weapons of mass destruction. Theorists of this group acknowledge that WMD push the moral limits of Islamic injunctions of fighting properly, but they argue that with the appropriate caveats, such weapons may be incorporated into the framework of traditional Islamic thinking on the proper conduct of jihad. An even greater embrace of WMD occurs with the second group, a group that may be labeled the Muslim WMD terrorists. Proponents of this view not only argue that it is morally and pragmatically necessary for Muslims to acquire WMD, they also justify and, more importantly, seem prepared to employ WMD as a weapon of first resort. Moreover, they place little value in the mainstream jihad tradition's distinctions between combatants and noncombatants, arguing that all non-Muslims—and even so-called nominal Muslims or Muslims who choose to live among non-Muslims—are legitimate targets. The last group may be identified as the Muslim WMD pacifists. These theorists renounce the acquisition and any possible use of WMD as contrary to Islamic ethics. Muslim WMD pacifism should be distinguished from the total pacifism that renounces all recourse to violence in the settlement of political disputes. […] Muslim WMD pacifists accept that jihad may require the resort to

191 Katherine K. Young, "Hinduism and the Ethics of Weapons of Mass Destruction," in Sohail H. Hashmi and Steven P. Lee, *Ethics and Weapons of Mass Destruction–Religious and Secular Perspectives* (Cambridge, MA: Cambridge University Press, 2004), pp295–301.

violence under certain circumstances, but they reject any conceivable set of circumstances in which nuclear, chemical, or biological weapons may be properly used.[192]

Utilization: From a contemporary Jewish perspective, America and Israel are conceived as the guarantors of the security of the Jewish people in particular and of humanity in general. Thus their security is valorized above others. Nonetheless, the consensus of Jewish thought is against their using weapons of mass destruction. Indiscriminate conventional weapons, such as incendiary bombs and antipersonnel mines, may be used only if they can be significantly limited to military targets. Deterrence: WMD may be developed as a deterrent, but probably never to be used. Proliferation: Since the more countries that have nuclear weapons, the greater the possibility of intentional or mistaken use, no nonnuclear country should be allowed to acquire them. […] Disarmament: Unilateral disarmament is immoral for countries such as Israel or the United States, who have declared enemies with the capacity to destroy them. Still, universal disarmament has always been a Jewish vision, a vision, however, not bereft of a modicum of realpolitik. […] Isaiah's vision of universal disarmament is predicated on the existence of a universal house of prayer that will function both as a locus of moral instruction and as a court for the arbitration of national conflict.[193]

Practitioner Perspectives

Core propositions about nuclear weapons:

- under certain conditions, nuclear deterrence can be "just"
- under certain conditions, using nuclear weapons would be tolerable within the spirit of the just-war tradition
- nuclear weapons provide the only assurance that Western freedoms can be protected

The following citations are illustrative:

Catastrophe is not necessarily inherent in nuclear technology. It is quite possible to think of uses of nuclear weapons that do not violate the jus in bello criteria. As for proportionality of destruction, nuclear warheads such as the "neutron bomb" can be coupled with precision guided delivery

192 Sohail H. Hashmi, "Islamic Ethics: An Argument for Nonproliferation," in Sohail H. Hashmi and Steven P. Lee, *Ethics and Weapons of Mass Destruction–Religious and Secular Perspectives* (Cambridge, MA: Cambridge University Press, 2004), pp322–323.

193 Reuven Kimelman, "Judaism, War, and WMD," in Sohail H. Hashmi and Steven P. Lee, *Ethics and Weapons of Mass Destruction–Religious and Secular Perspectives* (Cambridge, MA: Cambridge University Press, 2004), pp378–379.

systems and airburst above tanks so that they would do less damage than some conventional shells used in the two world wars and deposit very little radioactive fallout. And nuclear weapons used at sea on naval warfare targets could absolutely observe the principle of discrimination between combatants and non-combatants.[194]

In brief, it is possible to devise final-sanction nuclear-strike plans that might at the extreme—and that is all that legitimate possession for deterrence strictly requires—be tolerable within the spirit of the just-war tradition. The central idea in such plans would be to inflict disabling damage upon the aggressor state as a state, so as to remove or emasculate its ability and disposition to persist as an evil force against others, while keeping as low as possible (appallingly grave though that would probably still be) the harm done to its innocent citizens.[195]

In response to questions over whether it can be morally legitimate to threaten an adversary with nuclear weapons and to be prepared to carry out that threat, Quinlan's answer was "yes—depending on the circumstances." If the alternative was to risk defeat by an aggressive, nuclear-armed totalitarian adversary, then nuclear possession and use was justified under specific conditions and within certain limits. In fact, he went further, and argued that in extremis it would be a moral obligation for the West to launch a nuclear attack against the Soviet Union, in order to maintain international peace and stability. […] In Quinlan's eyes, nuclear weapons were a terrible (though not "evil") necessity; they posed the gravest of risks and appalling ethical dilemmas, but at the same time they provided the only assurance that Western freedoms could be protected.[196]

For it is simply not true that nuclear weapons are inherently incompatible with just war principles. Very highly destructive weapons, including nuclear weapons, can be targeted discriminately, provided the target is militarily significant and sufficiently separated from innocent parties. [...] because of advances in the accuracy and reliability of systems, such targets can be attacked today with nuclear warheads that produce a lower yield and cause less destruction than those mounted on the highly inaccurate bombs and missiles of the early Cold War, thereby lessening the direct secondary effects of a strike. Yet even higher-yield nuclear weapons can be directed at

194 Joseph Nye, *Nuclear Ethics* (New York: The Free Press, 1988), pp50–51.

195 Michael Quinlan, *Thinking About Nuclear Weapons* (London: Royal United Services Institute for Defence Studies, 1997), p47.

196 Tanya Ogilvie-White, *On Nuclear Deterrence: The Correspondence of Sir Michael Quinlan* (London: Routledge, The International Institute for Strategic Studies – Adelphi Series, 2011), pp64–65.

> *isolated targets far from population centers. [...] This is not to minimize the horrendous destructiveness of nuclear weapons but to emphasize that even extremely destructive weapons can be used to strike militarily significant targets while minimizing civilian casualties—in other words, discriminately. With respect to the criterion of proportionality, we must also consider the role of necessity in a just cause. If the destruction of a target is critically important, it may be permitted under classical law-of-war doctrine if the ancillary damage is not intended and its costs do not outweigh the legitimate object achieved. This is known as the principle of double effect.*[197]

Core propositions about the ban treaty:

- the ban treaty will not contribute to the elimination of nuclear arsenals
- the ban treaty weakens the Nuclear Non-Proliferation Treaty (NPT)
- the ban treaty undermines U.S. extended nuclear deterrence

The following citations are illustrative:

> *NATO's concern is that the ban treaty won't contribute to the elimination of nuclear arsenals, instead the treaty risks undermining years of steady progress under the Non-Proliferation Treaty. Importantly, the ban treaty disregards the security conditions and nuclear challenges that we face, most prominently today the emergence of nuclear weapons and long range missiles in North Korea.*[198]

> *The United States is committed, and is indeed bound by treaty, to pursue negotiations on effective measures for nuclear disarmament that might make such a world more likely. We have no obligation to pursue negotiations on ineffective measures, however, and in fact probably have a moral duty to oppose measures which would make that potential future less likely by making the world of today less secure and less stable. […] This is what concerns us about the proposed "ban"—which, whatever its arguable good intentions, certainly is not an effective measure relating to disarmament and is indeed very likely to be notably counterproductive. If anything, in fact, it is hard to imagine an effort that would be better calculated to*

197 Ibridge A. Colby, "Keeping the Peace," *First Things* (January 2011). https://www.firstthings.com/article/2011/01/keeping-the- peace. Accessed March 31, 2023.

198 Rose Gottemoeller, "Remarks by NATO Deputy Secretary during a panel discussion on Perspectives for a World Free from Nuclear Weapons at Vatican City," North Atlantic Treaty Organization (November 10, 2017). https://www.nato.int/cps/en/natohq/ opinions_148789.htm. Accessed March 31, 2023.

discredit the disarmament community by demonstrating to nuclear weapons possessors—and to any state that in any way relies upon nuclear weapons for its national security—that advocates of the "ban" are fundamentally unserious about addressing the real challenges of maintaining peace and security in a complicated and dangerous world, and unserious about trying to make that world a genuinely safer place.[199]

The second foreseeable result [of the TPNW] is the erosion of U.S. extended nuclear deterrence. This deprives from the fact that ICAN's campaign of pressure and shame is having a lop-sided impact among states—more on states with open, democratic systems of government and less on authoritarian systems, whose autocratic leaders are not susceptible to the kind of pressure ICAN can exert. [...] ICAN's attack on that umbrella has been explicit and unrelenting. A sustained, high-level effort is underway to pressurize and shame those governments to end nuclear cooperation with the United States. ICAN's success would mean the collapse of NATO's nuclear-sharing arrangements and of extended nuclear deterrence in Europe. [...] It would send a message of division and weakness to Moscow at a time when President Putin heavily relies on nuclear threats and displays in his strategy to re-make the European security order.[200]

The Legality of Nuclear Deterrence

Core propositions:

- the threat or use of nuclear weapons would generally be contrary to the rules of international law
- the threat or use of nuclear weapons might be lawful in an extreme circumstance of self-defense, in which the very survival of a State is at stake
- nuclear weapons could be used in a manner consistent with international law and the principles of just war doctrine
- nuclear deterrence is legally reconcilable with the principles of international humanitarian law
- nuclear weapons are not reconcilable with the theory of just war
- nuclear disarmament is the law of the land

199 Christopher Ford, "Briefing on Nuclear Ban Treaty by NSC Senior Director Christopher Ford," Carnegie Endowment for International Peace (August 22, 2017). https://carnegieendowment.org/2017/08/22/briefing-on-nuclear-ban-treaty-by-nsc-senior-director-christopher-ford-event-5675. Accessed March 31, 2023.

200 Brad Roberts, "Nuclear Ethics and the Ban Treaty," in Bård Steen and Olav Njølstad, *Nuclear Disarmament – A Critical Assessment* (London: Routledge Taylor & Francis Group, 2019). https://cgsr.llnl.gov/content/assets/docs/Nuclear-Disarmament-A- Critical-Assessment.pdf. Accessed March 31, 2023.

The following citations are illustrative:

> *The threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law.*[201]

> *However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake.*[202]

> *In fact, it is conceivable that nuclear weapons could be used in a manner consistent with international law and these principles of just war doctrine. For example it is possible that, in 2001, the use of a low yield nuclear weapon against the remote, deeply buried Al Qaeda caves in Tora Bora might have met the legal criteria of necessity and proportionality. If Al Qaeda had been preparing a WMD there, as some suspected, the legal case might have been even stronger. In our opinion, using nuclear weapons in that situation would have been exceptionally imprudent—ending the 70-year old tradition of the non-use of nuclear weapons would have set a precedent that could encourage others to use nuclear weapons in less discriminating ways—but it probably would not have been illegal. Although the list of scenarios in which the use of nuclear weapons might be legal and ethical is not long, a complete ban on the possession of nuclear weapons is simply not supported by reference to existing international law.*[203]

> *While an undeniable tension exists between nuclear deterrence strategy and the principles of international humanitarian law (especially the principle of proportionality and the obligation to distinguish between combatants and noncombatants), nuclear deterrence is legally reconcilable with these principles, at least with regard to the primary objective of deterring nuclear attack by an adversary. […] The only realistic means of eliminating nuclear weapons is a verifiable treaty, but, as a practical matter, the international*

201 International Court of Justice, "Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons" (July 8, 1996). https://www.icj-cij.org/en/case/95. Accessed March 31, 2023.

