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## Geopolitics of Nuclear Hypertrophy. America, the Bomb and the Temptation of Nuclear Primacy

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### ABSTRACT

10 The United States' grand strategy has consistently been marked by a distinct tendency toward nuclear hypertrophy. Especially the inherent difficulties in extending deterrence to its allies and friends, compounded by the geopolitical characteristics of the US as an unassailable 'insular' fortress off Eurasia have generated, rather paradoxically, a strong incentive for Washington to pursue a wide margin of nuclear superiority, if not nuclear primacy. This has implied, in turn, the deployment of redundant arsenals, robust counterforce capabilities and even a ballistic missile defence. Significantly, not even the Obama administration, though solemnly committed to nuclear disarmament, abstained from embracing a very ambitious modernisation program of American nuclear forces.

### KEYWORDS

Geopolitics; US nuclear strategy; nuclear proliferation; Obama administration; deterrence

20 At a time of growing concern regarding US President Donald Trump's declared intention to expand United States' nuclear capabilities, widely interpreted as an absolute break with the past, it is worth remembering that American nuclear forces have exhibited – during the Cold War and thereafter – a distinct bent toward nuclear hypertrophy.<sup>1</sup> That is to say a tendency to grow well beyond the levels needed to guarantee a second-strike capability and an assured-destruction parity with the US' adversaries. Rather than being the mere expression of the personal inclination of the American presidents, this nuclear hypertrophy has largely (though not exclusively) been rooted in the realities of *geopolitics* and *geostrategy*. In fact, persistent geopolitical and geostrategic constraints have not only led the US to rely on nuclear weapons during the Cold War and retain them thereafter. They have also made it difficult for the US to forgo pursuing a wide margin of nuclear superiority, in the shape of the deployment of robust counterforce capabilities and a ballistic missile defence. This pressure for superiority (if not primacy), far from disappearing at the end of the Cold War, has continued instead to condition America's nuclear policy profoundly, as demonstrated by the George W. Bush administration's "New Triad". In this respect, however, it is the administration of President Barack Obama that is especially significant; while solemnly pledging to make nuclear disarmament one of the priorities of his foreign policy agenda,

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<sup>1</sup>Kymball, "Trump's More Dangerous Nuclear Posture".

he embarked upon a very ambitious program of nuclear modernisation.<sup>2</sup> Without wanting to accuse President Obama of insincerity, this impressive modernisation speaks volumes about the strength of the geopolitical factors that have greatly affected in the past (and still today condition) the role of nuclear weapons in the US' grand strategy.

5 This article starts with a discussion of the geopolitical 'determinants' of the US nuclear strategy during and after the Cold War. It then highlights the pressure for nuclear superiority stemming from those geopolitical constraints. Against this backdrop, the article takes into consideration the nuclear policy and strategy of the Obama administration as a particularly telling case of *vertical* US nuclear proliferation. While giving him credit for some remarkable achievements in the field of disarmament, the article demonstrates that Obama hardly lived up to the expectations raised by his Prague speech, in which he envisioned "a world without nuclear weapons". As will be argued below, Obama's nuclear modernisation recounts a very different story – one in which geopolitics contributes to generating an aspiration to attain a wide margin of nuclear superiority (and an attendant tendency toward nuclear hypertrophy) which *all* American presidents find it very difficult to resist.

### America and the Bomb. The geopolitics of an indissoluble union

Whether generated by a perception of military *weakness* (as was the case during the Cold War) or incentivised by an opposite awareness of overwhelming *force* (as in the post-Cold War scenario), the US bond with nuclear weapons has proven to be indissoluble: it forms a robust thread that has run through its engagement overseas from the onset of the Cold War to the 'unipolar moment'.

Throughout the Cold War, in fact, American political leaders never really thought they could do without the contribution of atomic weapons in pursuing their strategy of containment of the Soviet Union (Union of Soviet Socialist Republics, USSR) in Eurasia. Rather, nuclear weapons soon became – and always remained – the very cornerstone of containment. The Soviet Union had emerged from the Second World War with an impressive military might – a formidable army capable of crushing the German *Wehrmacht*. By taking advantage, after the war, of such geostrategic factors as the forward deployment of its air and ground forces in Central Europe, and Western Europe's lack of strategic depth, Moscow would have been able to launch, according to the prevailing view in Washington, a *Blitzkrieg* campaign with "excellent prospects of success".<sup>3</sup> An effective defence of Western Europe by resorting only to conventional means (namely a huge forward-deployed army, symmetrical to the Soviets'), while feasible in theory, would nonetheless have had a huge financial and fiscal burden on the US economy. More in general, it would have meant imposing an unprecedented social regimentation on the American people which they would, in any case, not have tolerated for long.<sup>4</sup> Under these circumstances, it was not long before nuclear deterrence came to be seen as a fundamental military 'equalizer'; that is, a complete (under the banner of Eisenhower's *New Look* and *Massive Retaliation* strategy) or partial (as was

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<sup>2</sup>The White House, "Remarks by President Barack Obama".

<sup>3</sup>Gray, "Geopolitics of the Nuclear Era", 39.

