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# Why are Nuclear Weapons So Appealing to Nation-States in the 21st Century?

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JAMES CHISEM, JUL 20 2011

In 1870, as he surveyed the destruction engendered by the American Civil War, the novelist Wilkie Collins remarked that the only way to avoid another such catastrophe would be through the "discovery...of a destructive agent so terrible that war shall mean annihilation, and men's fears shall force them to keep the peace"[1]. With the advent of the atomic, thermonuclear, and missile ages during the Cold War, Collins' speculation was seamlessly transposed into reality – albeit in a somewhat less utopian fashion. Mindful of the importance of maintaining *crisis stability* in a nuclear world, policymakers in *NATO* and *Warsaw Pact* countries formulated a long-lasting, and at times tenuous, strategic framework of deterrence based upon mutual vulnerability[2]. The collapse of bi-polarity in 1991, however, removed a central justification for the retention of nuclear arsenals, and ushered in a brief period of optimism regarding the nuclear question – statesmen once again began to invoke the goal of *'global zero'*[3]. And yet, despite coordinated counter-proliferation efforts throughout the 1990s and 2000s and the ratification of a multitude of arms control agreements, there is little to indicate that, in the twenty-first century, multi-lateral disarmament is likely, or that horizontal proliferation will cease. On the contrary, nuclear weapons remain fundamental to the long-term security strategy of the nine states which currently possess them and an attractive proposition to those which do not[4].

This essay will demonstrate that the continued centrality of nuclear weapons to the conduct of international relations is a consequence of two primary factors. Firstly, invulnerable nuclear arsenals offer both existing and potential nuclear states a high degree of existential security in the international sphere. Second, the anarchical nature of international politics renders disarmament an inherently risky prospect.

The narrative will be structured in a three-fold manner. Section one will examine the role of the thermonuclear revolution in the politico-strategic thought of existing nuclear powers. Section two will consider proliferation determinants amongst potential nuclear states, particularly focussing on revisionist regimes. The final section will assess to what extent structural dynamics undermine moves towards disarmament.

## i) Existing Nuclear States

#### **Back to the Future: Pax-Atomica and International Symbols**

Over the past two decades there has been a marked shift in attitudes regarding nuclear weapons and the relevancy of deterrence, not only in the capitals of the original five *Nuclear Non-Proliferation Treaty* (*NPT 1968*) signatories, but also in the scholarly fields of *International Relations* and *Strategic Studies*[5]. With anxieties of an East-West confrontation receding from the public consciousness, Western governments and academics have sought to emphasise the unique epochal threat posed by the proliferation of nuclear and ballistic missile technology to *'millenarian regimes'* in nations such as Iran and North Korea. For figures as diverse as Colin Gray, Donald Rumsfeld, and Tony Blair, the emergence of this *'Second Nuclear Age'* necessitates a fundamental shift in the focus and rationale of nuclear policy "away from hostile great powers and towards reckless rogue states"[6] – a position reflected by the U.S. *Nuclear Posture Review's* delineation of a 'new nuclear triad' in 2002[7]. Nevertheless, in spite of the apparent ascendancy of this paradigm in Washington in particular, it is palpable that the principal elements informing the security calculations of existing nuclear states are essentially the same as they were as the dust settled

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over Hiroshima and Nagasaki in August of 1945 - fear and ambition[8].

According to Realism – the dominant school of International Relations theory – the defining feature of world politics, and the one which creates perpetual inter-state rivalry, is the absence of an overarching central authority[9]. In his 2001 monograph, 'The Tragedy of Great Power Politics', John Mearsheimer expanded this concept of structural anarchy by arguing that the only certainty which exists in international politics is that of uncertainty[10]. As such, leaders are inclined to presuppose that "those that can do harm, might do harm", and thus prepare accordingly by "creating countervailing military potential" or joining a balancing alliance[11]. The enormously destructive effects of nuclear weapons significantly add to this uncertainty and the impulsion to proliferate, both globally and regionally, by heightening the prospect and stakes of disadvantage vis-à-vis other powers[12]. The reaction of Joseph Stalin to the U.S. atomic monopoly in the late 1940s was a lucid articulation of this logic. Writing to the Soviet Union's chief physicist, Igor Kurchatov, he simply stated "provide the bomb; it will remove a great danger from us"[13]. So, just as Moscow and Beijing undertook the development of military nuclear programmes as a direct response to America's, and just as India went nuclear in an effort to offset a perceived Chinese advantage, it can be inferred that current nuclear states maintain their armouries in part for similar reasons[14]. Indeed, the UK's 2006 Defence White Paper justified the renewal of the Trident D5 system by highlighting the fact that "major countries...retain large arsenals, some of which are being modernised or increased"[15].