202 Ibid.

203 Benjamin A. Valentino and Scott D. Sagan, "The nuclear weapons ban treaty: Opportunities lost," *Bulletin of the Atomic Scientists* (July 16, 2017). https://thebulletin.org/2017/07/the-nuclear-weapons-ban-treaty-opportunities-lost/. Accessed March 31, 2023.

security environment must undergo significant changes before states possessing nuclear weapons will contemplate joining such a treaty. Until those changes occur, nuclear deterrence is not only legal but essential. Indeed, under the current international security environment, the primary objective of nuclear deterrence might even be considered morally compelling.[204]

Nuclear weapons explode the theory of just war. They are the first of mankind's technological innovations that are simply not encompassable within the familiar moral world. [...] Our familiar notions about jus in bello require us to condemn even the threat to use them. […] Nuclear war is and will remain morally unacceptable, and there is no case for its rehabilitation. Because it is unacceptable, we must seek out ways to prevent it, and because deterrence is a bad way, we must seek out others.[205]

First, working in good faith for nuclear disarmament is the law of the land. Article VI of the NPT requires all members to work in "good faith" toward the elimination of nuclear weapons. That was compromise language between nuclear states who wanted nothing to restrict themselves in the treaty and some non-nuclear states who wanted a time bound commitment.[206]

Conclusion

One of the main problems with many of these ethical debates is that they are happening in a vacuum, completely detached from the current security environment. At the same time, national leaders who are responsible to make decisions about the future of nuclear weapons cannot ignore the realities of the global political system. As Barack Obama noted in his 2009 Nobel acceptance speech:

We must begin by acknowledging the hard truth: We will not eradicate violent conflict in our lifetimes. There will be times when nations—acting individually or in concert—will find the use of force not only necessary but morally justified. […] As a head of state sworn to protect and defend my nation, I cannot be guided by their examples alone. I face the world as it is, and cannot stand idle in the face of threats to the American people. For make no mistake: Evil does exist in the world. A non-violent movement could not have halted Hitler's armies. Negotiations cannot convince Al Qaeda's leaders to lay down their arms. To say that force may sometimes

204 Newell L. Highsmith, *On the Legality of Nuclear Deterrence*, Livermore Papers on Global Security No. 6 (Livermore, CA: Center for Global Security Research, 2019). https://cgsr.llnl.gov/content/assets/docs/CGSR-LivermorePaper6.pdf. Accessed March 31, 2023.

205 Michael Walzer, *Just and Unjust Wars*, 3rd edition (New York: Basic Books, 2000), p282.

206 Scott D. Sagan, "Just and Unjust Nuclear Deterrence," *Ethics and International Affairs* (forthcoming article, Spring 2023).

be necessary is not a call to cynicism—it is a recognition of history; the imperfections of man and the limits of reason.[207]

The second challenge is that ethical and moral debates weigh differently on the shoulders of national leaders. While some policymakers might be constrained by ethical and moral dilemmas, others may not be affected by them at all. For example, Western democracies have a long history of having these types of ethical and legal debates on nuclear weapons, but authoritarian governments are less likely to apply the same constraints in their nuclear planning procedures (like for example, withholding specific targets in nuclear war plans simply because of their proximity to large civilian population centers).

Similarly, the implications of the position of religious leaders are different for most nuclear weapon states. In Christian countries, the Catholic Church's strong anti-nuclear position will likely affect both public opinion and the policy discourse, but in non-Christian countries, it will probably not have any effect at all. In the meantime, the Russian Orthodox Church takes an openly pro-nuclear position, and it plays a very proactive role in advocating for nuclear weapons within the Russian society.

The third problem is the lack of functioning institutions. International organizations have historically played an important role in facilitating global discussions about legal and moral standards. These institutions have laid out a number of guidelines and codified legal requirements that are still relevant for modern warfare and nuclear strategy. However, many of these institutions are failing, or they are completely dysfunctional in the face of renewed competition between the great powers. This makes it very difficult to enforce these principles, and punish those who violate them. The lack of consequences, over time, could lead to an erosion of existing standards, and it would make disarmament even more difficult to achieve.

Altogether, the issue of nuclear weapons is a highly polarizing question. Ethical and moral arguments have been made by both sides. While some argue that nuclear weapons are inherently immoral and therefore even the threat of use is unethical, others claim they are a legitimate tool of national defense that can be used both legally and morally in extreme circumstances. Over the past few years, both camps have taken trench positions and dialogue between them has been virtually nonexistent. This is not helpful and could actually prove to be counterproductive. In the face of heightened international tensions and renewed geopolitical competition, nuclear risks are on the rise. Despite the opposing views on the legality of nuclear possession, threat, or use, reducing the dangers of miscalculation and inadvertent escalation remains a shared goal of these two camps. In order to advance this agenda, these different communities will need to come together and have a dialogue about issues, such as the conditions of deterrence, the conditions of disarmament, and—while nuclear weapons exist—

207 Barack Obama, "Remarks by the President at the Acceptance of the Nobel Peace Prize," The White House, Office of the Press Secretary (December 10, 2009). https://obamawhitehouse.archives.gov/the-press-office/remarks-president-acceptance-nobel-peace-prize. Accessed March 31, 2023.

how nuclear weapon states can all adopt ethical nuclear postures. Such a discourse will require more tolerance and respect for the diversity of views and not an effort to convince the other side that its views need to change.

Conflicting Views of a Darkening Strategic Prospect: The Opposed Sensibilities and Discordant Perspectives of the Nuclear Practitioners and Disarmament Archipelago

Paul Schulte

Spring 2023 is developing into a historic vantage point from which to consider the ethical perspectives and choices of nuclear practitioners. Cascading events since February 24, 2022 show how much historical periodicity and the viability of alternative decisions matter for the moral standing of many nuclear choices. Nuclear practice occurs and develops within fluctuating political climates. The current and prospective international context is discouraging for the reliably negotiated control, progressive reduction, and eventual verified elimination of weapons of mass destruction (WMD). The case for intelligent self restraint and deep scrutiny of consequences will always remain. But—at least for liberal democratic (and therefore status quo) nuclear weapon states and their allies—expectations of reliable reciprocation from antagonistic nuclear capable states have receded. Existing multilateral global disarmament regimes, like the Biological and Toxin Weapons Convention (BTWC) or Chemical Weapons Convention (CWC), are losing the plausible prospect of enforceability in hard cases, even if they approach universal membership. There is a discouraging list of past "cornerstones of international order," starting perhaps with the Conventional Armed Forces in Europe Treaty (CFE), which have been undermined, abolished, or abandoned. And it is now evident that even the last surviving, rare, and reverenced bilateral nuclear treaties, like the Intermediate Range Nuclear Forces (INF) or Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START), can either be wrecked by withdrawal provoked by prolonged, defiant non-compliance, or suspended to convey political displeasure in conditions of growing global polarization.

In the past 12 months, even the most carefully drafted and reassuring formulations about consensual international nuclear restraint have proven unsafe. Solemn, diplomatically salient, and recently reaffirmed P5 (the United States, China, France, Russia, and the United Kingdom) promises, such as "a nuclear war cannot be won and must never be fought" do not prevent regular nuclear threats intended to enable and overshadow the entire conduct of a war of aggression against Ukraine. "Extreme circumstances of self-defense" which might be claimed to justify nuclear use can evidently be extended limitlessly to cover anything, including eternal annexation of recently conquered and annexed provinces invaded across a repeatedly guaranteed border. In 2023, nuclear practitioners and others now know that determined nuclear capable adversaries exist who wish others to believe that they are willing to initiate retaliatory nuclear sequences risking millions of human casualties rather than lose

a discretionary war. A permanent member of the United Nations Security Council can become a "nuclear predator state,"[208] menacingly warning of the irresponsibility of daring to make a nuclear power desperate. Yet it can still avoid total condemnation from states representing half of the global population. By contrast, it may be significant for future calculations that Chinese and Indian statements pointedly opposing any nuclear escalation in the Ukraine war are thought to have some inhibitory impact on Russian nuclear decisionmaking, even though they have no legal standing or treaty status.

Broad Definitions and Full Disclosure

For this discussion I shall take "nuclear practitioners" to mean members of the interconnected state organizations involved in producing and managing national nuclear weapons capability: research and development, acquisition, maintenance, deployment, and planning, and associated intelligence and diplomacy, including arms control, disarmament and non-proliferation diplomacy, and alliance management.[209] I shall not be focusing on the unknowable moral calculus of apex decisionmakers and national command authorities facing final decisions on nuclear release who will typically not be career nuclear practitioners. National leaderships evidently vary in the extent to which they seek or accept practitioner advice. Personalist leaders seem, in general, to be the least interested. (The most recent evidence on the Cuban Missile Crisis, for example, vividly illustrates how far Nikita Khrushchev failed, nearly fatally, to take advice or incorporate expert views in his closely guarded initial plans.[210]) Nevertheless, I shall assume that the ideal nuclear practitioner should be committed to the most precise understanding and accurate prediction of the international environment in which the nuclear policy of their state or its allies might be applied for wider national interests, including war avoidance or conflict management. Most practitioners will not be strategic policy experts or disarmament specialists. They will typically have low tolerance for complex, disputable, cutting edge, vocabularies from humanistic psychologies or philosophies, or critical international relations.

Compartmentalization will limit their individual knowledge of key background factors, especially intelligence on current or potential nuclear adversaries, so they will have little option but to accept the competence and good faith of the experts supporting their national leadership in nuclear matters. Though not strictly nuclear practitioners, relevant

208 S. Young, "The Age of Predatory Nuclear-Weapon States Has Arrived," Politico (September 30, 2022). https://www.politico.com/news/magazine/2022/09/30/putins-nuclear-threats-towards-ukraine-00059571. Accessed April 19, 2023.

209 It is worth noting that most military personnel will not be nuclear practitioners, especially when their service is not responsible for nuclear weapons. Thus the UK decision to rely entirely on submarine-launched ballistic missiles and to relinquish airdropped nuclear bombs or air ground-launched nuclear missiles means that Army or Air Force officers will not typically need to develop nuclear expertise, except perhaps in very senior central tri-service appointments. Comparable distributions of expertise will vary according to the deterrent postures of other military systems.

210 Sergey Radchenko and Vladislav Zubok, "Blundering on the Brink: The Secret History and Unlearned Lessons of the Cuban Missile Crisis," *Foreign Affairs* (April 3, 2023). https://www.foreignaffairs.com/cuba/missile-crisis-secret-history-soviet-union-russia- ukraine-lessons. Accessed April 19, 2023.

politicians, officials, and officers responsible for connections in multilateral or bilateral nuclear alliances based around extended deterrence will have similar perspectives. So will like-minded academics and commentators.

By contrast, what I would call, for the sake of brevity, but not disparagement, the Disarmament Archipelago is the internationally interlinked set of specialist diplomats, civil society campaigners, scientists, and academics, who are anxiously concerned with the nuclear future. Often skeptical of the safety of relying on deterrence between nuclear states, they are a potential source of ideas for improvement and demands for readjustment, reform, or abolition. It is better described as an archipelago rather than a network because it comprises widely dispersed, loosely connected islands of expertise with very different strategic cultures, levels of technical awareness, and (very importantly) sources of funding, which are often opaque. It displays uneven levels of intercommunication and coordination and political co-optation. The Disarmament Archipelago is most concentrated in the affluent Global North and displays large geopolitically empty areas, indicating regimes that are unsympathetic to independently critical judgements on nuclear matters. To compare moral perspectives—and do justice to the extent of their division—I shall have to concentrate on those antinuclear or nuclear skeptical sectors and dispositions which nuclear practitioners will find most challenging and which would most want to challenge nuclear practice. Other sectors of the Archipelago will be less morally excoriating and so more likely to propose or advocate actionable new solutions of greater appeal to practitioners. They may even overlap with official thinking through contracts, consultancies, and cross postings.

I write from experience gained as a (minor) former nuclear practitioner in the UK Defence Ministry and regular visitor to the Disarmament Archipelago, first as a national director of Proliferation and Arms Control and later as a think tanker and academic. This required attempting to master at least two very different languages. I shall try to point out how efforts to change language are part of ethical confrontation in the nuclear field. I shall here deliberately try to avoid judgements about superior morality or truth, whether for practitioner bureaucracies, different kinds of nuclear state, or for irreconcilable critics of the Disarmament Archipelago. Focus groups, surveys, or extended interviews are not comparative research methods available to me or, I think, others in this highly, and probably necessarily, classified field. My aim is to attempt a necessarily simplified outline moral typology, drawing on personal conversations, conference debates, and unclassified international publications, rather than to produce a persuasive moral tract, whether viewed as liberal democratic or nihilist. I shall have to generalize audaciously and controversially. Readers from different countries, political traditions, religions, and strategic subcultures will undoubtedly form their own judgements of the features I wish to highlight. I should perhaps finally state that, as a former arms control official from a liberal democratic nuclear weapon state, I might, unsurprisingly, personally prefer nuclear practitioners

in various other countries to choose different policies or even resign from their professional structures.

But I set out below why I do not expect them to do so.

Proposition and Summary

The general proposition behind this short essay is painfully clear.