<sup>4</sup>In President Eisenhower's words, a high level of defence preparedness would have made it "necessary to resort to compulsory controls [and] out-and-out regimentation", quoted in Friedberg, "Why Didn't the United States?", 124.

the case later on, with the shift to *Flexible response*) substitute for conventional defence of Western Europe and the other valuable sections of the Eurasian rimland.<sup>5</sup>

More precisely, as early as the outset of the Cold War, nuclear deterrence seemed the most promising way out of the peculiar security dilemma with which American internationalism was confronted. On the one hand, throughout the Cold War, for American internationalists the US simply could not afford the luxury of abandoning the whole of Eurasia to Soviet hegemony. The resulting concentration of power in Moscow's hands, along with the inevitable closure of commerce with Eurasia (abdication of the *Open Door* policy) was deemed to pose a deadly threat not so much to America's survival as an independent and sovereign country, as to its free *domestic* institutions and *way of life*. As political scientist Christopher Layne aptly summarised,

Washington did not fear that a continental hegemon would be able to threaten the United States by mobilizing the resources of the European continent. Rather, just as had been the case in 1939-40 (and, arguably, in 1917-18), US policymakers were concerned that America's core values at home – the American way of life – would be imperiled if an *ideologically* hostile great power dominated the Continent and closed it to the United States. Not only would the United States be forced to regiment its own economy to cope with an autarkic Europe but it would also be forced, or so it was believed, to maintain a vastly increased military establishment during peacetime.<sup>6</sup>

All this, in turn, would not only have ruinously burdened the US economy and profoundly altered its social structure, but also distorted its political culture and jeopardised the psychological balance of the nation.

On the other hand, ever since it took the helm of US foreign policy, US internationalism never really ceased to believe that the required engagement in world politics constituted a very narrow and treacherous path. If poorly conducted or recklessly executed, US security policy would likely morph into its opposite, putting at risk the very 'treasure' that the advocates of internationalism wished to protect. In sum, the security dilemma for the US was that the unavoidable task of eliminating one source of danger to its institutional fabric and identity (that is, isolation from the Eurasian continent dominated by a hostile hegemonic power or combination of powers) involved the risk of generating – to the extent to which it placed too heavy a burden upon US shoulders – another peril for the American core values that it was intended to protect. Hence the conclusion drawn by most internationalists was that it would depend on the methods and means devised to achieve its Open Door and Eurasian equilibrium objectives that would determine whether the US' overseas engagement could deliver on the internationalist promise to save the American way of life or turn out to be its grave. Only some very carefully calibrated – and particularly parsimonious – means and strategies of intervention in the Eurasia rimland were expected to be tolerable for American society; nuclear deterrence was deemed to be among them and it proved to be the most crucial of all.<sup>7</sup>

It was President Dwight D. Eisenhower who expressly spoke of the "essential dilemma" that the *containment* policy posed to American leaders:<sup>8</sup> "The great danger was that in defending our way of life we would find ourselves resorting to methods that endangered this

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<sup>5</sup>Walters, *The Nuclear Trap*.

<sup>6</sup>Layne, *The Peace of Illusions*, 77.

<sup>7</sup>Friedberg, *In Shadow of Garrison State*.

<sup>8</sup>Quoted in Ninkovich, *Modernity and Power*, 206.

way of life.” During the Korean War, Eisenhower’s decision-making was heavily affected by his concern that the continuation and escalation of the ongoing conflict on the Peninsula would lead the US to “general mobilization” and a level of social regimentation that American society could not be expected to bear, without “losing important parts of [its] free system”.<sup>9</sup> Significantly, Eisenhower emerged from that war determined to make the most of the US atomic arsenal, so as to spare the US further burdensome interventions across the oceans by substituting, as much as possible, (nuclear) deterrence for (conventional) defence (*Massive retaliation*). Though this over-reliance on nuclear weapons soon proved unsustainable in light of the rise and increase in Soviet nuclear forces, subsequent US leaders continued to see nuclear deterrence as the key to squaring strategic effectiveness of containment with financial and political sustainability at home. In their eyes, atomic weapons were the means able to check Soviet expansionism while relieving the US of the burdensome task of responding symmetrically to Moscow’s military build-up and deployments.

True, after the Soviet Union attained the capability to hit the US homeland with strategic nuclear forces, US administrations modified the deterrence strategy by reducing the role of the Bomb to some extent in the containment scheme. However, they never ceased to regard full ‘conversion’ of the latter to a strategy of pure conventional defence as impractical and detrimental to the goal of protecting the Eurasian rimland at a sustainable cost.<sup>10</sup> Undeniably, since then American leaders have no longer felt fully at ease (if ever they had been) with relying heavily on nuclear weapons; from then onwards, as will be seen below, the *credibility* of American deterrence remained a thorn in the side of containment, heavily influencing the evolution of US nuclear strategy until the end of the Cold War. Still, in the eyes of American leaders nuclear deterrence remained the indispensable equalizer of the (real or perceived) conventional military superiority and geostrategic advantages on which Moscow could count in the event of war in Europe or Asia.

It took the end of the Cold War and the emergence of the US as the sole superpower to free it from its reliance on nuclear deterrence as a means to redress and maintain the Eurasian military balance. However, not even this geopolitical earthquake made US nuclear forces superfluous, if only because it was now the turn of America’s opponents to be tempted by proliferation as a way to offset US military supremacy. What was heralded as the dawn of the post-Cold War era was, in fact, simply a reversal of the roles of nuclear deterrence in the strategies of the sole superpower and its prospective adversaries. The US resolved to stay engaged in Eurasian politics in spite of the demise of the Soviet threat, in order to bolster its Open Door economic order (soon to be called ‘globalisation’) and prevent the emergence of a Eurasian ‘peer competitor’, that is, to delay the rise of a threat to the Eurasian equilibrium of the same magnitude as the Soviet Union as much as possible.

