

# To What Extent is Nuclear Deterrence Important in the Post-Cold War World?

Written by Giorgio Bertolin

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GIORGIO BERTOLIN, JUN 4 2013

The end of the Cold War led to a sudden change in the security agenda of Western policymakers. In this context, the debate over the function of nuclear weapons in the new security scenario played a prominent role from the very beginning. The question of whether the possession of nuclear weapons was still useful in the post-Cold War world divided the academia, with some scholars arguing that there were still reasons justifying the existence of nuclear arsenals (like Quinlan, 1993: 486) and others who interpreted the historical situation as an opportunity to build a nuclear weapons free (NWF) world (see for example MccGwire, 1994: 226). Today, more than twenty years after the collapse of the Soviet Union, the debate still continues. However, there are elements that point towards a renewed significance of the strategy of deterrence in the 21<sup>st</sup> century.

Nuclear deterrence can still be relevant in the contemporary world, but, in order to do so, its boundaries have to change dramatically: today's deterrence has to be very different from the one that ruled the world during the Cold War. Still, some of the concepts developed during that era might be relevant in dealing with today's challenges to international security (Long, 2008: 59). The purpose of this essay is to show how nuclear deterrence has evolved, how it works today and especially why it is still a relevant part of the national strategies of the main international actors.

First of all, it is very important to define the key points of the issue that will be analysed. The word "deterrence", as it is used here, means the ability to prevent an enemy's attack by inducing fear. For the purposes of this essay, nuclear deterrence is intended in both its classical forms – deterrence by threat of denial and deterrence by threat of punishment. Even if the two theories are often considered alternatives (Keeny and Panofsky, 1981: 288), such a broad definition is the most useful in dealing with the subject of this essay, since the matter here is not *which* deterrence strategy is most effective but *whether* deterrence is still effective today. The validity of a deterrence system can be measured on the rationality of its actors (Morgan, 2003: 42), and this means that we must seriously consider to what extent some players recently introduced in the international arena – notably non-state actors – can be deterred.

This discussion will start by assessing the relevance of deterrence among the other strategies concerning the use of nuclear weapons. The era of the war on terror has witnessed the reintroduction of strategies which contemplate the actual use of nuclear weapons on the battlefield (Koshy, 2002: 1320, see also McDonough, 2004: 618), and this move is not without consequences for the whole apparatus of the classic theories on deterrence.

Two directions are crucial in analysing the importance of nuclear deterrence today:

- Firstly, this essay will examine the relevance of deterrence as a passive form of defence from a nuclear first strike attack. This way of understanding deterrence is particularly significant when we consider the security relations among the traditional protagonists of nuclear deterrence: in this case, we can envision a trend of continuity in their strategies.
- Secondly, this essay considers to what extent nuclear deterrence can be useful in deterring non-nuclear attacks in the post-Cold War world. These attacks may be conventional, but comprise also the bigger range

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of WMD use, with chemical, radiological and biological weapons.

Throughout this examination, particular attention will be paid to the official policies adopted by the United States of America: the US is currently holding the role of hegemon superpower, and is the homeland of the classic strategic thought concerning nuclear deterrence. Moreover, the strategies officially adopted by the US governmental bodies are unclassified and accessible to the public.

## Nuclear Strategies and the Role of Nuclear Deterrence Today

Nuclear strategy is still relevant in the landscape of contemporary security issues, and today's approach to nuclear strategy is mainly focused on the concept of deterrence. That said, the prominent role of deterrence is not an exclusive one: the first strategies, as the bombings of Hiroshima and Nagasaki show, treated atomic bombs as merely more powerful versions of their conventional equivalents. However, soon the nuclear device became 'the absolute weapon' (as Brodie calls it in his 1946 book of the same title), and the strategies contemplating its use on the battlefield were replaced by deterrence. Today, the two approaches coexist. Since the end of the Cold War, the actual utilisation of tactical or theatre nuclear weapons have been reintroduced on the security agenda (Levi, 2004: 93), but nuclear deterrence has not abandoned its prominent role: in fact, strategic deterrence and regional deterrence remain the fundamental elements in the Nuclear Posture Review Report of the US, published in 2010. Moreover, the prospects of utilising low-yield tactical nuclear weapons have so far remained just a possibility, while nuclear deterrence is a well-established reality.