The post-Cold War P5 nuclear honeymoon is over; no civilized reconciliation is in prospect which could lead to the deep nuclear cuts and wider progress towards nuclear disarmament which might begin to satisfy the Archipelago. Under currently foreseeable conditions, nuclear-armed states are unlikely to trust each other except for the most transactional, carefully verified, and robustly advantageous agreements. They will judge it naïve and morally negligent to act otherwise. There is no means of enforcing trust and no authority which could attempt to do so. And there is now a protracted, multi-domain, nuclear-inflected systemic global struggle, potentially as obstructive to nuclear arms control or risk reduction as the Cold War was in the 20th century. All this implies that much of the obligatory, NPT Article VI-mandated, Grand Narrative about the unfolding nuclear future (in which signatories are committed 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") is therefore becoming decreasingly believable as a perspective from which to launch moral criticism of nuclear choices. But this is a truth which is seldom officially made in public, for political and diplomatic reasons discussed below. Expert nuclear practitioners are professionally aware of the global situation, in minute, diplomatically assessed, detail, supported by consistent national intelligence assessments. They know it would show how far we are from the preceding conditions for a major benign transformation which could eliminate nuclear weapons and nuclear risk. They further understand that this is the only foreseeable climate in which their ethically-related choices can be made. Where those choices involve compromises with other nuclear states, they will be doubtful about any proposed deals that do not clearly and reliably preserve or strengthen their interests.

Conversely, the apprehensions and moral discontent of the Disarmament Archipelago have grown, and its criticisms will become more bitter. And in some (but only some) nuclear states and their allies, criticism from disarmers can create a significant political constraint on the efforts of practitioners to defend and advance what they believe to be prudent deterrence and defense policies. Antinuclear sectors of the Archipelago resent and will continue to morally excoriate what they see as the selfish recklessness of nuclear practitioners, their closed-minded indifference to nuclear dangers, their determination to preserve their states' role in global nuclear apartheid, and to subject the rest of the world to the unprovable stabilization and uneliminable dangers of nuclear deterrence. Nuclear practitioners believe that the Archipelago largely fails to engage with (1) the intractable realities of great power

competition, (2) the collective difficulties of exiting the nuclear condition in acceptable order, (3) the unreliability of treaties, and (4) the unavoidably pervasive resultant role of deterrence. The long dispute between disarmers and practitioners is not between cynical *realpolitik* and ethical determination. Rather, it is between two kinds of ethical reasoning or even fundamental moral intuitions. (These presumably emerge in turn from at least two different mixes of social position, psychology, and moral attitudes, but I can only touch upon disputable, and inflammatory, causation here.) It is unfortunate that resultant decades-long debates are now so entrenched and unproductive for viable initiatives. In countries where such criticism is allowed, practitioners will accordingly continue to expect orchestrated moral opprobrium for holding to conclusions that they consider intellectually justified or even unavoidable.

The Universal Nuclear Practitioner?

Even peripherally involved practitioners in nuclear-armed states will tend towards certain similarities in their professional worldview. They all choose to work within military, technical, intelligence, and diplomatic bureaucracies, implementing the expensive and fateful choice of developing, maintaining, and "using" nuclear weapons in conditions short of war to try to shape the international environment. But successful long-term nuclear shaping and signaling in conditions short of armed conflict (sometimes now called "unpeace") both require nuclear *credibility*. Most practitioners assume that credibility will require indications of underlying determination that national political leadership to contemplate some, perhaps limited, form of nuclear conflict, combined with reasonable certainty that national nuclear weapons are sufficient to affect adversary calculations and would remain effective, despite kinetic or electronic sabotage, missile defenses, or joint nuclear and conventional pre-emption. Maintaining survivable retaliatory ("second strike") capability is continuously technically demanding and expensive in nuclear materials, infrastructure, warhead numbers, system sophistication, launch platforms, and command control and intelligence (C3I) systems. But failing to do so would tempt attack in crisis and so is inherently destabilizing. Concerting all these considerations is complicated. The complex conditions and taxing imperatives generate a consequent institutional strain to achieve or strengthen overall consistency over doctrine, treaty obligations, acquisitions, budgetary availability, exercises, and deployment postures—all based on expert assumptions and assessments which often cannot be publicly disclosed. This is not to assert that all nuclear practitioners in every specialism will have monolithic views. But there will certainly be an institutional strain to achieve or strengthen overall national strategic consistency and coherence, and skepticism about outside criticisms which are not based upon the information available to practitioners or, evidently, on relevant wider historical experience. In bureaucracies which have to be compartmentalized for security reasons, and where details are extremely complicated and sensitive, there will be a tendency for specialists of one kind to defer to judgements in other areas where they are not experts and do not have complete access.

Overall nuclear motives and intentions in nuclear states are very different and hard to disentangle for judgement. National nuclear weapons, often initially acquired for narrow national security needs, are now understood to contribute to wider objectives beyond basic central deterrence of direct attacks on the possessors' homelands. Strategic purposes now frequently include a sense of national, civilizational, party or dynastic entitlement, or wider objectives such as a revisionist intention to drive favorable change in the international order, or a status quo motivation of preventing forcible change against national or allied interests, democratic and humanist values, or authoritarian alternatives.

Whatever the outsider interpretations of their motives, all nuclear practitioners are fundamentally committed to consequentialist moral positions. They have, after all, refused to reject nuclear acquisition and potential use as immoral in principle, as disarmers typically do and would wish practitioners to do. Practitioners also tacitly accept that, for compelling technical reasons, ultimate nuclear release decisions can only be taken at the highest national leadership levels—interpreting nuclear weapons to be "monarchical weapons."[211] They cannot agree that nuclear weapons are illegitimate, immoral, and universally illegal. Unless they personally see their national nuclear deterrent capability as a sacred value, unaffected by any suicidally apocalyptic outcomes from its detonation, they are unavoidably followers of Max Weber's much cited consequentialist ethics of responsibility discussed below.

This is not to argue that practitioners are always enlightened, well informed, or imaginatively able to perceive all the risks of nuclear war by entanglement and unintended escalation. The long list of revelations about near misses such as the Cuba Missile Crisis in 1962 or NATO Able Archer exercise in 1983 prove that. But a continuing process of "nuclear learning" has been taking place, driven by very appropriate anxieties. Files have been declassified and memoirs published, and reflective professional training programs with challenging simulations are standard for senior officers and officials. Practitioners in sophisticated nuclear states are therefore at least unlikely to repeat obvious errors of their predecessors. They accept the professional need for continual re-evaluation of their nuclear activities and plans. There may presumably be less sophisticated learning within equivalent structures in smaller and poorer, nuclear nations for economic and perhaps ideological reasons, and lack of intelligence resources. That does not mean they will give up trying to improve their nuclear capabilities and situational understandings, and, as with the numerous deterrence dialogues with India and Pakistan, some help can be given to some countries towards the wider understanding of risk developed by more advanced nuclear actors.

211 See the review of *Thermonuclear Monarchies* by Elaine Scarry: Richard Rhodes, "Absolute Power," *The New York Times* (March 23, 2014). https://www.nytimes.com/2014/03/23/books/review/thermonuclear-monarchy-by-elaine-scarry.html. Accessed April 19, 2023.

A nuclear attack, whether escalating from entanglement, engrenage, limited or demonstrative first nuclear use, or arriving as an undeterred bolt from the blue would be an ultimate unfavorable consequence. Avoiding nuclear disasters must therefore be the critical priority for any nuclear practitioner, though the worst case covers a range of scenarios of varying enormity which need some separate consideration. Yet avoidance of nuclear war cannot be the *only* priority if national and alliance interests are not to be entirely sacrificed to aggressors making credible nuclear threats; nuclear practitioners are not elected or appointed to give in to blackmail. (The only imaginable case in which they might so wish to capitulate might be if facing powerful evidence that capitulation would significantly and permanently reduce otherwise catastrophic and undeterrable nuclear dangers to their fellow citizens. But such circumstances have never come close to occurring in the nuclear age. This has been due to adaptive national deterrent policies, including alliance memberships, and the near universal drive to create a robustly survivable nuclear forces. It may also arise from the strengthening over past decades of the tradition of non-use, or nuclear taboo against nuclear release or direct threat.) Practitioners and their political leaderships will also appreciate that conceding to nuclear-backed aggression may not prevent in the creation of increasingly assertive and dangerous new confrontational scenarios. According to one slow-dawning interpretation, precisely this has been allowed to happen in response to intensifying Russian aggressions in 2008, 2014, and 2024. At present, nuclear practitioners will be focused on the unnerving implications, at least for the Collective West and the world's Non-Nuclear Weapon States (NNWSs), of the high-profile protracted Russian strategy of cross domain coercion or nuclear intimidation[212] aimed at constraining support from friendly nations for Ukraine. The confrontation, and its risks, payoffs, and possibilities, remains under intense analysis by practitioners and theorists of all orientations, whether concerned to maximize its impact or frustrate it and prevent its repetition in future crises. As a case study it will come to dominate specialist nuclear debate alongside Cuba in 1962 and Able Archer in 1983. It remains radically uncertain what different practitioner groups will take its lessons to be.

National nuclear forces vary enormously in size and complexity. National nuclear doctrines exist to explain their shape and necessity. National nuclear bureaucracies periodically review and update doctrines and deliver resultant reports and speeches pointing to the rationality of their nuclear arrangements, privileging the security and survival of their state and its military capabilities and national population. Some of these are published for open appraisal and political discussion. The resulting documents are inevitably targets for antinuclear Archipelagic critics. But, given the intractably untrustworthy state-centric global reality, and the lack of universalist alternatives which they would find believable, such critiques have historically been

212 Keir Giles, "Russian nuclear intimidation: How Russia uses nuclear threats to shape Western responses to aggression," Chatham House (March 29, 2023). https://www.chathamhouse.org/2023/03/russian-nuclear-intimidation. Accessed April 19, 2023.

unpersuasive with practitioners. This will remain true, unless and until practitioners and national leaders see better attainable solutions to their national security problems. The nuclear policy of each independent state electing to acquire and retain its nuclear weapons will consequently find its own compromise, based on its own best understanding of the consequences of its own available nuclear choices. Although it is usually unexpressed, and certainly cannot be mentioned in treaty language, there is an unavoidable underlying division between those nuclear states and alliances with a revisionist approach to international order, pressing towards a post-Western world, and those who wish to preserve the status quo. Each will wish to use the conditional threat of how their national nuclear weapons contributes to that overall policy. However nationalistically or ideologically fervent nuclear practitioners may be, they cannot (and absolutely, from any perspective, should not) avoid consideration of the potentially huge and disastrous risks of miscalculation, misperception, strategic failure, and escalation—consequences which might arise from deterrence failures through inadequate or unstable force postures, unconvincing commitment, or overreach, misperception, and mistake. If, as I suggest, cautious, self-questioning, and clear-eyed professional precision is nuclear practitioners' essential responsibility, it is vital that they avoid historically obvious distortions such as complacency, groupthink, mirror imaging, or threat inflation, and remain open to internal and external ideas and criticism, even though they may judge much of this to be inaccurate or irrelevant.

Practitioner Dissimilarities in Different National Systems

The character of potential nuclear enemies is obviously central. Underlying risk tolerance within different nuclear-armed states to advance or maintain national objectives is difficult to assess and may be subject to deliberate "madman" strategic misrepresentation. Yet it is unlikely to be uniform or even fixed. Practitioner bureaucracies will pay intense intelligence and diplomatic attention to the current capabilities, doctrines, strategic intentions, appetite for brinkmanship or escalation aversion, and propensity for early nuclear release of their potential nuclear adversaries. But they will also be aware that their understandings might prove wrong, as for example, it now emerges from declassified East European documents and interviews conducted in the post-Cold War period, that NATO underestimated the likelihood of large-scale pre-emptive Warsaw Pact theatre nuclear release once serious conflict had begun to appear inevitable, despite their public doctrine of No First Use.