In this context, the US might easily have reconciled itself with (and even preferred) “a world without nuclear weapons”, one in which it would have been possible for Washington to take full advantage of its overwhelming conventional force and technological edge. That was exactly the reason, however, for some of the lesser powers determined to promote their agenda against US interests or inclined to contain the US’ global preponderance to be tempted by nuclear proliferation. Which meant, in turn, that the US retained its nuclear forces and adjusted them for future contingencies, so as to preserve its global room

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<sup>9</sup>Gaddis, *Strategies of Containment*, 131.

<sup>10</sup>Friedberg, “Why Didn’t the United States?”, 116-20.

for manoeuvre against the nuclear anti-access capabilities and strategies of its potential opponents.<sup>11</sup>

In fact, without a threat to the Eurasian balance of power of the magnitude and scope of the Soviet Union, Washington no longer needed the *absolute* weapon to deal with the *relative* problems and threats arising in the post-Cold War world – neither to remove minor hurdles to the stability of the *Pax Americana* such as Saddam Hussein's territorial revisionism, nor to dispense with minor nuisances at the periphery of the Atlantic community, such as the fall-out of Serb nationalism in the Balkans. Rather, the very impressive show of force offered by the US military in the Persian Gulf (1991) and the Balkans (1999) created a strong incentive for those expecting to advance their national interests in opposition to the US to look to nuclear deterrence as a valuable equalizer of US military supremacy. Unsurprisingly, as early as 1993, President Bill Clinton's Counterproliferation Initiative signalled the acute awareness in Washington that, in the unprecedented unipolar system, the discontented powers might resort to weapons of mass destruction in their efforts to dissuade American intervention in their respective geopolitical areas, probably by adopting a deterrent strategy not that different from NATO's Cold War flexible response.<sup>12</sup>

Since then, virtually all the most important US national strategy documents have expressed American apprehension about the possibility of a regional power dissatisfied with the *status quo* threatening – in the event of a regional crisis or war – limited use of nuclear weapons against US troops abroad, forward bases or regional allies (still needed by the US to project its military power) in order to raise the potential cost and risk of US military intervention.<sup>13</sup> In such a scenario, in which a regional rival also possesses *strategic* nuclear forces and a second-strike capability, any US attempt to deter its adversaries from using their nuclear weapons by threatening to escalate the nuclear exchange to the strategic level – namely to respond to a nuclear attack circumscribed to the regional theatre of operations with a blow against the adversary's territory – might prove an extremely arduous step. Now that regional crises were no longer part of the US-Soviet Union struggle, nuclear-capable adversaries of the sole superpower might be inclined to believe that the risk of escalation was likely to counsel prudence in American leaders, driving them in the end to abstain from sending troops to fight abroad for the sake of other countries' independence or for some regional balance of power. Would the US really have intervened in 1991 to dislodge Iraqi divisions from Kuwait if Saddam Hussein had at that time possessed even a small nuclear arsenal? In other words, the American leaders' true concern was that, once there was a risk of nuclear escalation, the US might be deterred from intervening abroad while its opponents might be encouraged to defy America's will and interests in their 'near abroad'. Perhaps more importantly, its allies might be inclined to throw into question the firmness of the US commitment to protect them, and decide to bandwagon rather than balance the revisionist regional powers for lack of alternatives. Ironically, America's newly attained

<sup>11</sup>Bracken, *Fire in the East*; also Wilkening and Watman, *Nuclear Deterrence in a Regional Context*; and Dodge, "Circumventing Sea Power".

<sup>12</sup>"During the Cold War, our principal adversary had conventional forces in Europe that were numerically superior. For us, nuclear weapons were the equalizer. The threat to use them was present and was used to compensate for our smaller numbers of conventional forces. Today, nuclear weapons can still be the equalizer against superior conventional forces. But today it is the United States that has unmatched conventional military power, and it is our potential adversaries who may attain nuclear weapons. *We're the ones who could wind up being the equalizee*". Aspin, "Remarks at the National Academy of Sciences" (italics added).

<sup>13</sup>For example, The White House, *National Security Strategy for a New Century*, 19. Also Cohen, "Report of the Quadrennial Defense Review". Section II.

overwhelming conventional force not only constituted an incentive for its adversaries to proliferate, but was also expected to undermine the credibility of US promises and threats in the context of deterrence: why should one expect American leaders and people to risk so much for such 'small' stakes?

5 In light of these worries, it is no surprise that the US soon indicated nuclear proliferation as the most insidious threat to its global leadership – a rather paradoxical upshot, in any case, of America's unrivalled strength.<sup>14</sup> Significantly, it was not long before non-proliferation was declared one of the priorities of the US' grand strategy. Its importance was demonstrated by US diplomatic efforts to extend and enhance the Non Proliferation Treaty (NPT) as well  
10 as by the tough stance taken by Washington on the issue of the North Korean and Iranian nuclear programs.<sup>15</sup> However, in addition to contrasting non-proliferation, whether within the framework of NPT or outside of it (as the George W. Bush administration preferred), the US deemed that it should prepare itself for the possible failure of its non-proliferation efforts.<sup>16</sup> What was intended was the rise of further nuclear-capable states as well as a  
15 presumable increase in the role of nuclear weapons in the strategies of such established nuclear states as Russia and China. To that end, the mere retention of US nuclear forces was not enough; their upgrade and enhancement also seemed to be required.<sup>17</sup>