In the light of the current spending plans of the two Cold-War era superpowers, it would be naïve to consider the relevance of nuclear strategy concluded with the end of the Cold War. Both Russia and the US, in fact, are planning to develop in the next years more sophisticated delivery systems for their long-range strategic nuclear forces, as well as spending on keeping operational the old hardware (Kearns, 2011: 4). Despite the signing of the "New Strategic Arms Reduction Treaty" (New START), both sides are currently working to modernise their arsenals, with the US alone planning to invest over \$ 100 billion in its nuclear stockpiles (Ibid. 11): new, more effective delivery systems, as for example a new generation of strategic bombers, are currently under design, and the limitations imposed by the New START merely show that a new arms race is possible and feared by both states.

However, there are elements of discontinuity. The growing importance of actors like the PRC, together with the imbalance in the nuclear Powers' arsenals, explains why Mutual Assured Destruction (MAD) has lost its validity (Lieber and Press, 2006: 10). This system was based on the bipolar order of the Cold War, and its inapplicability today is one of the main reasons that has led to the current reinterpretation of deterrence by strategists, in both its nuclear and conventional form. In fact, the current situation of unipolarity does not permit a strategic balance: even if the eventuality of a first strike still may involve catastrophic consequences (the fear of which allegedly prevented war to break out during the Cold War), the "healthy fear of devastation" which made deterrence so easy then (according to Jervis, 1979-1980: 618) is no longer applicable to a scheme so profoundly changed.

Another key factor in shaping today's policies is the emergence of international terrorism. With the declaration of war on terror in 2001 (although the process started well before), the threats posed by non-state actors have replaced interstate conflict as the primary source of insecurity for the US. The National Security Strategy of the United States of America, published in 2002, explicitly recognised that traditional deterrence, as it was conceived during the Cold War, was useless when facing an adversary of this kind (US Department of State, 2002: 15). Anyway, rather than discharging the whole concept, the new strategy adopted by the US just proposed its adaptation to the new security scenario.

An interesting point in this context is the fact that flexible response plans are not part of the strategy actually adopted by the US, and, although they are seriously taken into consideration by the Nuclear Posture Review of 2010, the empirical approach of US chain of command is so far inconsistent with the prospects of the document. As already mentioned, the role of nuclear weapons in actual war-fighting has been limited to just two cases in history, and it is very unlikely that this tendency will change in the foreseeable future. The major obstacle to any nuclear utilisation theory is the consolidation of the nuclear taboo: the use of nuclear arms in the battlefield would probably confine any

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actor that used them to the status of a pariah state. This attitude by the international community is reinforced by the presence of international regulations which severely affect the legitimacy of a nuclear first-strike use (Tannenwald, 1999: 436). The time elapsed since the only event of actual use of nuclear weapons in war is another factor that strengthens the consolidating of this taboo. Having said that, the only use that remains for nuclear weapons is deterrence, since the consolidation of the nuclear taboo does not hinder the credibility of a state's threat of nuclear retaliation in response to a severe attack to its national security, especially if this attack threatens the state's survival.

The greatest innovation in the field of nuclear strategy is probably the concept of expanded deterrence – that is, deterrence aimed at governments that support terrorist organizations: this is one of the two possible responses which have been conceived to counter the risk of a terrorist use of WMDs, the other being preventive war (Gallucci, 2006: 52). The other nuclear powers of NATO have in a sense modelled their innovations in contemporary strategy over those of the United States: France has clearly affirmed in 2006 that states sponsors of terrorism could be attacked by a French nuclear warhead in retaliation of a terrorist attack (Yost, 2006: 702), and the British government did a similar declaration the same year, revealing a joint strategic line (Boese, 2007).

Specular to this concept, but representing an element of continuity with the Cold War-era strategies, is that of three-party extended deterrence. This is the official strategic policy adopted by many non-nuclear states under the NPT regime: they do not develop their own devices, choosing instead to rely on the arsenal of a nuclear power, sheltering under what is called a “nuclear umbrella”. This strategy is designed to prevent nuclear attacks conducted mainly by state actors, but can as well be applied to conventional attacks (Quackenbush, 2006: 563). Its application to conventional threats is crucial with regard to its validity in the contemporary world: for example, one of the states which currently most relies on this strategy – Taiwan – is faced with an adversary – the PRC – whose hostile intentions, although fully proven, are unlikely to include a nuclear attack (Dunn, 2007: 28). However, the risk of a nuclear crisis between the PRC and the US (of which Taiwan is the protégé) cannot be underestimated, even if the likelihood of this happening is mainly linked to the possibility of miscalculations on both sides (Ibid.).

Given its importance within the US strategic doctrine, it is not surprising to find out that nuclear deterrence also continues to be an important part of NATO strategy today: in fact, according to the Deterrence and Defence Posture Review issued by the Alliance in 2012, “nuclear weapons are a core component of NATO's overall capabilities for deterrence and defence” (NATO, 2012). This document clearly delineates the common position of the Atlantic allies towards the role of nuclear weapons in today's security scenario and characterises it as a conservative one, mainly focused on the threat posed by state actors and oriented to solve it through the classic scheme of deterrence.