The circles of moral concern for national nuclear elites also vary enormously, and perhaps ominously. The P5, with varying credibility, corporately claim undefined overall responsibilities for the management of global nuclear order in the interests of wider human welfare. Within the P3, (United States, France, and the United Kingdom) treaty obligations mean that all three to some extent need to consider the interests and calculations of allies whose interests they have guaranteed. Conversely, it is increasingly evident that determinedly revisionist and extreme sovereigntist states can operate by an unashamedly narrow moral calculus with little or no concern for

wider impacts. Putin's Russia has moved from the first category to the second, though he would of course deny it. There is also a possibility that others will do the same. The Democratic People's Republic of Korea, or North Korea, is an even more extreme existing illustrative case. Here, the statements and revealed preferences of the Kim regime seem to indicate that national power, reputation, and leadership survival in a crisis has always been of overwhelming importance. Consistent policy and investment choices prove that. They seem to be aimed at protecting and strengthening the dynastic basis of the regime against external attack, through deploying "irreversible" and ever-growing offensive nuclear capabilities at the expense of almost any other value, including wider stability and the welfare and basic health of the general population. This is an insistently nationalist configuration—one that demands respect yet is indifferent to wider considerations. It can be easily and widely deplored, but cannot be discounted. It has own strident, beleaguered, and habituated moral claims, rooted in outraged narratives of contemporary geopolitical unfairness and historical injustice, which may recur within similar radically revisionist, outlaw, or pariah states—perhaps first with an eventually nuclear-armed Iran. Such attitudes and nuclear policies cannot fit easily into any expectation of universalist progress. Moral criticism from a cosmopolitan universalist standpoint will remain almost irrelevant while the state structure and its control of public opinion persist. No expert on North Korea appears to expect otherwise.

Ethical differences of a similar scale may apply to targeting policies, though real intentions here are inevitably hard to identify and perhaps simply cannot be known in advance. Discrimination, proportionality, and minimized civilian harm are declared to be the legal principles which tightly apply to U.S., UK, and French nuclear targeting policy, under continuously effective legal oversight to check compatibility with international law. It is less clear what applies elsewhere. National legal interpretations of nuclear constraint evidently vary, as Cold War disclosures have tended to prove. Unverifiable promises such as No First Use are in any case seldom believed by nuclear adversaries. And those who make, and ritually advocate them, know that. But their true target audiences may in fact be domestic commentators and opinion formers in the Disarmament Archipelago.

Sovereigntist Complications for the Nuclear Future

One very evident DPRK (and Iranian) value is unconstrained national sovereignty rather than verifiably compliant membership of multilateral institutions. Despite conference rhetoric, it is observable that not all nuclear actors want a better controlled multilateral world, still less a tighter rules-based global order. North Korea most obviously does not. Neither Russia nor China seeks closer integration into an international order whose security organs they assert are unfairly hegemonically dominated. Russia's systematic damage to the credibility of those international institutions over Malaysia Airlines Flight 17 (MH 17) prosecutions, investigations by the Organisation for the Prohibition of Chemical Weapons (OPCW) which incriminate the Assad Regime (its

regional client) for chemical murder, and its unashamed defiance of three United Nation General Assembly votes against its latest invasion of Ukraine, is so contemptuous and consistent that it appears to be a deliberate feature rather than a side effect,[213] despite diplomatically repeated denials. But Russians would insist that they are not in fact unique in this and that others would also—if they judged necessary—resist serious internationalist encroachments on their freedom of action. Some commentators, in the United States and beyond, do hypothetically doubt whether any future U.S. or allied government should, could, or ever really would, submit critical nuclear policy decisions to international bodies whose motives, technical competence and composition they might question. While the DPRK and Putin's Russia are the most obvious and extreme sovereigntist regimes, many other countries seem quietly but determinedly motivated to reject "progress" towards the effective oversight arrangements (perhaps the "Competent International Authority" proposed, but, unsurprisingly, not defined in the TPNW) which, even if falling short of world government, would be minimally necessary for nuclear abolition. Many states in the Non-West or "New Non-Aligned" reject such an ordering vision—at least while the institutions to oversee it are, in their view, still unacceptably dominated by the West. One important result is widespread ambivalence, or unconcealable bad faith, about norm enforcement—and frequently voiced opposition or "Hybridised Resistance"[214] to a U.S.-led globalist "hegemonic" liberal international order.

The development of multilateral disarmament treaties therefore displays abundant suspicion among non-Western signatories of legitimating potential "disciplinary invigilation," or internationalist interventions, amounting to unjust world policing by the powerful and self-interested. (The invasion of Iraq in 2003 by the U.S.-UK Coalition is frequently brought up.) A rigorously verified world is not (or at least not yet) universally desired, despite cosmetic diplomatic statements. Non-Western sovereigntist regimes want, instead, a permanently post-Western world, rather than more empowered verification and enforcement bodies. They support, vote, and trade with each other to move international practice towards the latter rather than the former. Nuclear practitioners concerned with the issue are by now entirely unsurprised by this scattered and fractious pattern of preferences by national elites. They have no reason to expect it to change and their national assessments will reflect this, whether or not they are fully published.

The problematic state of global disarmament diplomacy is another indication that the national nuclear decisionmaking elite has to rely on its own assessments of consequences in a world of growing uncertainty where the encouraging expectations of the post-Cold War Era are being extinguished. There is no universally accepted superordinate moral position from which they would accept criticism. They all now

213 Christopher Ford, "Russia's troubling diplomatic campaigns to undermine institutions of transparency and accountability in controlling weapons of mass destruction at the Organization for the Prohibition of Chemical Weapons (OPCW), the International Atomic Energy Agency (IAEA), and the United Nations," U.S. government (2020).

214 Bohdana Kurylo, "Russia and Carl Schmitt: the hybridity of resistance in the globalised world," LSE Research Online (2016), p16096. http://eprints.lse.ac.uk/68794/1/Kurylo_Russia%20and%20Carl%20Schmitt_2017.pdf. Accessed April 19, 2023.

face a radically unforeseeable and "deregulated polycentric nuclear future"[215] with little likely cooperation between them.[216] However, they will have the military technical confidence that disarming first strikes are no longer possible (if this can be retained) and will probably be a greater source of stability than surviving treaties. Practitioners will be able to draw on the now increasingly discouraging lessons of almost 80 years of attempted nuclear disarmament, collected by academic research and intelligence analysis, and distilled within their bureaucratic systems. That huge corpus of disillusioning experience, critically sifted by historians and blended with disquieting current assessments, will not wholly prevent the development of limited national diplomatic initiatives, but it will be skeptically focused on each outside scheme, particularly from individuals, institutions, or campaign groups with no experience of managing nuclear capabilities, no apparent concern for second or third order destabilising consequences, and intense emotional aversion to existing nuclear arrangements.

No exhortation to reach collective "critical will" to eliminate nuclear weapons has so far overcome the often justified distrust between nuclear actors or promised to resolve the overarching collective action problem. Despite NPT-driven promises to implement an undefined "stigmatization," devaluation, or delegitimization of its nuclear weapons, each nuclear state will be aware that its adversaries can be expected to continue thinking and planning in hard nuclear deterrent or coercive terms, even if it were somehow to cease doing so itself, as UN resolutions and (when there are achievable) NPT Review Conference Agreed Documents demand. As Therese Delpech pointed out, with fierce Cartesian lucidity:

> *Ideas have consequences. So does the lack of them… We should not forget that, in the nuclear arena, combat is first and foremost an intellectual contest. The side that stops thinking is already losing.*[217]

Other practitioners might add that adequate nuclear thinking has also to take into account the emotions, especially anxiety, which nuclear weapons generate, and their range of potential political consequences.

Whether or not they think it desirable, practitioners will all, moreover, have multiple reasons to doubt whether any universal redistribution and equalization of military power involving unilateral elimination or unbalanced renunciation of national nuclear capacities is possible. This professional skepticism would give them little logical incentive to support simple renunciation of national capabilities, which would

215 Dmitri Trenin, "Stability amid Strategic Deregulation: Managing the End of Nuclear Arms Control," *Washington Quarterly* 43, no. 3 (September 30, 2020). https://www.tandfonline.com/doi/full/10.1080/0163660X.2020.1813401. Accessed May 18, 2023.

216 RAND, "Prospects for Great Power Cooperation in an Era of Competition" (March 2023). https://www.rand.org/paf/projects/ great-power-cooperation.html. Accessed April 19, 2023.

217 Therese Delpech, *Nuclear Deterrence in the 21st-Century: Lessons from the Cold War for a New Era of Strategic Piracy* (Santa Monica, CA: RAND, 2012).

simply favor and perhaps encourage nuclear-armed adversaries. They would have reason to be less hostile to negotiated limits, on a case by case basis, but will also automatically raise standard professional questions about deterrent sufficiency, balance, verifiability, compliance, and wider consequences for international political stability. Skeptical "hardline" opposition to negotiated changes of this kind may be more or less likely under ideological different systems. It can be overruled or outargued by practitioners in foreign ministries and disarmament agencies, more optimistic about potential improvements in the international environment, more hopeful about negotiations and encouraging gestures, and more concerned about national reputation in international fora and domestic political constituencies. This classical difference of judgement will tend to generate repeated internal disagreements between Hawks and Doves about necessary numbers and postures, although each professional group would claim to share loyalty to overall national interests and purposes. Such disputes are generally kept classified and inaccessible to informed outside experts. But they seem both unavoidable and desirable as part of adjustments to changing strategic conditions. That happened, apparently benignly, over treaties and agreements reached during the post-Cold War honeymoon. Now that the subsequent marriage treaties have proved so dangerously unhappy and unstable, it is unlikely that a thawing process could happen again in the same way. Nevertheless, there will inevitably be internal nuclear debates of some kind within nuclear-armed states, however classified. It is important that they are as intelligently, farsightedly, and honestly conducted as national leaderships will allow.

Growing Frustrations within the Disarmament Archipelago

Recent years have witnessed intensifying, perhaps increasingly desperate, moral denunciation by Non-Nuclear Weapon States, especially in the Global South, international organizations, and civil society groups of the failure to make progress towards the total nuclear disarmament promised in the non-proliferation treaty. They have insistently demanded accelerated movement towards nuclear abolition and the immediate, public relinquishment of faith in nuclear deterrence, as the immoral and dangerous gospel of nuclearism. These pressures will not go away. But neither will the interlocking structural obstacles such as determinedly different interpretations of the force of the Article 6 obligation.

It is ironic, but not accidental, that in a period of low and declining expectation of progress in further cutting worldwide nuclear numbers, integrating Chinese nuclear forces into some future limitations or reductions framework,[218] or addressing new

218 The rapid increase in Chinese nuclear numbers, which are entirely unconstrained by any treaty agreement or notification arrangement, will create a serious new "Three Body Problem" of future strategic stability between the United States, Russia, and China. It is radically unclear how that the major nuclear actors will respond to it. For a very recent, concerned, and sophisticated U.S. analysis, see Brad Roberts, ed., *China's Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy* (Livermore, CA: Center for Global Security Research, 2023). https://cgsr.llnl.gov/content/assets/docs/CGSR_Two_Peer_230314.pdf. Accessed April 19, 2023.

technologies like hypersonic weapons and conventional strategic missiles, there is a demand for total transformation, despite the consistent, interlinked opposition of the most affected states who would have to trust each other to implement it. This collision of unlimited moral demands with recalcitrant geostrategic interests and insistently negative professional judgements of technical feasibility and adversarial good faith is creating an oppositional atmosphere which blocks intellectual experiment for even limited movement.

The Long Protracted, Echoing Absence of a Plausible Global Alternative to Nuclear Deterrence

Intense worldwide thinking about nuclear ethics since Hiroshima—despite test cases and natural experiments involving nuclear confrontations, accidental wars, and disasters—has evidently not led to universal consensus demanding or facilitating nuclear renunciation. Nuclear practitioners, organized and communicating in contending allied or adversarial national security bureaucracies, are not without their own moral arguments and preferred thinkers and value systems who are centered on national or regime security interests and the importance of stability and war avoidance. These aspects seem to them to be convincing when compared to the prospective hazards and security losses of proposed schemes for Disarmament or, for China, even the notion of transparency about national nuclear numbers. A very few countries (South Africa or Sweden, for example) have unilaterally abandoned or been induced (like Libya and Ukraine) to relinquish their nuclear weapons programs. But none has done so in recent years, even under the pressures of the TPNW campaign. No one can reliably foresee how the Iranian nuclear crisis will develop or how many other new or long suspected states will decide to break with previous NPT promises, cease hedging, and acquire nuclear weapons themselves. So “the Nth Country” problem of unknowable numbers of future nuclear arms states remains as one of a widening set of currently unresolvable difficulties.