### **Geopolitics of nuclear superiority: the challenge of extended deterrence**

20 After Moscow achieved a strategic nuclear capacity, the US deterrence strategy found itself faced with a credibility problem which, probably more than any other single factor, profoundly affected the development of the US nuclear strategy and, accordingly, the structure and composition of the American arsenal. More precisely, the persistent misgivings regarding the credibility of American deterrence and the search for convenient remedies was the driving force behind the growth of the US nuclear arsenal well beyond the requirements  
25 of the declared strategy of mutual assured destruction (MAD). In effect, the need to shore up the credibility of US nuclear threats and promises in the eyes of its foes and (no less important, nor less difficult) friends has been the major motive behind the US' lasting uneasiness with nuclear parity and recurrent drive toward nuclear superiority, in spite of the declared adherence to the principle of MAD. After the end of Cold War, this credibility  
30 problem did not disappear and indeed in some regards it has even grown worse.<sup>18</sup>

Geopolitics, rather than pathological paranoia, helps explain such US worries. The problem concerns the difficulties inherent in extending deterrence to benefit allies and friends, on the one hand, and the characteristics of the geopolitical setting in which the US-USSR confrontation played out, on the other. The persuasiveness of a nuclear threat  
35 aimed at deterring an invasion or a major military attack on one's territory can be taken

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<sup>14</sup>See for example, the 1997 Department of Defense *Quadrennial Defense Review Report*: "Indeed, US dominance in the conventional military arena may encourage adversaries... to seek advantage over the United States by using unconventional approaches to circumvent or undermine our strengths while exploiting our vulnerabilities". In this respect, weapons of mass would serve "to delay or deny access to critical facilities; disrupt our command, control, communication, and intelligence networks; deter allies ... from supporting US intervention; or inflict higher than expected US casualties in an attempt to weaken our national resolve".

<sup>15</sup>Litwak, *Rogue States and US Foreign Policy*, 123-237.

<sup>16</sup>Payne, "The Nuclear Posture Review".

<sup>17</sup>*Ibidem*; and also Payne, "Bush Administration Strategic Policy".

<sup>18</sup>Art, "The United States".

for granted, even when an enemy also possesses nuclear weapons.<sup>19</sup> For deterrence to be credible (and reliable) in this case, all that is needed is a second-strike capability; namely the ability to survive a pre-emptive (first) strike with nuclear forces sufficiently strong to carry out a devastating reprisal (second strike).

5 Arguably, the same degree of clarity does not apply when extended deterrence is involved. In fact, it is reasonable to assume that the credibility – and reliability – of a threat intended to discourage an attack on an ally by another nuclear-capable state depends instead on whether the link between one's national security and the independence of one's allies appears indisputably robust and direct. Whether one conceives of the international arena  
10 as a Hobbesian jungle or a Grotian club, it seems sensible to posit that states belonging to it are very unlikely to commit suicide for the sake of their counterparts, unless the survival of the former looks unquestionably conditioned on the integrity of the latter. This tends not to be the case, ironically, when it comes to nuclear-armed states, able to count on their own nuclear arsenal (and the plausibility of the promise to make use of it on their own behalf)  
15 rather than relying on the help of other states.<sup>20</sup> This is all the more true in the case of the United States: as a continental power, detached from the Eurasian "grand chessboard"<sup>21</sup> on either side of its vast territory by an ocean-wide 'moat', the US took part in the Cold War as an unassailable, 'insular' fortress, never directly exposed to the realistic danger of Soviet invasion and military expansion. As already noted, what the American internationalists felt  
20 committed to preserving through overseas engagement was US national security *lato sensu*; that is, the survival of the American way of life and institutions, which in turn seemed to necessitate the political independence of Europe and other conspicuous portions of the Eurasian rimland.<sup>22</sup>

25 That the only truly reliable guarantee of credibility of US nuclear threats in such a situation might be the invulnerability of the American homeland to Soviet nuclear attacks was a suspicion that American leaders found it hard to dismiss. Nor could they comfortably overcome the impression, once the nuclear invulnerability of the US homeland was definitively gone by virtue of the expansion of Soviet strategic forces, that the only  
30 dependable way to make extended deterrence credible was through the ability to cope with the *failure* of deterrence. That is to say that the solidity of deterrence rested upon a credible claim that the US would be able to fight and win a war in which nuclear weapons, and even strategic ones, would be used. In lieu of threatening massive retaliation and assured destruction of the adversary (likely to become a hollow promise of mutual assured  
35 destruction and self-inflicted death), the key for effective deterrence appeared to reside in the capacity to use nuclear weapons in a gradual fashion to deny the Soviet Union its war aims (invasion of Western Europe) while suffering a degree of homeland devastation compatible with what one might still call victory.

40 Significantly, the US and NATO's shift to flexible response was meant to capitalise on low-yield tactical nuclear weapons. Used against military targets or for the purpose of nuclear warning within the theatre of operations, they were supposed to prevent NATO's first use of nuclear weapons from automatically triggering a strategic exchange between

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<sup>19</sup>Gray, "Geopolitics and Deterrence".

<sup>20</sup>Or their mere existence as geopolitical "buffers", territorial "shields" or forward "trenches" (Spykman, "Frontiers, Security, and International Organization").

<sup>21</sup>Brzezinski, *The Grand Chessboard*.