The actual validity of the concept of nuclear deterrence in the post-Cold War world will be now valued through the examination of two broad categories into which can be split the whole range of possible threats to the survival of a country, that is deterrence of nuclear and of non-nuclear attack.

## **Nuclear Deterrence of Nuclear Attack**

The eventuality of a nuclear attack has always represented one of the most dangerous threats to the safety of a country, inasmuch the precision and lethality of nuclear devices permit an adversary to cripple in an extremely short period of time the command, control and communication (C3) structure of the attacked state, in what is called a “decapitation strike” (Walton, 2010: 215). The only effective deterrent for such an attack remains the threat of another nuclear strike, in what is called a “second-strike capability”. Anyway, today's nuclear threats are extremely different from the ones that lead to the establishment of the classic balance of terror during the Cold War. In a 2008 report, the US Secretary of Defense indicates as the current most urgent causes for concern terrorism and nuclear proliferation (US Secretary of Defense, 2008: 9). The two phenomena are closely linked, since the two most likely scenarios of terrorist acquisition of nuclear weapons – acquisition of HEU (highly enriched uranium) with or without the assistance of a government and theft or transfer of a completed weapon – require the existence of a nuclear arsenal in a sympathising or unreliable country (Gallucci, 2006: 53). As previously said, the main strategy developed to deal with the threat of a nuclear attack conducted by a non-state actor is expanded deterrence; anyhow, this measure must be implemented by steps to prevent horizontal nuclear proliferation, that is, the growth in the number of actors armed with nuclear weapons.

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In fact, the enlargement of the nuclear club has increased the likelihood of a nuclear strike taking place: since a single weapon is sufficient to conduct such an attack, it can be deduced that, while vertical proliferation (the growth in the number of warheads within a country) does not make the eventuality of such an attack more likely, horizontal proliferation does. Nuclear deterrence has traditionally been associated with the neorealist view that a world with more nuclear actors, and ideally a world composed only by nuclear actors, is the prerequisite to a lasting peace founded on the fear of nuclear war (Berkowitz, 1985: 115). However, this model does not consider the current relevance of non-state actors and so-called rogue states and their asymmetrical relationship with the traditional players.

One of the most serious challenges to nuclear deterrence in the Second Nuclear Age is, in fact, represented by the issue of its applicability to actors with a different behaviour than the Cold War-era US and USSR (Walton, 2010: 214). These new actors may not conform to a model of rational behaviour, the latter being a fundamental prerequisite for deterrence to work. Hence, the major contemporary challenge for nuclear deterrence is to find ways to adapt itself to actors that may be non-rational: this means forcing them to assume a rational behaviour. The reduction of the “nuclear threshold” referred to in the US Nuclear Posture Review can be read in the light of these facts not as an introduction of flexible response strategies in nuclear policy, but as an action consistent with the need for improved deterrence schemes. Being credibility far more influential than capability as a variable that decides the effectiveness of a nuclear deterrent (Lowther, 2009: 32), the aggressive policy of nuclear pre-emption which is discussed in the above said document and in the US National Military Strategy to combat Weapons of Mass Destruction (US Chairman of the Joint Chiefs of Staff, 2006: 18) can be seen as a way to make the prospect of nuclear attack more real in the minds of the potential enemies of the US. Since the nuclear taboo does not apply to terrorist organisations or rogue states ruled by irrational leaders, the only way to counter them is acting as if its validity was lost also for the traditional actors (in this case, the US).

The matter is different with regard to the relationships within the circle of the established nuclear powers. In this case, nuclear deterrence is based on the schemes of the Cold War, as the policies of Russia and the US show. In fact, the current expenditure for nuclear weapons, despite significant cuts, is still extremely high, as previously mentioned. China has a considerably inferior arsenal compared to that of the two former superpowers, sufficient only to assure a policy of “minimal deterrence” (Lieber and Press, 2006: 8). The concept of minimal nuclear deterrence could be the most suitable to today’s security issues regarding the relations among declared nuclear armed states, and there are sectors of the public opinion lobbying for an even greater reduction in the nuclear stockpiles of the US: among the others, this position is supported by the Federation of the American Scientists (Kristensen et al., 2009: 21). Anyway, at the moment the official strategy of the US is oriented differently, and the same can be said for Russia. While at the beginning of the First Nuclear Age the US relied on nuclear weapons to counterbalance Soviet conventional forces, today the situation has reversed, and Russia keeps an apparently anachronistic large storage of nuclear weapons to cope with the drastic reductions which took place after the Cold War in its non-nuclear offensive capabilities. NATO has stated in its Deterrence and Defence Posture Review that the current amount of its strategic nuclear weapons is dependent on the reciprocal level of these weapons on the Russian soil, so it is very unlikely that there will be drastic reductions, similar to those that occurred at the end of the Cold War, by the US and its allies in the foreseeable future.