In even a cursory estimate of future probabilities, practitioners would be aware that, despite immense worldwide intellectual effort, no proposal generated in the Disarmament Archipelago or elsewhere has proved capable of appealing to nuclear states and their allies as a compellingly prudent, practicable, and reliable means to stimulate mass departure from the nuclear condition. Each national nuclear security bureaucracy has concluded, often through periodically reviewed formal national intelligence assessments, that there is unlikely to be such a newly persuasive game-changing initiative in the foreseeable future. Breakthroughs must now be even less likely to be anticipated in a period of increased polarization and nuclearized global tension. Nuclear practitioners will therefore predict continued disarmament deadlock, at least until a change in underlying political calculations within one or more nuclear states. Much of the Archipelago will insist that that this is represents a dangerous scandal rather than a justification, and that the global polarization stemming from the war in Ukraine is the responsibility of the nuclear weapon states which cannot

be allowed either to increase dangers of nuclear war, or to delay or derail mandatory moves towards total nuclear disarmament.

The 80-Year Abyss of Nuclear Moral Dispute

Max Weber saw an "abysmal opposition" between two types of ethics: (1) conviction, *Gesinnungsethik* and (2) responsibility, *Verantwortungsethik.* Those following their convictions wish to preserve their own moral purity, no matter what consequences their policies may have in the real world. "If an action of good intent leads to bad results, then, in the actor's eyes, not he but the world, or the stupidity of other men, or God's will who made them thus, is responsible for the evil," he wrote. By contrast, someone guided by responsibility "takes account of precisely the average deficiencies of people…(H)e does not even have the right to presuppose their goodness and perfection."[219]

Weber himself explicitly preferred the latter type. The depth of the division he lastingly labeled means that much discussion has amounted to name-calling across the abyss.

Explanations for the Abyss: Intrinsically Contested Offerings from Moral Psychology

The moral split is inevitably prominent in the nuclear crisis overhanging the war in Ukraine. Driven by characteristic pro-Ukrainian moral passion, Timothy Snyder recently interpreted the resultant pattern of attitudes through a psychoanalytic lens, focusing on the United States, but developing an argument which could apply at least to other liberal democratic nuclear weapon states, where the politics of conviction seem to him to have turned into faith-based masochism:

> *Yielding to Russian nuclear talk is also wrong, and embarrassingly so, as strategic thinking. It is an example of a narcissistic fantasy that looms over discussions of American foreign policy: the fantasy of omnipotent submission. This is the notion, birthed in American exceptionalism and impatience, that since America is the power behind everything, all will be well if America does nothing. If we do what the Russian propagandists want, and do nothing for Ukraine, then (in this fantasy) there will be no nuclear war.*

In the fantasy of omnipotent submission, America has the magical power, by way of complete inaction, to restore a peaceful status quo where we could all sleep soundly. But America has no such power. And there is no way to do nothing. American policymakers have to act within a certain setting, formed by many actors in complex interactions, in which doing nothing will always have consequences, just as doing something will always have consequences. Doing nothing, in fact, always amounts

219 See the discussion of "Politics As A Vocation," quoted in "A tale of two ethics," *The Economist* (September 29, 2016). https://www.economist.com/europe/2016/09/29/a-tale-of-two-ethics. Accessed April 19, 2023.

to doing something, and usually (as in the case of Russian invasion) it is the wrong something! In this case, doing nothing (to support Ukraine) would increase the risk of nuclear war. By doing something specific, by supplying arms to Ukraine, the United States has assisted the Ukrainians in decreasing the chances of nuclear war.[220]

Snyder uses psychoanalytic terminology like omnipotence, fantasy, and submission to critique those flinching from any possibility of nuclear risk, whom he observes—probably accurately—to be mostly located in the most liberal parts of the Collective West. But he might have used a very different diagnostic vocabulary[221] from the swelling list of cognitive distortions, i.e. "exaggerated or irrational thought patterns involved in the onset or perpetuation of psychopathological states, such as depression and anxiety."

Using Cognitive Behavioral Theory it would, for example, be entirely possible for psychologically-minded nuclear practitioners to examine the discourse of abolitionist critics to pick out examples of at least the following distortions:

Motivated or Emotional Reasoning - letting feelings guide interpretation of reality.
Catastrophizing - focusing on the worst possible outcomes.
Overgeneralizing - seeing a big pattern of negatives based on a single incident.
Dichotomous thinking - viewing events or people in all or nothing terms.
Negative filtering - ignoring all but the worst interpretations.

It is not necessary for practitioners to be fully aware of the underlying explanatory frameworks for them to have noted these features in critiques aimed at them.

Alternative psychological explanations of this kind would functionally mirror and counter the long-term use by radical nuclear abolitionists of overlapping dismissive and denigratory psychological notions like "Exterminism,"[222] "Genocidal Mentality,"[223] and "Nuclearism,"[224] as corresponding ideological and cognitive distortions which cloud the brains and moral faculties of nuclear practitioners and their supporters.

One very recent article,[225] well received within its community, perhaps inevitably takes disparagement further, into the realm of fundamental philosophical categories.

220 Timothy Snyder, "Nuclear War!" (February 8, 2022). https://snyder.substack.com/p/nuclear-war. Accessed April 19, 2023.

221 Matthew Whalley, "Cognitive distortions: An introduction to how CBT describes unhelpful ways of thinking," Psychology Tools. https://www.psychologytools.com/articles/unhelpful-thinking-styles-cognitive-distortions-in-cbt/. Accessed April 19, 2023.

222 John B. Foster, "Notes on Exterminism for the Twenty-First Century Ecology and Peace Movements" (May 1 2022). https://monthlyreview.org/2022/05/01/notes-on-exterminism-for-the-twenty-first-century-ecology-and-peace-movements/. Accessed April 19, 2023.

223 Robert Jay Lifton and Eric Markusen, *The Genocidal Mentality: Nazi Holocaust and Nuclear Threat* (New York, NY: Basic Books, 1990).

224 Marianne Hanson, *Challenging nuclearism A humanitarian approach to reshape the global nuclear order* (Manchester, UK: Manchester University Press, 2022). https://manchesteruniversitypress.co.uk/9781526165091/. Accessed April 19, 2023.

225 Nick Ritchie, "A contestation of nuclear ontologies: resisting nuclearism and reimagining the politics of nuclear disarmament," *International Relations* (September 28, 2022). https://journals.sagepub.com/doi/full/10.1177/00471178221122959. Accessed April 19, 2023.

It argues that the politics of nuclear disarmament has hardened into a contestation between two broadly incommensurable nuclear worldviews, or nuclear ontologies: hegemonic nuclearism and subaltern anti-nuclearism.

That insight might even be agreed by practitioners, although they might take considerable persuasion to accept that the esoteric terminology of critical theory was both useful and neutral in describing an obvious condition. The author, however, concludes that "'bridge building' approaches to find a middle ground generally deny this …. and thereby close down debate, and that this explains why they often fail to gain traction." He therefore favors unyieldingly "resisting nuclearism and reimagining the politics of nuclear disarmament."

This provides another telling contemporary example of leading antinuclear opinion formers' determination to pursue total psychological and philosophical condemnation and refuse any sympathetic consideration of available nuclear practitioner choices other than total unilateral elimination. The very language used on different sides of the abyss seems to doom most attempts at engagement or compromise. Like any other occupational group, nuclear practitioners will be understandably skeptical about perspectives which would not only ignore, but openly and deliberately stigmatize, their own worldview, lived experience, and moral self-understanding. Practitioners' professional skepticism will be strengthened by very strong doubts about the strength—or often even sometimes the comprehensibility—in ordinary language antagonistic ("critical") vocabularies and intellectual systems which tellingly lack empirical references, and which would be not only irrelevant but ideologically marginalized or even legally forbidden in the classified inner discussions of nuclear adversaries.

The incongruence of vocabularies is another dimension of the underlying moral abyss. Michael Quinlan, the most influential and senior British nuclear practitioner and thinker, repeatedly conceded that a non-nuclear world *might* be possible. But he insisted that it could not be like today's world system from which nuclear weapons had simply been removed. Wider contextual political priorities, structures and patterns of behavior would have to have been transformed. This is the opposite vision from that calling for an immediate unconditional move for global nuclear disarmament. Nuclear practitioners are probably distinguished from any other profession by their extreme professional awareness of how much of this crucial context has not begun to change and is even regressing. They would have to point out how far indispensable agendas and paths of consensual action for effective disarmament have not been addressed or even universally agreed, and throwing up huge consequent collective problems which would have to be overcome to move to a post-nuclear condition. Their abolitionist critics have the moral luxury of urging rapid action while remaining unconcerned about practicalities which most practitioners would have conscientiously to conclude were currently insurmountable. Yet in this situation unbalanced, unverifiable, and destabilizing nuclear measures are likely to favor and encourage the least scrupulous and morally restrained nuclear actors.

These clashes of understanding and interpretation, like other aspects of moral psychology or philosophy, are a fascinating emergent field of study.[226] Such recurrent systematic differences do not, after all, emerge from nowhere. But uninvited psychological explanations of deeply held beliefs are usually denied and resented. Endless arcane ontological disputes have no evident purchase on the world beyond circles of the like-minded. Additional research into present-day attitudes will lead to further, possibly angrier and more theoretically complicated, name-calling. This will once again reveal, and perhaps worsen the divisiveness and the difficulty of persuasion or conversion in such an elementally important and terrifying subject.

Practitioner Reasons to Stay Unpersuaded

Experience strongly suggests that conclusions emotively transmitted from the Archipelago will remain intellectually, psychologically, and morally unconvincing to nuclear practitioners, for several sets of reasons:

1) The More Salient Claims of Nationally-based Nuclear Consequentialism, discussed above

2) The Technical Weakness of Many Unclassified Critiques

Outside critics commenting on situations involving nuclear deterrence will almost certainly lack detailed intelligence knowledge of assessed intentions, underlying capabilities, leadership personalities, doctrines and technical balances, SIGINT, ELINT, or HUMINT revelations, secure second strike and robust C4 I, flight times, throw weights, accuracies, interception probabilities, and illegal nuclear proliferation. Their lack of detailed or reliable topical subject matter expertise here is beyond their control but often seriously limits the credibility of specific arguments for practitioners who will be more aware of at least some of these often highly classified facts. In general, practitioners seem to judge that antinuclear commentators exaggerate, sometimes hysterically, scenarios which would call into question the stability of deterrence relationships between well-established nuclear powers and alliances.

3) Clashing, Unrelinquishable, Wider Geopolitical Equities

226 Yet another theoretical explanation which might be examined is that of Moral Foundations Theory, a social psychological approach proposed by Jonathan Haidt (*The Righteous Mind: Why Good People are Divided by Politics and Religion*, Pantheon Books, 2012) and others intended to explain the origins of and variation in human moral reasoning based on innate, or early, modular foundations. *Prima facie*, moral intuitions of nuclear practitioners, by self-selection and socialization, might be likely to fall disproportionately into the "group-focused binding cluster" of those whose moral concerns center on "loyalty, authority and sanctity" of the in-group, family, and nation, rather than the person-focused individualizing cluster of "care and fairness." Practitioners perspectives may therefore be intrinsically resistant to idealist and universalist arguments from the Disarmament Archipelago or beyond. But there is no hard evidence yet to support these hypotheses, and perhaps it will always be too institutionally sensitive to try to collect it.

Nuclear weapons perform—and states know that they perform—many important functions beyond nuclear attack. They demarcate or contest geopolitical territory by operational ranges, exercises, treaties, alliance memberships, and declarations. They threaten or reassure. Their geospatial and psychological effects are a fundamental reality of the international system. They are "used" every day in shaping the strategic environment, as the Russians are openly, menacingly, trying in Ukraine. We could imagine an inexact missing science (it might be called Nuclear Psycho Geopolitics) to study this continuous background worldwide nuclear shaping by overlapping politico military force fields of reassurance and inhibition, visible in normal conditions mostly to diplomats and intelligence agencies. That picture would remind us that responsible nuclear policy cannot just be about canonical treaties, diplomatic interpretive statements, proposals for deep cuts, or arms race stability. Changes in nuclear numbers, deployed weapon types, or declaratory postures seriously, though often intangibly, affect entire populations and wide territories. To quote just one, lastingly traumatic example: detected Soviet intentions to deploy the new and much more powerful SS missile stimulated a NATO deployment counter response and set off the continent-wide hysteria of the Euro Missile Crisis, amplified and prolonged by professional Warsaw Pact disinformation and Active measures. This was coordinated by specialists in information warfare, who overlapped with nuclear decision-makers in the effort. It was only partially countered[227] by NATO at great political cost, distraction, and enormously exacerbated public anxiety.

