

Nuclear weapons and deterrence: Questioning the “indispensable” relationship

States seek to acquire and retain nuclear weapons because policy elites deem them to be of high value for national security, defence, power and identity. It is a small step from this for such elites to present nuclear weapons as essential and indispensable. Without exploration and transformation of our understandings of how deterrence might operate in a denuclearised world it will be difficult to persuade the nuclear elites to diminish the role of nuclear weapons in national security policies sufficiently to facilitate the elimination of nuclear weapons in accordance with the Non-Proliferation Treaty (NPT).

Three dimensions are central to this exploration: 1) the contemporary nature of deterrence between the world's major powers; 2) conventional military deterrence as a substitute for nuclear deterrence; 3) an understanding of the complexity of actual deterrence and the implications of the psychological and social processes entailed.

While deterrence as a component of defence is as old as warfare, the theory and practice of nuclear deterrence as an explicit determinant of state policy is intimately tied to the advent of nuclear weapons and the Cold War superpower relationship. The key, as Bernard Brodie argued in his 1946 book *The Absolute Weapon: Atomic Power and World Order*, was that there could be no defence against these weapons and states could only guard against nuclear attack if they had the ability to retaliate in kind. Nuclear deterrence theory therefore asserted that the threat of nuclear devastation would decisively alter an adversary's calculation of the costs and benefits of its aggressive actions causing it to modify its behaviour.

Nuclear deterrence

Concepts of nuclear deterrence may be divided into three categories: 1) no specific threat and no specific adversary (basic deterrence); 2) no specific threat but a specific adversary or adversaries (general deterrence); or 3) a specific threat and a specific adversary (immediate deterrence). Nuclear weapons are also generally assigned one or more of three broad deterrent roles in the national security strategies of nuclear powers: i) deter threats to the survival of the state and vital national interests by other nuclear-armed powers; ii) deter nuclear coercion or blackmail by WMD-armed regional (rogue) states; and iii) deter state-sponsored acts of nuclear terrorism.

Nuclear deterrence is not a defining feature of relations between today's major powers (a classification that might include the United States, China, Russia, India, Japan, Brazil, Britain, Germany and France). Their relations are not characterised by enduring political-military hostility and confrontation, despite some levels of economic and strategic rivalry. Nevertheless, nuclear policy-makers continue to assert that nuclear deterrence still makes an important contribution to international peace and stability, though at a basic, recessed level and as one of several background conditions. In this context nuclear weapons are assigned the function of providing long-term insurance against a return to major power conflict.

Opponents of nuclear disarmament consider the presence of nuclear weapons to be the background condition that has prevented war between the world's major powers since 1945 by escalating the costs of aggression to unthinkable levels through fear of nuclear retaliation. Remove nuclear weapons from the equation, it is argued, and the risk that crises and conflicts between the major powers will degenerate into large-scale conventional war increases significantly. Better to accept the risks of living in a low salience nuclear world than a nuclear weapons-free alternative.

Conventional deterrence

Deterrence theory distinguishes between deterrence by denial - that seeks to demonstrate and communicate the military capability and political resolve to deny an adversary any objectives they make seek through aggressive action, and deterrence by punishment or retaliation - that seeks to demonstrate and communicate the military capability and political resolve to launch a devastating counter-attack to punish an adversary for their aggressive actions.

Both deterrence by denial and by threatened punishment may be provided through conventional military means through rapid deployment of large numbers of forces or other advanced anti-access weaponry that can deny an adversary quick successes, for example, or by utilising means of resistance that force the attacker into a longer and more difficult conflict than envisaged and risk escalation beyond the aggressor's control. As the US Nuclear Posture Review indicates, conventional military capabilities have the potential to exert increasingly effective deterrence effects by denial and by punishment. These include long-range precision strike, pre-emptive targeting of an aggressor's military facilities with precision-guided munitions, multi-layered defences, manoeuvrable forces for rapid or forward deployment, and so on.

A potentially self-defeating consequence of transferring nuclear deterrence dependency to conventional munitions, however, is increasing the perceived threat to other countries, and a subsequent potential for arms racing as others seek to gain technological parity or superiority in offensive and defensive conventional weaponry. Relying on high tech conventional weaponry to fulfill a deterrence function founded on threats of large-scale destruction currently assigned to nuclear weapons would raise all the same problems of crisis stability concerns, arms race dynamics, and the tenuous line between deterrence by denial and overt war-fighting postures and military capabilities that occupied nuclear policy-makers and analysts throughout the Cold War. Nonetheless, it can be argued that conventional deterrence is already more effective than nuclear deterrence because threats to use non-nuclear forces are more credible than the threat to use nuclear weapons precisely because the consequences of use are more limited.

Moreover, deterrence by denial may also be provided by non-military means, for example through international laws or collective security arrangements designed to deny an adversary its political or territorial objectives and target leadership assets, including through threats of arrest, trial and humiliation in national or international criminal courts.

Deterrence through major power cooperation

In considering alternatives to nuclear deterrence, it is necessary to recognise that the international security environment is fundamentally and qualitatively different from the Cold War. The removal of nuclear weapons from national armouries in this context need not reinstate major power war as a social institution if sufficient major powers take a different approach to deterrence and security. State sovereignty, a core international social institution since the Treaty of Westphalia, is of declining salience in today's interdependent security environment. In an era of extensive globalisation characterised by the integration and interdependence of the economies of major powers, increasing urgency of common security challenges and concomitant decrease in inter-state military security threats, strategic stability for the world's major powers lies more in cooperation as mutual trading partners and global security actors than in military aggrandisement and rivalry. An example of this recognition is the US-China joint statement following President Obama's visit to Beijing in November 2009, which stated that "The United States and China are of the view that in the 21st century, global challenges are growing, countries are more interdependent, and the need for peace, development, and cooperation is increasing. The United States and China have an increasingly broad base of cooperation and share increasingly important common responsibilities on many major issues concerning global stability and prosperity. The two countries believe that to nurture and deepen bilateral strategic trust is essential to US-China relations in the new era."