<sup>22</sup>Leffler, "The American Conception of National Security".

the superpowers. Regrettably, that was hardly enough to enhance the credibility of the US promise to use its strategic forces – always the cornerstone of containment – in the event that tactical ones proved insufficient to halt a Soviet campaign. Pressure soon rose in Washington to work out a scheme for gradual use of the strategic arsenals as well, and grew stronger in the last two decades of the Cold War.

Once the expansion of the Soviet arsenal precluded the possibility of carrying out a disarming strike against Moscow's strategic forces, the US oscillated between two different inclinations. On the one hand, a willingness on the part of the US to resign itself to MAD parity, being content with a strategic force large enough to be able to strike Soviet cities in case of failure of the containment strategy. What was needed for this deterrence framework was an arsenal comprising mostly 'countervalue' capabilities in sufficient numbers to wipe out Soviet cities even after absorbing a Soviet nuclear attack. This approach presented some significant advantages, such as defusing a nuclear arms race with Moscow and bolstering nuclear stability. It was in light of this, which became the declared US strategy, that Washington and Moscow developed their arms control talks and agreements.

Still, this orientation failed to be regarded as fully satisfactory, largely because of the expected detrimental impact on US credibility of the persistent exposure of American cities to Soviet nuclear forces. To remedy its weaknesses, US nuclear forces were assigned the additional missions of *damage limitation* and *escalation dominance*. This meant possession of a robust offensive counterforce 'leg', needed to incinerate the enemy's silo-based ICBMs missiles, so as to limit the destructiveness of a counterblow (damage limitation) from Moscow. Along with it, abundant countervalue forces were needed to hold hostage the Soviet cities still untouched after the first strike ('withhold options'), in order to discourage Soviet leaders from executing strategic reprisal from a position, at that point, of (relative) nuclear weakness (escalation dominance).

In effect, the increasingly visible US drift toward counterforce nuclear strategies from the middle of the 1970s onwards (in spite of the unchanged official policy of MAD) had to do mainly with efforts to bolster extended deterrence on both sides of the strategic and political nuclear equation, that is, intimidation of the enemy and reassurance of the allies. As Earl C. Ravenal put it in 1982, this growing emphasis on counterforce "is neither perverse nor accidental. [...] To grasp the rationale of counterforce, it is necessary to understand the logic of extended deterrence. For ultimately it is its adherence to alliance commitments that skews the United States' strategy toward counterforce weapons."<sup>23</sup>

As Ravenal aptly noted, extended deterrence

requires the practical invulnerability of American society itself to Soviet attack [...] the ability to limit damage to 'tolerable' levels of casualties and destruction. This is so an American president can persuade others that he would risk an attack on the US homeland [...] in the act of spreading America's protective mantle over Western Europe and other parts of the world.<sup>24</sup>

### After the end of the Cold War: smaller interests, bigger arsenals

This tendency persisted even after the end of the Cold War, and not merely because of the somewhat inevitable bureaucratic inertia inside the Pentagon and the vested interests

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<sup>23</sup>Ravenal, "Counterforce and Alliance", 26.

<sup>24</sup>*Ibidem*.

of the military-industrial complex in enlarging arsenals. Instead, as previously noted, the disappearance of the only plausible threat to the whole Eurasian geopolitical equilibrium had the potential to undermine further the credibility of US resolve to get involved in crises and military conflicts overseas, which now tended to take on merely regional significance. In many ways, the New Triad envisaged in the George Bush administration's *Nuclear Posture Review (NPR, 2001)*<sup>25</sup> confirmed the US' readiness to pursue "practical invulnerability", to put it in Ravenal's words. It added momentum to it, as testified by Bush's resolve to field an anti-ballistic missile defence,<sup>26</sup> expected to work in synergy with the enhanced (nuclear and conventional) counterforce capabilities:<sup>27</sup> the portion of the opponent's nuclear force that the latter might fail to obliterate with a disarming strike would be intercepted by the former. This is the point at which practical invulnerability would approximate to absolute invulnerability.

As is well known, an effective anti-ballistic missile defence seemed out of reach throughout the Cold War (apart from Reagan's *Strategic Defense Initiative*, soon scaled down, however, to levels compatible with the 1972 ABM Treaty) due to persistent technical hurdles and the magnitude of the Soviet atomic arsenal. After the end of the Cold War, technical advances along with the small size of the arsenals likely to be fielded by the proliferators significantly increased the prospects of success of anti-ballistic missiles and therefore their potential contribution to deterrence, to the point of justifying the huge expenditures involved in their development. It is worth noting that five years after the Bush administration's *NPR*, a study by Karl A. Lieber and Daryl G. Press concluded that the United States was already on the verge of attaining nothing less than nuclear primacy. The US allegedly had the capability to disarm not only the small arsenals of such possible proliferators as North Korea and Iran but also "the long-range nuclear arsenals of Russia and China with a nuclear first strike"<sup>28</sup>

In 2006, according to Lieber and Press, the United States had continued to modernise its nuclear weapons, despite the decline in Moscow's arsenal: "US strategic forces have shrunk in numbers since the end of the Cold War, but they have become more lethal"<sup>29</sup>. The (*intentional*, for the authors) upshot of this modernisation was the "The End of MAD", as the title of their article put it.<sup>30</sup> While Lieber and Press may have overrated the level of superiority achieved by the US, the trend that they indicated was real and impressive.<sup>31</sup> It is at this juncture that the Obama administration stepped in, with its strong aversion to nuclear weapons and the vow to work hard to realise the vision of a "world without nuclear weapons".