Ethically defensible nuclear decisions must therefore address power, territory, anxious threat perceptions of vulnerability to blackmail or attack, confidence in governments and allies, and the impact on various public opinions of information operations. Nuclear practitioners on all sides know this, and try to allow for untidy, uncertain, geospatially distributed psychological realities, historical rivalries, and painfully remembered aggressive state behaviors. Here, nuclear strategy supports overall national and Alliance strategy and diplomacy. But this usually background shaping of the international environment by a relatively (and, because of the NPT, deliberately) small number of nuclear states is easily—and no doubt sincerely—denounced as "nuclear injustice" by antinuclear critics.[228] In reply, practitioners could point to the probability of exchanging one kind of injustice for others. Neither status quo or revisionist nuclear powers would automatically expect more satisfactory regional situations simply through the removal or thinning of nuclear weapons. (Nuclear Free Zones are a rare and painstakingly negotiated exception.) Status quo Alliance

227 Fletcher Schoen and Christopher J. Lamb, "Deception, Disinformation, and Strategic Communications: How One Interagency Group Made a Major Difference," Institute for National Strategic Studies, *Strategic Perspectives*, no. 11 (June 2012). https://ndupress.ndu.edu/portals/68/documents/stratperspective/inss/strategic-perspectives-11.pdf Accessed April 19, 2023.

228 Franziska Stärk and Ulrich Kühn, "Nuclear injustice: How Russia's invasion of Ukraine shows the staggering human cost of deterrence," *Bulletin of the Atomic Scientists* (October 26, 2022). https://thebulletin.org/2022/10/nuclear-injustice-how-russias- invasion-of-ukraine-shows-the-staggering-human-cost-of-deterrence/. Accessed April 19, 2023.

partners would predict destabilizing strategic fallout from ill-judged, unreciprocated, unilateral nuclear renunciations, unbalanced reductions, or even prolonged failure to emphasize guarantees. Exposed allies would fear ragged or destabilizing changes—or neglect—which could prejudice or terminate extended deterrence arrangements. If that were allowed to occur, they would then have to anticipate greater vulnerability to direct aggression or coercion. States benefiting from U.S. or NATO nuclear guarantees vehemently share their apprehensions with Allied nuclear practitioners and their anxieties are one of the reasons for continued U.S. and NATO rejection of No First Use options. (In Asia there are periodic, predictable, hints that if U.S.-extended nuclear deterrence began to appear unreliable, countries like Japan, the Republic of Korea, and Taiwan would be quite capable of developing national nuclear deterrents.) But, conversely, from the perspective of local revisionist and would-be regionally hegemonic states, Western nuclear guarantees to "umbrella countries" are unfair and objectionable, however anxiously desired by smaller neighbors. Arguments of ostensibly high principles recur over this problem. Russia and China insist that their own security interests are unacceptably prejudiced by very notion of extended deterrence, or, as they describe it: "containment" or "encirclement."

Russia has had its own elaborated geostrategic and moral rationale for its long established opposition to U.S. Forward Based Systems in Europe, or indeed, since the Cold War, basing nuclear weapons anywhere outside national frontiers. But in April 2023, Russia announced its intention to base its own theatre weapons in Belarus, apparently provocatively close to its frontier with Poland and therefore NATO. It is particularly noteworthy that this follows a rapidly arranged, and widely questioned, referendum within Belarus[229] announced soon after Russia's invasion of Ukraine, to terminate Belarus's previously constitutionally enshrined prohibition of nuclear weapons on its national territory. This sequence is a reminder of how quickly formal structures of legally binding nuclear restraint or relinquishment can be made to disappear by authoritarian governments. Practitioners throughout the world will have taken note of the possibility in future situations. It will add to the options which they will offer or warn against to national leaderships.

Because Putin's intimidatory nuclear signaling has been such an enabling and controlling feature of his war with Ukraine, it is genuinely hard to envisage how either practitioners or outside experts could have expected recent Russian behavior to be more restrained—or Europe to have felt equally secure—without the NATO Dual Capable Aircraft which Russia has been trying to negotiate away for so long, and with such frequent, yearning support from the Disarmament Archipelago. It is also conceptually difficult to understand how the intimidation problem could be countered, or even fully understood, without resorting to precise analysis in terms of nuclear deterrence. (China's denunciations of American nuclear guarantees to

229 "Belarus to end neutral, non-nuclear status following referendum critics say was rigged," The Associated Press (February 28, 2022). https://www.cbc.ca/news/world/belarus-referendum-russia-ukraine-invasion-1.6367876. Accessed April 19, 2023.

smaller countries on her periphery have been predictably similar, yet it has not so far openly criticized the new Russian policy.) Both powers seem to seek regional nuclear dominance by proliferation of undisclosed numbers of theatre systems, to offset other U.S. and Western advantages. The background geopolitics of nuclear shaping will therefore appear too legitimately important to nuclear practitioners (and concerned populations) on all sides to be overridden or ignored in pursuit of abstract disarmament principles or populist campaigning. It would seem to them immorally irresponsible to do so, though often for diametrically opposed strategic reasons.

4) "Knowledge Resistance" through Moral Rejection of Nuclear Culture and Nuclear Learning

Outside critics may be ignorant of the component realities and repertoires of sophisticated deterrence behavior and nuclear signaling such as patrol and deployment patterns, exercises, modification of alert states, and back channel communication. Or they may simply refuse to engage with them, as axiomatically immoral, inadequate, and doomed to failure. There is undoubtedly intensely felt, though fluctuating and unevenly distributed, moral disgust at the very possibility of nuclear war. These feelings are an important international political reality, and part of nuclear geopolitics. They mean that anxious perceptions may be all too easily shaped by emotive campaigning within civil society, and information warfare from state adversaries. And as a further result, because deterrence is a transformative language, as Carol Cohn brilliantly asserted,[230] its strongest critics often now refuse to learn or speak it for fear of lending it respectability and corrupting their own and others' understandings of the world.

This refusal through detestation of the very vocabulary of deterrence emerges from strong and sincere moral disapproval. It leads not just to demands for the stigmatization and devaluation of nuclear weapons, but programmatic (public) avoidance of the vocabulary and the concepts behind them which have been built up over decades to understand and guide how nuclear weapons "work" in the world. Nuclear "delegitimization" or "stigmatization" is one contemporary effort amongst many to redistribute power by controlling permissible vocabularies, as in other domains of coercive social engineering, to police and ban deterrence arguments in any polite international conversation connected with the Disarmament Archipelago. Left unchallenged, ignorance through nuclear distaste, another variety of "knowledge resistance,"[231] would further facilitate the emotional fallacy of judging the strength of a case by the intensity of the feelings of partisan Archipelagic nodes such as

230 Carol Cohn, "Sex and Death in the Rational World of Defense Intellectuals," in "Within and Without: Women, Gender, and Theory," *Signs* 12, no. 4 (Summer, 1987), pp687-718. http://links.jstor.org/sici?sici=0097-9740%28198722%2912%3A4%3C687%3ASADITR%3E2.0.CO%3B2-E. Accessed April 19, 2023

231 Jesper Strömbäck, Åsa Wikforss, Kathrin Glüer, Torun Lindholm, and Henrik Oscarsson, eds., *Knowledge Resistance in High- Choice Information Environments* (Milton Park, UK: Routledge, 2022).

ICAN, which relentlessly transmits, and, as an essential part of their project, *have to* transmit, anticipatory moral triumphalism. But activists' emotions, however sincere, eloquent and widely communicated, cannot be accepted as a reliable guide to wise collective action. Conscientious nuclear practitioners might, or might not, sympathize, but would have to oppose a concession to emotive reasoning, with as much eloquence as they could achieve—or be told that it was politic to express. The project of "nuclear delegitimation"—conceived within, and energetically propagated by the Disarmament Archipelago—has obviously not prevented Putin's systematic nuclear saber rattling since February 2022. Whatever the degree of national diplomatic self-censorship, nuclear practitioners know that they will themselves continue confidential consideration of worst-case strategies and will expect potential adversaries and allies to be doing the same, undaunted by accusations from the Archipelago and the Academy, framed in an artificial and freighted language that they do not themselves speak. Moreover, efforts to enforce change in relationships and power structures by rectifying undesirable language will appear even less realistic at the international level than they might do for individuals subjected to efforts at social engineering. Compartmentalization is standard, even essential, in the nuclear (or any other advanced military or industrial) field. Compartmentalized structures clearly overcome the cognitive dissonance which might afflict the individual members of societies or professions using forbidden vocabularies. So practitioners and strategists have every reason to expect that highly classified conversations about optimizing the contributions and methods of nuclear deterrence will assuredly be continued worldwide, whatever public diplomatic formulae are claimed to rule them out.[232] They will think it absurd to expect anything else.

5) Reanalyzed Historical Experience as a Warning Against Abrupt Abolitionist Utopianism

Most importantly and persistently of all, practitioners will notice that their committed non-practitioner moral critics make harsh judgements of actual nuclear choices against the imagined alternative of a reliably and permanently disarmed world that no one, in fact, knows how to reach. (They also make and frequently smuggle in, unchallenged, the huge, unsupported assumptions that such a world would automatically also be more just and stable.) Specifically, critics display a consistent shortage of what I suggest should be, openly and repeatedly, labeled "Treaty Regime Fragility Awareness (TRFA)." They avoid such awareness partly through ignoring or denying so many observable features and failures and structural weaknesses in the operation of modern disarmament treaties to date. It is telling that disarmament campaigners (and sympathetic Critical International Relations theorists) seemingly lack, or consistently underplay, awareness of the unsolved structural fragility

232 Paul Schulte, "The Strategic Risks of Devaluing Nuclear Weapons," *Contemporary Security Policy* (April 18, 2013), pp195-220. https://doi.org/10.1080/13523260.2013.771058. Accessed April 19, 2023.

of postulated but largely non-existent Treaty Regimes. This tendency could be described as amounting to *denial* of Treaty Regime Fragility. It is as psychologically or organizationally explicable (and as likely to be angrily rejected) as other varieties of knowledge resistance.

In the escalated rhetoric of the TPNW, campaigners and NNWS diplomats can consequently, and perhaps sincerely, insist that existing NPT obligations are being inexcusably evaded and that this necessitates the imagination and practical enforcement of a fundamental, treaty-based, change in the nuclear order. An abolitionist action plan has proudly emerged based on coercive moral suasion (rather than intellectual *persuasion*) to universalize the 2017 Ban Treaty. According to the International Committee against International Weapons (ICAN) and its NSNW government supporters, civil society (at least when permitted within democratic Nuclear Weapons States and umbrella allies) will progressively eliminate nuclear weapons, postures, strategies, and intentions when working through NNWS diplomacy—triggered through humanitarian disgust, existential survival anxiety, and energetic nuclear stigmatization. When nuclear practitioners and their dupes are forced, by mobilized public opinion, to stop blocking and denying the inevitable future, orchestrated moral outrage will create an unstoppable cosmopolitan "Politics of Inevitability." Such a force would be immune to treaty weaknesses and driven towards an indispensable, redemptive, just, and stable end state, which would be completely verified, and irreversible nuclear disarmament—even, astonishingly, during a nuclear-influenced global confrontation involving a high-intensity conventional conflict.

Security bureaucracies in nuclear states are, however, all too aware of that so far ineradicable treaty fragility. They include it in their calculations—whether to obstruct and undermine or better design and implement treaties which will be as effective as possible. Their diplomatic services and intelligence agencies have watched, absorbed, and sometimes protested, but always reported and confidentially recorded, the stress patterns of treaty fragility revealed over WMD and their far-reaching implications.

By contrast, certain disarmament diplomats and campaigning INGOs, critical IR academics and religious spokesmen (especially Catholic/Anglican, or Liberal Protestant—seldom Orthodox, or fundamentalist Protestant, clerics) typically tend, unconsciously, or knowingly choose, to ignore or deny them, and refuse to discuss their most disturbing implications. More generally, nonpractitioner moralists avoid acknowledgement of the cavernous open secret that humans have still not invented any sufficiently trustworthy multilateral architecture which nuclear states could be expected to trust to oversee, ensure, and maintain nuclear disarmament. While technically tending, and diplomatically defending existing treaties, it is essential to maintain some simulacrum of nuclear order, as it has had notably limited success in hard cases. Hard Cases now evidently include any update, interpretation, suspicion, accusation, or finding involving Great Power interests or clients. Nothing can be finally legally authoritative without the UNSC, but nothing can prevent unashamedly partisan P5 vetoes, and systemic reform would obviously be vetoed. Resultant exceptions and

obstructions cumulatively undermine the credibility of the treaty. No reasons have been advanced to expect postulated future treaties to escape these problems.