The defence postures of the globe's nine nuclear polities are also heavily influenced by the notion that the invention of thermonuclear weaponry has irrevocably altered modern day international relations – that the unparalleled devastation which can be inflicted by only a few nuclear warheads, or rather the "fear of human beings that these weapons may go off", amounts to a 'nuclear revolution [16]. Before the splitting of the atom, the leaders of major states – particularly those with revisionist aspirations or those who were presiding over a period of national malaise – could rationally risk exacerbating a crisis to the point of war. Since conventional conflicts entail a number of complex outcomes, they also present, at least in the minds of statesmen, the possibility of a desirable political conclusion [17]. There are three aspects of the 'absolute weapon', however, which militate against all-out-war between one or more nuclear rivals.

First, the combination of modern delivery platforms and hydrogen warheads makes defence against a nuclear attack exceptionally difficult, if not impracticable, and pre-emptive strikes on opposing nuclear forces incredibly dangerous[18]. Second, contrary to the assertions of some intellectuals and defence planners, there is little besides dubious conjecture to suggest that a nuclear exchange could be limited[19]. The inter-related Clausewitzian ideas of *Friction* and the *Fog of War*, which describe how modern conflict is inevitably propelled towards the 'total', are arguably aggravated by the incorporation of a nuclear dimension. It is difficult to conceive of a scenario involving nuclear weapons, in which the logistical and psychological pressures exerted upon military-political bureaucracies would not severely impede attempts to terminate hostilities[20]. Third, most leaders understand that the infrastructural and human costs of having nuclear warfare visited upon their territory would be cataclysmic[21]. Consequently, the urge to avoid major war in the nuclear age "moves beyond the realms of international relations theories and into fields like biology"[22].

In light of these factors, the immediate benefits of possessing even a limited second-strike capability are obvious. Nuclear weapons have an inimitable capacity to deter conventional and nuclear aggression. Writing in the aftermath of the atomic bombings on Japan, Bernard Brodie recognised the repercussions of this reality, noting that "thus far the chief purpose of [our] military establishment has been to win wars – from now on it must be to avert them"[23]. The bomb gives states a near-guarantee of security, whilst, on a systemic-level, imbuing relations between nuclear powers with relative stability. Indeed, there is widespread scholarly agreement that the nuclear revolution explains why the Cold War didn't turn hot, why Arab states have eschewed military action against Israel, why China and the United States treat the Taiwanese issue with caution, and why antagonisms between India and Pakistan remain largely rhetorical – a compelling verity which continues to influence policymakers in nuclear nations[24].

At this juncture, it is pertinent to point out that phenomenological studies have highlighted other, more insular objectives which reinforce the importance of remaining in the nuclear club. Robert Jervis argues that nuclear weapons are not simply an additional material manifestation of the security dilemma. Rather, they are symbolic

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objects in both domestic and international political arenas[25]. A nuclear capability can serve a function "similar to flags, airlines, and Olympic teams", shaping a state's perception of its own identity, and reflecting how it wishes that identity to be projected to the outside world[26]. The French, Russian, and Indian experiences are especially relevant in illustrating this raison d'être. The 'Force de Frappe' is inextricably linked to Paris' desire to be seen as a great power, acting as a conspicuous emblem of Gallic grandeur and independence[27]. Likewise, Russia's retention of a large nuclear arsenal – roughly equal in size to that of the United States – can be seen as an attempt to offset decline in other areas[28]. For India, the technical complexity involved in the development of a nuclear force is representative of its modernity and equality with First World nations[29]. Furthermore, there is a tendency to equate this symbolism with actual power. As Harold Macmillan put it, an independent deterrent assures "influence in world affairs, and … [our] right to have a voice in the final issue of peace and war"[30].

It is thus clear that nuclear weapons remain an attractive proposition to large states in the 21<sup>st</sup> century because they promise a level of normative, political, and military security, which conventional force structures do not, and cannot.