### **The litmus test. Obama's 'betrayal' of the 'spirit of Prague'**

In Prague on 5 April 2009 President Obama did not make the unrealistic promise that the US would get rid of its huge nuclear arsenals any time soon. More soberly, what Obama meant to do was convey the message that his administration, while determined to counter the proliferation of nuclear weapons, also intended to take seriously Article VI of the

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<sup>25</sup>The three 'legs' that make up the New Triad are the (nuclear and conventional) offensive forces, missile defence and the nuclear production complex.

<sup>26</sup>US Department of Defense, *Nuclear Posture Review Report*.

<sup>27</sup>McDonough, "Nuclear Superiority".

<sup>28</sup>Lieber and Press, "The End of MAD", 7-8.

<sup>29</sup>*ibid.*, 13.

<sup>30</sup>See also Lieber and Press, "The Rise of U.S. Nuclear Primacy".

<sup>31</sup>Buchan *et al.*, *Future Roles of U.S. Nuclear Forces*.

Non-Proliferation Treaty, which commits the five Nuclear-Weapon States (NWS) to work for “the cessation of the nuclear arms race and nuclear disarmament”. It is fair to say that the Prague speech constituted, first and foremost, an attempt by the newly elected President to renew the grand bargain upon which the NPT had originally been built and then extended (1995): the Non-Nuclear Weapon States’ (NNWS) pledge to forgo developing nuclear arsenals while retaining the right to use nuclear power for civilian purposes; in return, the five nuclear *beati possidentes*<sup>32</sup> commitment to provide assistance for the civilian nuclear programs of the NNWS, but also their pledge to reduce their nuclear arsenals and work for the final objective of general disarmament. Over time, though, while the NWS put much emphasis on fulfilment of the non-proliferation obligation, and sought to tighten the TNP even further in this respect, they turned out to do little to deliver on the parallel pledge to work for disarmament – a major source of frustration for the NNWS and a hurdle to the reform of the NPT urged by Washington. In effect, Obama aimed to rebalance the US nuclear agenda or, more precisely, to reinvigorate America’s non-proliferation efforts, by taking steps to demonstrate the seriousness of the US commitment to disarmament as well, so as to win the support of nuclear *have nots* for the US campaign for enhancement of the non-proliferation regime.<sup>33</sup>

Admittedly, Obama’s Prague speech should not be dismissed as hollow rhetoric followed by inaction, for there were notable achievements during Obama’s first term, such as the adoption by the Security Council of Resolution 1887 in 2009, or the signing of the *New Strategic Arms Reduction Treaty* with Russia in April 2010 (which entered into force on 5 February 2011), or the positive outcome of the 2010 NPT *Review Conference*.

On 29 September 2009, Obama chaired the United Nations Security Council summit on both nuclear proliferation *and* nuclear disarmament. As a solemn acknowledgement of the necessary link between the former and the latter, and of the impossibility of making headway on tightening the non-proliferation regime while neglecting disarmament, the Council adopted the US-sponsored Resolution 1887 calling for a world without nuclear weapons. The following year, by signing a new arms control treaty with Russia (which replaced the 1991 START I Treaty and superseded the far less ambitious 2002 Strategic Offensive Reductions Treaty signed by the previous administration), Obama agreed to reduce accountable deployed nuclear warheads to 1550, a decrease of approximately 30 percent from the 2200 limit set by SORT and 74 percent from the START limit of 6000.<sup>34</sup> The New START, the first verifiable arms control treaty since 1994, also limited each nuclear superpower to no more than 800 deployed and non-deployed delivery vehicles and, within that total, no more than 700 deployed ICBMs, SLBMs and bombers.

A few weeks after the signing of the New START, and largely thanks to the positive momentum created by Obama’s ‘Prague agenda’, the NPT *Review Conference* unanimously adopted a final document that was widely praised as a substantial “recommitment of nations to the basic bargain of the NPT”.<sup>35</sup> Significantly, for the first time in the history of the NPT, the final document included specific action plans across the three pillars upon which the treaty is based: non-proliferation, peaceful uses of nuclear energy, and disarmament. What

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<sup>32</sup>The US, USSR/Russia, UK, France and China.

<sup>33</sup>See Obama’s explicit reaffirmation of the grand bargain in Prague (The White House, “Remarks by President Barack Obama”), 2.

<sup>34</sup>Reif, “New START at a Glance”.

<sup>35</sup>Choubey, “Understanding the 2010 NPT Review Conference”, 3.

is more, when the Conference started, the Obama administration could already claim credit for the newly issued *Nuclear Posture Review*, which embraced the goal of reducing the role of the nuclear arsenal in America's military strategy in accordance with the disarmament commitment reiterated in the final document of the Conference.<sup>36</sup>

5 That was the high-water mark of Obama's disarmament policy. Shortly afterwards, it lost much of its momentum. As Theodore A. Postol put it in his piece on US nuclear policy in 2014, at some point the Nobel Peace Prize laureate Obama "learned to stop worrying and love the bomb".<sup>37</sup> Five years after the Prague speech, Postol pointed to the ongoing US nuclear modernisation programs – a stark contradiction to the pledge to work hard for  
10 disarmament. In his comment, Postol focused in particular on the upgrade of the fuses of ballistic-missile warheads, which officially aimed to improve the "reliability" of the US nuclear arsenal but in effect determined a remarkable increase in the killing power of the warheads, and was accompanied by "painstaking efforts" aimed at "improving their delivery accuracy".<sup>38</sup> To call it by its name, it was a case of vertical nuclear proliferation. Lower  
15 numbers, but better performance.