## **Nuclear Deterrence of Non-nuclear Attack**

The role of nuclear deterrence in averting the threat of a conventional attack is currently proving to be alive especially with regard to non-traditional nuclear actors, that is, non-declared nuclear powers, states outside the NPT and states that have violated the terms of the NPT. Countries in this category have not been attacked militarily in recent times, and there is some evidence that their nuclear capabilities could have played a major role in defending them. It is the case of North Korea, a part of Bush’s “axis of evil”: her policy towards the development of WMD programs was far more aggressive than that of Iraq (on her current and past programs: NTI, 2012), but she has not suffered any attack by the US nor by any of their local allies. It can be argued that it was her very progress in the development of WMDs, and especially of nuclear weapons, that permitted her to avoid an external aggression. Given the sensitivity of the American public opinion toward the number of casualties during recent conflicts, it is easy to understand that a retaliatory strike conducted by an actor facing foreign invasion is considered as an unacceptable condition by the US.

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On the other side, the threat of a nuclear attack should be questioned the survival of the state apparatus must be considered seriously: in fact, the price to pay to break the nuclear taboo is high, but certainly lower than that of regime capitulation: so, these actors gain in credibility what they lack in capability.

Nuclear deterrence has a role also in averting conventional attacks in a regional context. The conflict between India and Pakistan exemplifies this point: in fact, despite the existence of sources of tension between the two countries, these actors have not engaged in major open hostilities since their development of a nuclear arsenal. The fear of nuclear escalation may be the explanation for the restraint of these governments in an area like Kashmir, where since the acquisition of nuclear weapons both sides have only supported a low-intensity conflict (Joeck, 1997: 36).

In any case, nuclear deterrence of non-nuclear attack seems inconsistent with regard to the traditional nuclear actors. In fact, these have continued to experience major conventional conflicts (it is, for example, the case of Russia with Georgia). It is possible that the threat of a nuclear retaliation lacks credibility when only the aggressor is armed with nuclear weapons – as the behaviour of many nuclear powers in time of war may lead to think – but this would be hardly true in the case of a WMD attack. In this respect, the biggest innovations are those developed by the US within its strategy to combat global terrorism. The same policy of expanded deterrence which has been discussed above is applied also to non-nuclear threats, in particular with regard to the scenario of a terrorist use of WMDs (Huntley, 2006: 49-50). In the National Military Strategy to Combat Weapons of Mass Destruction, Washington has confirmed its willingness to pursue a policy aimed at

“dissuading, deterring and defeating those who seek to harm the US directly [...] especially extremist enemies with weapons of mass destruction” (US Chairman of the Joint Chiefs of Staff, 2006: 9).

Nuclear deterrence is the most likely way to counter terrorism to be used in the future, since pre-emptive war lacks popular support and has been recognised to be an excessively expensive strategy. As Trager and Zagorcheva argue, nuclear deterrence may prove to be an effective method to counter the threat posed by non-state actors, as long as terrorists' political aims will be influenceable by states (2005/2006: 88).

## Conclusion

Nuclear deterrence is still relevant in dealing with contemporary security issues. Although different strategies concerning the use of nuclear weapons have been proposed in recent times, their application would be extremely controversial, and for this reason is very unlikely. Nuclear deterrence is still an important part of the official strategy of the US to fight traditional threats, and has been adapted to meet also today's new security concerns. The other nuclear armed states, the traditional as well as the non-traditional ones, have shown their willingness to maintain the nuclear taboo, pursuing in most cases a minimal deterrence policy.

The threat of a nuclear strike can deter both nuclear and non-nuclear attacks, the contemporary security scenario requires an evolution of deterrence rather than a discharge of the concept as a whole. In fact, nuclear weapons are still among the most powerful and intimidating weapons with which states can arm themselves, and the stability of a system based on deterrence still remains attractive, although since the end of the Cold War maintaining this system has become far more complicated.

However, nuclear deterrence alone cannot be the answer to every security issue in the contemporary world, and its application needs to be strengthened by other strategies. The main role it held during the First Nuclear Age is lost, but its relevance, although resized, is not.

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