The fact that this dimension is so often unexpressed by politicians, diplomats, academics, and journalists is partly explained by the national diplomatic and reputational costs of open expression. Publicly citing the evidence for doubting the NPT formula for the necessary future would invite wearisome automatic counteraccusations and angrily obstructive punitive reactions from the non-nuclear weapon states. The jarring disjunction of loud, passionate, concerted international accusations of suicidal hypocrisy from the Archipelago—versus largely unexpressed national or Alliance judgements of idealistically infatuated, historically deficient, geopolitical blindness—largely defines the current moral debate over nuclear weapons. It disguises the extent of unvoiced distributed disarmament skepticism within the international community, and the long-conditioned refusal of knowledge by the loudest antinuclear sectors of the Archipelago. These are not the circumstances in which nuclear practitioners are likely to be converted by unvarying moralistic denunciations from critics with no new arguments, and little evidence of understanding inconveniently nonobvious obstacles.

But there is a disconcerting natural experiment which has run for years in the debating chambers of the UN building, without apparently causing any concern to those debating and voting for the TPNW in the same building. It is extraordinarily relevant to arguments over nuclear deterrence. But it is almost never referred to.

Blocked CW Disarmament in Syria: A Sobering Protracted Chemical Test for Attainable Nuclear Order

The fate of OPCW investigations[233] into the Gouta nerve gas attacks outside Damascus in 2013 and subsequent incidents provide a perfect paradigm test case for WMD treaty verification.[234] The interminable, acrimonious, compliance crisis and its verification melodrama is disturbingly reminiscent of the Iraqi WMD compliance crisis between 1991 and 2002 with which I had been involved as a UN Disarmament Commissioner. The two crises suggest the following illustrative playbook, whose lessons will not be new to the world's diplomatic services and intelligence agencies. But new methods will, no doubt, be added over time.

233 Martin Chulov, "Syrian regime found responsible for Douma chemical attack," *The Guardian* (January 27, 2023). https://www.theguardian.com/world/2023/jan/27/syrian-regime-found-responsible-for-douma-chemical-weapons-attack. Accessed April 14, 2023.

234 Ambassador Richard M. Mills, Remarks at a UN Security Council Meeting on the Situation in the Middle East (November 7, 2022). https://usun.usmission.gov/remarks-at-a-un-security-council-meeting-on-the-situation-in-the-middle-east/. Accessed April 14, 2023.

SUCCESSFUL DISARMAMENT OBSTRUCTION –
A MINI MANUAL AND BEHAVIORAL DOSSIER FOR CHEATS AND PATRONS
How to Block The World's Most Advanced, Integrated, and Near Universal, WMD Disarmament Mechanism

a) deep concealment, enforced by a "fierce state," followed, if external suspicions are nevertheless raised, by:

b) rapid, elaborate, sustained, and shamelessly implausible denials (*vranyo*), jointly asserted by allies and Great Power patrons, also prepared to invest their national reputations over the compliance dispute.

c) delay, and inaccuracy in declarations of assets and materials; persistent failure to respond adequately to questions and counterevidence

d) diplomatic refusal or blockage of investigatory attempts, despite treaty obligations over verification.

e) pervasive and continuous Information Warfare, by the state under suspicion, and, more importantly, its supporters, patrons, coreligionists and allies, disinformation coordinated to spread corrosive generalized "post-truth" cynicism, rather than focused empirical skepticism,

f) threats to withdraw from the WMD regime, or to refuse wider cooperation, if accusations are acted upon or publicly pursued.

g) continued obstruction of access to sites or program experts, including excuses of violence from civil conflicts.

h) counteraccusations: of false flag attacks, or more generalized "*what aboutism."* This includes amplification of hypotheses put forward by contrarian scholars or journalists repeatedly and perhaps genuinely skeptical of Western good faith (e.g. Hersh, Postol, Hitchens, Bustani, Beeley, et al.) while rebutting, trolling, or ignoring unsympathetic open source accounts, such as those by Bellingcat.

i) bureaucratic obstruction and pressure over investigations, including attacks on the integrity and nationality of inspectors, technical obfuscation and quibbling, within international verification organizations. Systematic denigration of technical competence and personal integrity of any "gatekeepers of truth" if they even seem likely to reach inconvenient findings.

The unending saga is a perfect illustration in progress of the intractable untrustworthiness of the international strategic environment, which seems, on current evidence, to be worsening. Poisonous, pervasive, and endlessly repeated disinformation,[235] employing techniques with patterns of gaslighting familiar from domestic abuse, now categorised as DARVO (an acronym for "*deny, attack, and reverse victim and offender*")[236] have prevented the development and exercise of a previously expected consensus of global outrage over treaty breach, even when WMD cheating had been revealed through the televised murder of children. The eventual intention in blatantly exploiting treaty fragility is to create situations in which, although it might be widely suspected that major illicit capacities are being developed, maintained, or even lethally used, not only in Syria but Salisbury and against Navalny, the issue will

235 The literature on disinformation grows daily. Keir Giles, "Russia's War On Everyone And What It Means For You," Bloomsbury Academic 2023, has compendious up-to-date references on interlinked Russian information methods of political warfare. Specialist patriotically-minded Russian practitioners might read it and admit amongst themselves to a sense of professional accomplishment.

236 "What is DARVO?" Blackburn Center (September 21, 2021). https://www.blackburncenter.org/post/what-is-darvo. Accessed April 19, 2023.

gradually become too diplomatically unrewarding to bring up against the interests of morally disinhibited Great Powers. This pattern no longer causes widespread anger: the international community seems habituated to it. Much of the normatively-focused academic world ignores it. Diplomats from the Global South seem to have no difficulty in refusing to take a position over the Syrian chemical dispute (*"a problem for the Global North in which we refuse to commit ourselves"*) while insisting on the overriding moral necessity of immediate universal signature of the TPNW.

The Wider Case Against Treaty-based Nuclear Utopianism

It is important to understand that this aspect of the nuclear condition is not a technical problem to be solved in time by better verification science with new sensor technologies. Given revealed state behavior in relation to other WMDs, there is no treaty architecture or blueprint which can be expected to cope with determined non-compliance by Great Powers or their proxies. Russian and Syrian defiance and wider acquiescence, over Syria annually demonstrates that this is the current and anticipated condition in which deep or complete nuclear disarmament would have to be managed. And there is no other even faintly encouraging precedent. There has never been a bilateral treaty which has attempted verifiable limitation or elimination of all nuclear warheads rather than certain observable delivery systems. And there has been no multilateral treaty at all with such technically improbable nuclear ambitions. Fred Ikle's famous question about arms control *"After detection what?"* still has no encouraging answer. Normative, diplomatic or legal responses have been shown to be inadequate for repeatedly proven violations, even if the norm against WMD proliferation and use has been symbolically reasserted by almost every country on the planet. Practitioners might therefore now ask *"After Splendidly Ambitious And Endlessly Proclaimed Universal Disarmament Treaties Are Threatened By Non Compliance, What?"* (From repeated personal experience, TPNW advocates have no convincing answer.) In what kind of world, for example, could reliable, verifiable permanent nuclear elimination not simply lead to contested domination by the best armed conventional state or alliance?

Intellectually scrupulous nuclear practitioners, whether within or opposing the Collective West, will therefore insist on their responsibility to remain at least privately skeptical, especially, in relation to the brightest prophecies of radical change. They are professionally obliged not to overlook prospective treaty fragilities and the historically demonstrated likelihood that some national elites will judge it necessary, for their own concepts of security, to refuse, obstruct, cheat over, undermine, or defect from negotiated arrangements. And, in doing so, even (or perhaps especially) those recalcitrant or non-compliant elites seem certain to find and rely upon arguments which will provide ethical justification to their own satisfaction, in their own special cases. Informed skeptical awareness of the underlying problem does not in itself necessarily rule out long-term optimism in a changed future international political climate. Nor does it preclude savage moral indignation—even if diplomatically disguised. But it does force attention to essential questions with potentially highly

inconvenient answers. Can a particular proposed arrangement be made fair, robust, and in the national interests of all those who would need to accept it? Can crucial states parties realistically be expected in practice to honor a Treaty's intent and comply with its obligations, however extensive? If some states refused to join, or decided to cheat, could the Treaty be kept effective in its explicit aim? What are the consequences if it could not? Is it necessary to hedge against Treaty failure? Isn't it morally obligatory to reach authoritative national assessments about treaty prospects and consequences? If so, could it then be right for governments to deliberately ignore them, however loudly pressed by well-intentioned campaign groups? If not, should fundamental national doubts, and their rationales, be repeatedly and fully expressed, even if this inconveniently inflames diplomatic divisions?

Here, significant and potentially far-reaching anti-utopian indicators may be the eventual, carefully considered, but domestically controversial refusal of Norway and Sweden to sign the TPNW—even though they had previously done so much to finance and encourage it. The subsequent decisions of previously neutral and carefully non-nuclear Sweden and Finland to join NATO, as an alliance which describes itself as determined to remain nuclear while nuclear weapons exist, could prove even more quietly consequential.

Uncomfortably Re-evaluating Past Lessons?

Moreover, there is evidence that the international community may in fact have been collectively much too optimistic about the extent of Treaty Regime Fragility. Global expectations about reliable international behavior within Treaty Regimes were raised and set between 1971 (Entry into Force of the BTWC) and 1998 (EIF of the CWC). It is a reasonable counterfactual hypothesis that key governments—particularly the U.S. Congress—would never have signed the BWC, CWC, Open Skies, Vienna Document, or the INF treaty had they accurately predicted the persistently non-compliant behaviors which would dog and eventually doom the resultant regimes. Long-term problems with the CWC have already been mentioned. After signature of the 1972 Biological Weapons Convention, there was lavish classified evidence unearthed of huge illegal continuing Soviet offensive BW efforts, only revealed by walk-in Soviet whistleblowers.[237, 238] Plans to maintain ingeniously concealable chemical weapon (CW) (Novichok/Foliant) production capabilities seem to have been well known to the West by the 1990s. But all this appears to have been deliberately downplayed in the hope that Russia's treaty memberships and socializing involvement in the international economy would morph into permanent behavior change. Successive revelations indicate that those hopes were never realistic, even under Gorbachev in the more hopeful circumstances of the post-

237 Milton Leitenberg and Raymond A. Zilinskas, *The Soviet Biological Weapons Program: A History* (Cambridge, MA: Harvard University Press, 2012).

238 Robert Petersen, "Fear and loathing in Moscow: The Russian biological weapons program in 2022," *Bulletin of the Atomic Scientists* (October 5, 2022). https://thebulletin.org/2022/10/the-russian-biological-weapons-program-in-2022/. Accessed May 18, 2023.

Cold War honeymoon. Today it is evident that Russia is using bogus accusations under the BTWC of American offensive biological programs in Ukrainian research facilities as an additional justification for its war,[239] in which it issues warnings of imminent Ukrainian chemical attack, knowing that they will be interpreted as plausible threats of false flag CW attacks by its own forces. It ought logically to follow from revised assessments that either the structural problems creating treaty regime fragility, or expectations about the contribution to international security from multilateral treaties, must be substantially reduced. Considerable emotional opposition could be expected to such conclusions. But, once again, it will not, and should not, stop practitioners drawing their own professionally required conclusions.

An Unillusioned, But Not Despairing, Practitioner Conclusion: "Tragic Realism" in Nuclear Affairs

Much of this is self-evident to closely observant or regularly briefed experts, although these arguments will seem cynical, self-serving, and despairing to others. But they do not call for ignoring treaties or breaking international law and should not mean giving up on possibilities of reducing nuclear risks, numbers, or costs, even when initiatives for negotiation may very well go not only unreciprocated but quite possibly be interpreted as signs of weakness, revealing the exploitable anxieties of democratic electorates.