#### ii) Potential Nuclear States

#### **Porcupines: US Preponderance and Small States**

With the concretisation of US unipolar hegemony in the aftermath of the Cold War, the American academic-defence nexus has become increasingly pre-occupied with the danger posed by the proliferation of atomic capabilities to so-called 'rogue states'[31]. Nations like North Korea and Iran, whose leaders have persistently violated international norms, are seen by the *White House* to be less predictable and inestimably more irrational than present nuclear powers. These regimes, the argument goes, are theologically motivated, place diminutive value on human life, and "would be willing to use nuclear weapons despite the threat of nuclear retaliation"[32]. Mindful of the prospective obstacles implied by the existence of nuclear pariah states – namely the weakening of American preponderance over regional security-complexes – the United States has adopted a pro-active, interventionist foreign policy, perhaps most succinctly elucidated in the Bush Administration's *2002 National Security Strategy*, which emphasises the efficacy of pre-emptive military action[33]. Nonetheless, there is evidence to suggest that the underlying assumptions and prescriptions informing this stance are fundamentally flawed.

When exposed to empirical and behavioural analysis, the contention that traditional conceptions of deterrence do not apply to 'rogue states' becomes tenuous at best. It is not in the interest of any regime, even those with the most tyrannical rulers, to risk almost certain annihilation[34]. Obsessing over the "characteristics of the state that is to be deterred or [scrutinising] its leaders", is unnecessary, as "in a nuclear world any state will be deterred by another states second-strike forces" [35]. Much like previous nuclear powers, revisionist states are attracted to nuclear weapons for reasons of security and survival. Since the equalising impact of the nuclear revolution is absolute, small states need only a few invulnerable atomic or thermonuclear devices to credibly resist great-power predation[36]. There is little doubt, for instance, that the United States would have been dissuaded from launching Operation Iraqi Freedom if Saddam Hussein would have possessed the counteractive capacity to obliterate Seattle and Texas. The defensive impetus driving Iran's nuclear aspiration is thus plainly apparent. In a regional context, the bomb offers Tehran the facility to deter Israeli aggression, as well as enhanced integrity in the competition for Middle-Eastern primacy. The pressure on the Islamic Republic to nuclearise has been intensified by American military intervention in Afghanistan and Iraq, and continuing US hostility towards Ahmadinejad's government[37]. Somewhat ironically then, it is patent that the epistemic assumptions of American policymakers, together with the resulting counter-proliferation policies, are prone to greatly amplify the incentives for weak, isolated states to proliferate [38]. As Jervis notes, the U.S. endeavour to prevent 'rogue states' from developing military nuclear programmes implies that "the consequences of their succeeding would be great, a belief that...could easily be self-fulfilling" [39].

Moreover, there is a high probability that this will generate a 'regional domino effect'. Unless the United States is able to assure Japan and South Korea as to the credibility of its extended nuclear umbrella – a task which is acutely problematised by US policymaker's public questioning of the effectiveness of deterrence – it is likely that those countries will, quite rationally, seek to develop indigenous nuclear forces to counter the North Korean bomb. Similarly, the Iranian nuclear programme contains the latent facility to produce numerous vectors of proliferation, with

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Egypt and Saudi Arabia being the most plausible candidates to follow suit[40]. In a unipolar system, therefore, the nuclear revolution presents the practitioners of American, and more generally great power, statecraft with a troubling dichotomy – in order to prevent the spread of nuclear weapons, systemic hegemonic states must pursue a foreign policy which is either "unsustainably burdensome" or "unsustainably dangerous"[41]. Regardless of which path is chosen, the deep logic of the thermonuclear age – that which makes Thucydides' old adage, "the strong do what they have the power to do, the weak accept what they have to accept" obsolete – is likely to be too forceful for some small states to ignore[42].

## iii) The Disarmament Bubble

In 2007, amidst much fanfare, the 'Global Zero' initiative was launched – counting amongst its supporters strategic luminaries such as Henry Kissinger, George Schultz, and David Owen. Pointing to the ongoing saliency of the nuclear threat to human civilisation, it called for the "phased, verified elimination of all nuclear weapons worldwide" [43]. In this sense, 'Global Zero' is the contemporary incarnation of the abolitionist tradition, which stretches back to the scientists of Los Alamos, holding nuclear disarmament to be at once essential and viable [44]. However, although some progress has been made in recent years with regards to arms control, most notably the *Nunn-Lugar* project and the *Trilateral Agreement*, the persistence of international anarchy brings into question the feasibility of a nuclear weapons free world [45].