Even when it comes to numbers, due to the new counting rule established by the New START,<sup>39</sup> the number of *actual* warheads deployed can be considerably higher than the legal limit indicated in the treaty. Moreover, it is remarkable that when Obama left office the reduction in the total US stockpile of nuclear warheads was smaller than any other  
20 post-Cold War presidency.<sup>40</sup>

[C]ontrary to his 2009 vision of a world free of nuclear weapons, Obama... initiated the largest re-investment in the modernization of US nuclear forces since President Ronald Reagan, a program some independent analysts project will cost as much as \$1 trillion over 30 years to upgrade and maintain these systems.<sup>41</sup>

25 By no means restricted to the upgrade of warhead fuses which worried Postol so much, these copious investments went into all the major components of the US nuclear arsenals, without neglecting the nuclear production complex, namely the third leg of the new nuclear triad.<sup>42</sup> Finally, looking at nuclear strategy, after long weighing the pros and cons, Obama refrained from adopting a no-first use policy. When he left office, Obama reiterated that,  
30 despite possessing a colossal conventional armada, the US could not yet afford to take such a seemingly small step as relinquishing the option of first use of nuclear weapons in war.

Hardly surprisingly, the failure of the 2015 NPT Review Conference to adopt a final document attested to the erosion of whatever confidence Obama may have succeeded in  
35 building between NWS and NNWS during his first term. Ironically, the frustration generated by his disappointing record on disarmament was one of the main motives for the adoption,

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<sup>36</sup>US Department of Defense, *Nuclear Posture Review Report 2010*.

<sup>37</sup>Postol, "How the Obama Administration".

<sup>38</sup>*Ibid.*, 5

<sup>39</sup>Each bomber counts only as one nuclear bomb even if it can carry many more than one. See Warren, "The Promises of Prague", p. 449.

<sup>40</sup>Doyle, "Nuclear Weapons", 3.

<sup>41</sup>*Ibidem*.

<sup>42</sup>Just to mention some of the most conspicuous programs in place when Obama left office, such modernisation includes development of a next-generation ICBM (known as the *Ground-Based Strategic Deterrence*, scheduled to substitute the *already* formidable Minuteman III between 2028 and 2035) (Kristensen and Norris, "United States nuclear forces, 2017", 51; Reif, "US Nuclear Modernization Programs", 4-5); replacement of the Ohio-class ballistic missile submarines (SSBN) with the new Columbia-class SSBN (Reif, *Ibid.*, 6-7); development of improved nuclear weapons for bombers (such as the B61-12 warhead and the long-range standoff missile, or LRSOs) and a new heavy bomber (the B21 'Raider') to replace the B-52 and B-1 bombers (Kristensen and Norris, "United States nuclear forces, 2017", 53).

in 2017, of the Treaty on the Prohibition of Nuclear Weapons by 122 NNWS. Significantly, the US not only steered clear of the negotiations which were conducted over the previous year within the legal framework of the United Nations, but also vigorously campaigned against the Treaty among its allies and friends, and successfully so. No US treaty-ally voted for its adoption; and none has so far announced the intention to sign it.<sup>43</sup> In the end, Obama's nuclear policy contradicted the very spirit of Prague.

No doubt, domestic constraints, in particular partisan politics and the Republican opposition in Congress contributed to frustrating Obama's disarmament ambitions.<sup>44</sup> To a certain extent, the Obama administration's nuclear investments were the price it had to pay to win Republican support in the Senate for the New START. Significantly, in December 2011 the Senate ratified the New START (by a vote of 71 to 26) only after the Senate Democrats accepted two amendments to the resolution of ratification which emphasized the administration's commitment to missile defence and continued funding to modernise the US nuclear weapons complex. Shortly after, Obama certified, as required by the Senate's resolution of ratification, that he intended to modernise or replace the panoply of strategic nuclear delivery systems.<sup>45</sup> As the 2012 presidential elections drew near, the fear that he might look weak on national security recommended putting the disarmament agenda on hold.

However, as recognised even by scholars ready to underscore the importance of the 'Republican challenge' to Obama's nuclear policy, this is only one side of the explanation of his disappointing score. "The White House", as Steven Pifer writes, "might have moved its agenda further, had it dared to."<sup>46</sup> According to him, attention also has to be paid to external constraints.<sup>47</sup> For Pifer, the lack of interest shown by Russia in reductions in strategic forces beyond those mandated by the new START and, later on, the crisis in Russian-American relations following Russia's annexation of Crimea, help clarify why Obama fell short of his transformative goal on nuclear matters, but do not explain a more general reluctance on the part of the White House to take further steps toward disarmament.<sup>48</sup> Pifer notes, "The administration never fleshed out even the outline of how it would propose to realise Obama's vision of a world without nuclear weapons."<sup>49</sup> So what was the source of this reluctance?

Of course, the rationale for the latter must be put in relation with the caveat Obama stated in Prague: while pursuing nuclear disarmament as a distant and somewhat vague goal, the US must retain "an effective arsenal to deter any adversary, and guarantee the defense of our allies". As the 2010 *Nuclear Posture Review* reiterated, "as long as nuclear weapons exist, the United States will maintain a safe, secure, and effective arsenal, both to deter potential adversaries and to assure US allies and other security partners that they can count on America's security commitments".<sup>50</sup> The point is that, in light of the structural and geopolitical constraints discussed above, the task of upholding the credibility of the US'

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<sup>43</sup>Reif, "UN Approves Start of Nuclear Ban Talks".