Though there will continue to be disputes and crises, the globalised security environment makes it increasingly unlikely that these will escalate into conventional military conflagration. The complex interdependence of major powers along multiple dimensions of soft state power enables expansion of the concept of post-nuclear deterrence to encompass far more than military power to deter threats to the country and to important national interests. Hence non-nuclear and non-military tools for deterrence might include: civil defence and effective resources and plans for consequence management and post-conflict recovery; economic power to impose sanctions, embargoes or economic disruption; and collective approaches with other nations to create disincentives or threaten withdrawal of benefits and relations deemed important to a potential aggressor. Hence post-nuclear deterrence need not depend solely on one state's capabilities, but can be seen to operate at a collective international level through cooperative and coercive multilateral diplomacy and the threat of international diplomatic isolation for aggressive behaviour; multilateral economic sanctions and embargoes; and collective military containment. Such deterrent practices and effects may be intangible just as the claims made for nuclear deterrence are unprovable (except in the negative, when they fail) but the progressive internationalisation of the national security calculus of most major powers has the potential to have a powerful restraining influence.

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Shared values and predictable behaviour

Deterrence is not a quality intrinsic to weapons as material objects, but a process or a relationship in which varying degrees of threats and reprisals are implicitly or explicitly communicated to an adversary who decides whether or not to be deterred. Therefore, deterrence is as much about the psycho-socio-historical context between or among potential aggressors as about their military capabilities. Successful deterrence therefore depends on creating and sustaining a body of shared knowledge, values and expectations in order to comprehend the likely behaviour of an adversary. For example, threatening to destroy a country's major cities is a deterrent only if the adversary's policy elite values the lives of its civilians sufficiently highly; if, on the contrary, the adversary's decision-makers are sanguine about heavy civilian casualties or believe that your own value system would preclude attacks on cities full of civilian non-combatants, such a threat would have no deterrent value.

In the Cold War it took some time (and a few near misses) for the policy elites in the United States and Soviet Union to establish and share sufficiently common meanings and expectations for a deterrence relationship to become institutionalised. Moreover, the absence of attack does not necessarily indicate successful deterrence. There are many reasons why a perceived adversary may not actually invade or attack a rival's territory, allies or vital assets: if the efficacy of a particular weapon or tool of deterrence is being asserted, there must at least be some demonstrable intention, motivation and capability to invade or attack on behalf of the deterree.

The growing complexity of international politics means that deterrence relationships are likely to be more complex than in the past and encompass a diverse and asymmetric range of understandings, actors, power relationships, and political instruments. This complexity generates significant challenges for policy-makers in terms of the ambiguity of the situations and actors they face, unbounded problems that cannot be distilled into solvable chunks, and the risks of unintended and counter-productive consequences. Deterrent threats are therefore likely to become much harder to define, communicate and execute effectively in an increasingly complex world.

Strategic stability for the world's major powers lies more in cooperation as mutual trading partners and global security actors than in military aggrandisement and rivalry

Establishing and successfully propagating a deterrence culture based on shared values and knowledge of the other(s) is set to become more difficult in complex, asymmetric and multiple inter-state relationships and almost impossible with regard to non-state actors. It is important to remember that in sixty years, nuclear weapons possessors have been involved in numerous conflicts and wars round the globe in which they have not necessarily prevailed. Nuclear weapons have not deterred or prevented such wars, and unless and until human political relations are transformed further, post-nuclear deterrence cannot be held to an unreasonably higher standard. Non-nuclear deterrence approaches may substantially contribute to peacebuilding, but that will have to be worked for. The key question here is whether a post-nuclear security environment would carry greater risks, and the answer to that must be no. While any deterrence tool or relationship may fail, the consequences of such failure when nuclear weapons are involved would likely be more far-reaching and catastrophic in an increasingly complex world than for non-nuclear deterrence.

Formal and informal diplomatic interaction is a vital part of the process of creating shared meanings, rules, social technologies, and discourse of deterrence, which can make deterrence strategy and practice more effective through a process of mutual learning. As they move towards eliminating nuclear weapons, the major powers need to develop conceptions of post-nuclear deterrence through mutual learning in which they accept that escalation of limited conflicts into major conventional war would carry unacceptable risks and costs for them all, and must therefore be prevented and avoided.



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What needs to be done?

Thinking realistically about post-nuclear deterrence means an evolution in our thinking about what strategic deterrence is and how it might operate in a complex, interdependent international security environment. Three shifts are essential:

- Major powers must recognise and institutionalise the strategic imperative of permanent and continuous high-level engagement prioritising political over military engagement, in order to develop the shared understandings for effective post-nuclear deterrence.
- The paradigm in which 'strategic stability' between the major powers rests on the threat of mutual assured destruction (which still underpins the conceptual apparatus and operational reality of nuclear-based 'strategic stability') must be progressively transformed into a paradigm of mutual reassurance and cooperative security.
- The transition from dependence on nuclear deterrence to incorporation of post-nuclear deterrence approaches and tools will require self-restraint and negotiated limits on offensive and defensive strategic weaponry – conventional as well as nuclear. As nuclear weapons are progressively eliminated, major states will need to strengthen their soft power deterrence capabilities and build cooperative security arrangements in place of confrontational alliances and military hardware.

Further reading

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