Aside from the strategic and ideational dynamics considered in sections *i* and *ii*, there are two further intractable barriers to the achievement of *global zero*. The first of these relates to the issue of verification. Due to the unique advantage which any state would gain by going nuclear in a post-disarmament context, present nuclear nations would have to be confident that an abolition regime would be universally rigorous and enduringly effective. Such a regime would necessarily have to accurately identify each nation's existing capabilities and infrastructure, share this information with all other countries, and devise a system of mandatory enforcement[46]. Given that North Korea developed the bomb whilst supposedly adhering to the *NPT*, and in light of the ambiguity which surrounds Israel's deterrent, it is doubtful that any actor would place its security in the hands of numerous others and willingly submit to the unavoidable margin of uncertainty involved in the disarmament process.[47]

In addition, the problem of verification is compounded by a second impasse. Even if every state renounced its claim to nuclear arms, the knowledge and technology which are required to create them cannot be eradicated[48]. As Josef Joffe points out, states with the capacity to produce weapons-grade material would "inevitably keep mobilisation bases at a high state of readiness to guard against a nuclear breakout by others, since the acquisition of only a few bombs would offer a deadly advantage to whichever state re-armed first"[49]. The implications of this actuality were clearly taken into account in the formulation of the 1946 Baruch/Gromyko Plans and the 1986 Weinberger-Perl Scheme. Whereas these proposals were framed as genuine attempts to produce a multi-lateral agreement on disarmament, scholars are unanimous in the view that they were in reality a shrewd attempt to gain propaganda points and, ultimately, justify the retention of atomic armaments[50]. In the uncertain environment of anarchy, as in Rousseau's parable of the stag, self-interest and mutual suspicion are likely to overcome the urge to act on more abstract principles[51]. Crucially, it can be postulated that the abolitionist paragon confuses the causal relations of state behaviour. Instead of distrusting each other because they are armed, nations "are armed because they distrust each other"[52].

Campbell Craig convincingly observes that normative resolutions to the disarmament puzzle tend to "gravitate toward the logic of a world state" [53]. If one accepts this proposition, whilst acknowledging that such an outcome is highly improbable, then the problematic intersection between the psycho-political structure of the international system and the unit-level impact of nuclear-weapons becomes evident. Indeed, disarmament initiatives may be perennially hindered by this Faustian catch-22. Richard Betts is clear on this point – "there are no simple solutions that are feasible, no feasible solutions that are simple, and no solutions that are applicable across the board" [54].

#### Conclusion

The contemporary appeal of nuclear weapons, for both existing and prospective nuclear powers, is dyadic in nature.

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For large states, indebted to a Cold War strategic culture, nuclear armaments offer the capacity to irrationalise major inter-state war, therefore creating the foundations for great-power peace and stability. The nuclear revolution, moreover, gives small states the ultimate life insurance, allowing them to defy the preponderance of other more powerful nations. In essence, due to their ability to deter conventional *and* nuclear aggression, second-strike capable nuclear forces confer a degree of existential security upon possessor states – ideational, military, and diplomatic – which is often too compelling to forego. The compulsion to remain (or become) nuclear which this generates is exacerbated by the anarchical structure of the international system, which makes the credible verification and enforcement of disarmament initiatives remarkably difficult.

There is, nevertheless, an important distinction to be made between what is immediately prudent for a state, and what is permanently desirable for human beings. The problem with relying on nuclear weapons to provide security simultaneously for states and the global community, as Martin Amis opines in the foreword to 'Einstein's Monster's', is that deterrence has to remain effectual for a very long time – for all and intents and purposes, between now and the entropic death of the solar system[55]. And here is the crux of the dilemma facing statesmen in the 21<sup>st</sup> century. The allure of hydrogen bombs is predominantly drawn from the level of uncertainty and mistrust which plagues the international realm. And yet, for their continued existence to be justified, leaders must trust, with absolute certainty, that all states will be infinitely rational, all of the time, and forever. If they are not, the results will be disastrous.

**Post Script** – By focussing on the reasons why a military-nuclear capability is attractive to some states, it is not suggested that one is necessarily appealing to all states. Some states, such as Germany, the Ukraine, and post-apartheid South Africa, have sculpted a normative identity based on the rejection of nuclear weapons. For an excellent exposition on the factors which drive certain states not to proliferate, see Scott Sagan's article 'Why Do States Build Nuclear Weapons?', and Richard Betts' 'Paranoids, Pygmies, Pariahs and Non-Proliferation'.

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