<sup>44</sup>See Collina, "GOP Raps Obama". Also Pifer, "Obama's Faltering Nuclear Legacy", and Feffer, "Obama's Nuclear Paradox", 4.

<sup>45</sup>Collina, *ibid.*, 5.

<sup>46</sup>Pifer, "Obama's Faltering Nuclear Legacy", 112.

<sup>47</sup>See also Kymball, "Russia and the Big Chill".

<sup>48</sup>Pifer ("Obama's Faltering Nuclear Legacy", 112-3) points to, among other things, Obama's unwillingness "to make deterring nuclear attack... the 'sole' purpose of US nuclear weapons", his "excessive caution" regarding "the question of accelerated implementation of New START", or his failure to propose to cut B61 bombs in Europe by 50 percent.

<sup>49</sup>*ibid.*, 113.

<sup>50</sup>US Department of Defense, *Nuclear Posture Review Report*, 1.

commitment in Eurasia remains a demanding one, which implies a wide margin of nuclear superiority, in qualitative if not quantitative terms.

Indicatively, after considering the elimination of one leg of the offensive strategic triad – nuclear bombers, apparently redundant and the easiest to do without in the name of the Prague spirit – the 2010 *NPR* opted for retaining them on the grounds of their unique contribution to the preservation of the US' ability to demonstrate commitment and resolve in faraway crises. In fact, whereas the retention of SLBMs (“the most survivable leg of the Triad”) and ICBMs (“like SLBMs, not vulnerable to air defence”) is clearly coherent with the logic of MAD, the (more vulnerable) bombers are well-suited – and thus still prized – for the “political” missions of *signalling* America’s determination to undertake a vigorous role, if need be, even in the face of nuclear opponents: “Unlike ICBMs and SLBMs, bombers can be visibly deployed forward, as a signal in crisis to strengthen deterrence of potential adversaries and assurance of allies and partners.” Moreover, while the 2010 *NPR* favours an extension of the arms control agreement with Russia to non-strategic nuclear weapons, it also acknowledges the importance of their availability “for global deployment in support of extended deterrence to allies and partners”.<sup>51</sup>

More in general, the strategic imperative of diversification of the US nuclear panoply (including anti-missile ballistic defence) implicit in extended deterrence is clearly reiterated in the 2010 *NPR*: “Security architectures in key regions will retain a nuclear dimension as long as nuclear threats to US allies and partners remain. US nuclear weapons have played an essential role in extending deterrence to US allies and partners against nuclear attacks or nuclear-backed coercion by states in their region that possess or are seeking nuclear weapons. A credible US ‘nuclear umbrella’ has been provided by a combination of means – the strategic forces of the US Triad, non-strategic weapons deployed forward in key region, and US-based nuclear weapons that could be deployed forward quickly to meet regional contingencies”.<sup>52</sup> Against this backdrop, the huge advantages in terms of accuracy and lethality of the US strategic forces deriving from such modernisation plans as *Ground-Based Strategic Deterrence*, the new Columbia-class SSBN, the B61-12 warhead, the long-range standoff missile (LRSO) or the B21 ‘Raider’ bomber,<sup>53</sup> are coherent with a strategy of deterrence by nuclear warfighting,<sup>54</sup> rather than one of assured destruction, all the more so when combined with missile defence. Overall, Obama’s unwillingness to scale down significantly the Pentagon’s modernisation programs reveals that he felt bound to follow a well-established path – one that is firmly and ultimately rooted in the US policy of preserving its global leadership and the accompanying geopolitical constraints that have influenced that undertaking.

## Conclusion

The lesson to be drawn from Obama’s nuclear policy is twofold. Firstly, America’s nuclear weapons will continue to play a crucial role in its policy and strategy, regardless of who the president is. This will be the case, moreover, both in the event of the extension of the

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<sup>51</sup>For all quotations in this paragraph: *Ibid.*, 22-7.

<sup>52</sup>*Ibid.*, 31.

<sup>53</sup>See footnote 43.

<sup>54</sup>That is, by demonstrating its will and ability to fight and win a war, rather than by threatening punishment and inflicting damage.

‘unipolar moment’ and in the alternative scenario (now more likely) of the rise of a Eurasian peer competitor (with China as the main candidate for that role). In effect, whether to neutralise its opponents’ nuclear equalizers to preserve US global room for manoeuvre (a prolonged unipolar scenario) or to compensate for its rivals’ geostrategic and military advantages in Eurasia (a new Cold War scenario), the United States will continue to depend on its nuclear arsenal. Furthermore, whether to take advantage of its prolonged military supremacy or to remedy its relative military weakness in the face of a prospective Eurasian peer competitor, the US will continue to be pressured not only to retain but also to extend its nuclear capabilities. Predictably, this will be done by upgrading and enhancing them further, beyond the minimum requirement for MAD, if for no other reason than that in both cases the US will still be struggling with the somewhat unsolvable problem of the credibility of extended nuclear deterrence. Probably, only a truly neo-isolationist America – which Trump’s America, for all its unilateralism, does not seem to be ready to become either – may be satisfied with possessing a nuclear arsenal limited to MAD levels. In other words, only a truly neo-isolationist US may be willing to realise the vision of a world without American nuclear superiority.

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