For nuclear practitioners in democratic societies, personal moral denunciation across the moral abyss of ethical thinking on nuclear weapons is a periodic, acrimonious, but so far entirely manageable, professional risk. Their subject's tragic dimensions inspire angst, fierce disapproval, and sometimes open loathing of official statements or personal opinions about choices which, as Snyder topically reminds us, *unavoidably* risk massive human casualties. As Robert Kaplan has recently re-emphasized:

> *"Geopolitics—the battle of space and power played out over a geographical setting—is inherently tragic…Never before has thinking tragically—and husbanding fear without being immobilised by it—been more necessary."*[240]

239 The cumulative dangers of false accusations of WMD proliferation in disinformation campaigns are greater than has generally been acknowledged amongst the general commentariat. "Referring to dozens of Russian disinformation claims that U.S. BW facilities were located all over the world..., [Filipa] Lentzos wrote, "By claiming that biological weapon labs exist where they do not, Russia is hastening the death of that [BW] taboo—creating the appearance that reliance on these weapons is greater than it actually is, possibly encouraging other nations to pursue them." Similar considerations obviously occur in the nuclear case. Milton Leitenberg, "False allegations of biological-weapons use from Putin's Russia," *The Nonproliferation Review* (2021). https://doi.org/10.1080/10736 700.2021.1964755. Accessed May 18, 2023.

240 Robert D. Kaplan, *The Tragic Mind: Fear, Fate, and the Burden of Power* (London: Yale University Press, 2023). For convenience, and sympathetic concision, see the review by John Gray, "Robert Kaplan's Tragic Realism," *The New Statesman* (January 28, 2023). https://www.newstatesman.com/the-weekend-essay/2023/01/robert-kaplan-tragic-realism-book-review. Accessed April 19, 2023.

Although it is not a term many of them would yet recognize, "Tragic Realism" probably best describes the ethical and emotional context within which nuclear practitioners will feel that they must continue to operate, at least at this stage in nuclear history. However it is labeled, an ethic of this kind will of course appear repugnantly inadequate to those demanding rapid nuclear abolition. It would be unutterable within the Archipelago. Yet, for reasons set out above, I also think it is part of practitioners' (and, if they are asked, former practitioners') moral responsibility to express their judgements of the landscape of nuclear possibilities as accurately and with as few illusions as possible. They may not be allowed, or need not choose, to enter public disputes. But they should not back down from expressing professionally justified anti-utopianism when circumstances warrant it—even if there might be few nearby sympathizers. As repeatedly pointed out, this does not imply that that they should cease looking out for realistically achievable tension reducing deals or cooperative risk reduction measures, and for all possible alternatives to nuclear use. That obligation remains permanently part of any convincing ethics of nuclear consequences and there is a continuing series of deliberately cautious proposals from the Archipelago which deserve at least open-minded practitioner attention.[241]

But, in periods of heightened confrontation, practitioners may have to accept, and explain, conscientiously and authoritatively, to others that no ameliorative deals are easily or quickly attainable. Banking on democratic electorates' continuous demands for nuclear reassurance, autocratic adversaries characteristically resort to a strategy of nuclear tension, punitively refusing negotiations or contacts. Deliberately uncomfortable ensuing periods must then be accepted, ameliorated wherever possible, and finally lived through, as after the 1979 NATO Dual Track Decision, but this time on a global scale. That is certainly not going to be a popular or a comfortable outcome for most of the world. Nevertheless, in democratic states and alliances, it may become for obligatory for informed practitioners, as well as politicians, to be prepared to explain publicly that even a long, tense, hiatus in nuclear diplomacy, though undesirable against any calculus involving nuclear risk and overall human welfare, is currently neither avoidable nor necessarily catastrophic.

241 It is worth mentioning here three recent or ongoing initiatives which typify the possibilities developed to create options which nuclear practitioners might feel morally obliged to consider with professional open-mindedness. The first is the long-term carefully limited effort of the British American Security information Council (BASIC) to engage nuclear states in cooperatively thinking through their nuclear responsibilities: https://basicint.org/portfolio/nuclear-responsibilities/. Accessed April 19, 2023. The second is the carefully incremental and nonconfrontational Stepping Stones approach developed by 16 non-nuclear weapons states. https:// basicint.org/wp-content/uploads/2021/12/The-Stepping-Stones-Approach-to-Nuclear-Disarmament-Diplomacy-report_summary- paper.pdf. The third is the latest practical proposal from CSIS, a relatively nuclear-friendly part of the Disarmament Archipelago, making practical proposals for an expanded framework for future nuclear reductions, incorporating China and including, also for the first time, China, Britain, and France: https://thebulletin.org/2023/03/all-start-a-proposal-for-moving-beyond-us-russia-arms-control/. They each offer possibilities for progress over or towards nuclear agreements. None would have a place if bridging options were cancelled in favor of a stridently consistent anti-nuclearism. But they may still have little effect while key national leaderships in revisionist autocracies decide that they are strategically correct (and no doubt they believe they are morally justified) in refusing inconvenient dialogues.

Nuclear Ethics in Political Discourse

Brad Roberts

In late 1959, J. Robert Oppenheimer and Raymond Aron participated in a conference in Switzerland focused on the public political discourse about science and security a decade into the Cold War. Aron posed the following question:

> *Has the result of the progress of science and scientific reasoning merely been to place in the keeping of unreason the thing that concerns us most, that is to say, the definition and choice of the essential, of the good life, of the good society?*[242]

Oppenheimer responded in the affirmative. In a wide-ranging paper entitled "In the Keeping of Unreason," he lamented "the alienation between the world of science and the world of public discourse, which has emasculated, impoverished, and intimidated the world of public discourse without any countervailing advantage."[243] He went on to argue as follows:

> *There have been crucial moments in which the existence of a public philosophical discourse…could have made a great difference in the moral climate and the human scope of our times…I find myself profoundly in anguish over the fact that no ethical discourse of any nobility or weight has been addressed to the problem of atomic weapons. There has been much prudential discussion, much strategic discussion, and game theory. This is recent, and I welcome it, because as little as five or seven years ago there was no discussion of any kind; that was certainly worse. But what are we to make of a civilization which has always regarded ethics as an essential part of human life…which has not been able to talk about the prospects of killing almost everybody, except in prudential and game-theoretic terms?*[244]

Six decades later, the landscape has changed—but how much? Has the Western public discourse improved? Has the nuclear discourse gained the needed balance between the prudential and the normative?

In 2023, the national leadership discourse in the United States and among its allies is heavily focused on prudential concerns, as the need to address growing nuclear challenges from Russia, China, and North Korea is compelling and urgent. These prudential concerns have been publicly articulated in the Nuclear Posture

242 J. Robert Oppenheimer, "In the Keeping of Unreason," *Bulletin of Atomic Scientists* 16 (January 1960), p18.

243 Ibid.

244 Ibid., pp21-22.

Reviews of the Biden and Trump administrations but have not been a focus of sustained public engagement in follow up. But leadership deliberation over nuclear policy is not limited solely to prudential concerns, as I argued in my chapter.

At the public level, the focus is reversed: by and large, normative issues generate more political dialogue than prudential ones. The terms of public debate have been set largely by those making the moral case against nuclear weapons and nuclear deterrence, whether in religious institutions, academia, or non-governmental advocacy groups. Disarmament campaigners have focused on trying to change the public discourse in order "to challenge and destabilize the acceptability of nuclear violence, to create a 'crisis of legitimacy' for nuclear weapons and nuclear deterrence."[245] As John Borrie has argued, "changing the discourse—the manner in which things are talked about, including which questions are asked and answered—must be a goal for campaigning."[246] In the academic community, scholars writing from an ethical perspective tend to express concerns and skepticism about nuclear weapons and nuclear deterrence. As Scott Sagan has argued, "relying on nuclear deterrence for U.S. security is like walking on thin ice. The fact that we have done it for so long without falling through does not mean that we should assume that the ice will hold forever."[247]

But, in my experience, the public also has an interest in prudential considerations and wants reassurance that deterrence remains effective for the problems for which it is relevant in the current security environment. It also wants reassurance that the risks of nuclear deterrence are bearable and that there is a plausible pathway to the ultimate escape from nuclear burdens and dilemmas.

Because the actual prospects for nuclear disarmament are dim for the foreseeable future, nuclear deterrence will be practiced for a long time to come by the United States, its allies, and its rivals and adversaries. In the United States as in other democratic states, this implies an enduring need for political support for deterrence. Yet such support is unlikely to prove durable if built solely on prudential grounds. The nuclear deterrence strategy of the United States and its allies requires also a solid moral foundation and an ethical context that will be credible to Western publics. As Mike May has argued:

> *For a policy to last…especially in a democracy, it must be seen not only as effective but also, if not moral, at least as moral as possible under the circumstances. Leaders can broaden (or narrow) their people's understanding of what a moral policy requires but they cannot go far beyond it.*

245 Nick Ritchie, "The Treaty on the Prohibition of Nuclear Weapons: delegitimizing unacceptable weapons," in Shetty and Raynova, *Breakthrough or Breakpoint?*, p44.

246 John Borrie, *Changing the Discourse on Nuclear Weapons: What it Means for Campaigners and Why it's Important.*

247 Scott D. Sagan, "Just and Unjust Nuclear Deterrence," one of a collection of essays on nuclear ethics published in *Ethics and International Affairs* (Spring 2023).

Drawing on the essays included in this collection, the basic elements of the moral case for nuclear deterrence are the following:

First, leaders have two moral obligations related to nuclear weapons: to disarm and to protect. Sometimes these obligations are complementary and sometimes they are not, depending on the security context. In the improved security environment when the Cold War ended, it was possible to take many steps to reduce the role of nuclear weapons in U.S. defense strategy, to reduce their number cooperatively with Russia, and to reduce their international salience, all without compromising the effectiveness of deterrence for the problems for which it was then relevant. In the eroding security environment of today, additional steps toward disarmament could have a deleterious effect on deterrence, unless fully reciprocated.

Second, the obligation to disarm follows from the recognition that nuclear weapons are inherently inhumane and that their employment again would be a human catastrophe. This implies a duty to take practical steps toward their ultimate abolition. It does not imply a duty to take steps that would make us less safe and secure or otherwise increase international tensions. As Mélanie Rosselet has put it, "nuclear disarmament cannot be separated from the construction of a fairer world."

Third, the obligation to protect follows from the recognition that there are nuclear-armed challengers to the existing international order—an order which lacks a central authority to prevent their attempts to alter that order by violent means. This implies a right and a duty to both self-defense and collective defense, to deterrence and, if deterrence fails, to military responses that are effective in safeguarding vital interests and in securing a durable, just peace.

Fourth, the acceptance of nuclear deterrence as moral must be both conditional and temporary, as Nicolas Roche and Hubert Tardy-Joubert have argued. Mike May has made this case as follows:

> *A policy of nuclear deterrence is not immoral in itself. It is the best we can do under present circumstances to prevent nuclear war or actions likely to lead to nuclear war. But a policy of nuclear deterrence by itself is also not moral. Morality requires positive action toward a moral good.*

Fifth, the purpose of maintaining a nuclear deterrent is to deter. It is not to fight and win nuclear wars.

Yet for our deterrence threats to be credible to adversaries contemplating doing us harm, we must be capable of employing nuclear weapons to negate any advantages they may hope to gain with the use of their nuclear weapons or with other attacks on our vital interests or those of our allies and partners. Thus, sixth, the United States also has a moral duty to prepare for the possibility that deterrence may fail. Such preparations are guided by the requirements of the law and ethics. In the words of the Obama administration's 2013 report to Congress on presidential nuclear planning guidance:

> *All plans must also be consistent with the fundamental principles of the Law of Armed Conflict. Accordingly, plans will, for example, apply the principles of distinction and proportionality and seek to minimize collateral damage to civilian populations and civilian objects. The United States will not intentionally target civilian populations or civilian objects.*[248]

U.S. presidents have promised repeatedly that nuclear weapons will only be employed in extreme circumstances when our most vital interests, or those of our allies and partners, are at risk. Those interests include our sovereignty and integrity and our right to life, liberty, and the pursuit of happiness. This cause is just.

The responsibility to make this moral case falls squarely on national political leaders committed to a continuing role for nuclear deterrence. It is not someone else's responsibility.

248 U.S. Department of Defense, *Report on Nuclear Employment Strategy of the United States Specified in Section 491 of 10 U.S.C.* (2013). https://uploads.fas.org/2013/06/NukeEmploymentGuidance_DODbrief061213.pdf. Accessed May 16, 2023.

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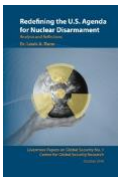

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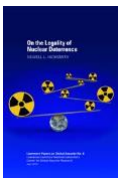

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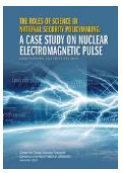

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