Beyond Deterrence:

Nuclear Realism, the H-Bomb and Globality

> 'The invention of nuclear weapons, if it is not to lead to disaster, requires a revolution not only in military strategy but also in the whole conduct of international relations'
>
> Bertrand Russell (1956: 24).

Introduction

During the decade of the thermonuclear revolution (*c.* 1952-1962) many students of international politics came to reconsider the nature and availability of military force. Today, however, the discipline of IR tends to view this period through a compartmentalized lens, which restricts the range and misses the diversity of responses to the nuclear revolution. To the extent that ideas about nuclear weapons from this period figure in International Relations (IR), they primarily emanate from the once-dominant field of strategy. Thus, a 'golden age' of strategic studies is located in the period from 1955-1965 and is made up of 'high' and supposedly policy relevant theorizing in the shape of nuclear strategy (e.g. Baldwin, 1995). Oppositional voices are rarely included, and if at all, they are seen as part of the peace studies field that emerged in the mid to late 1960s (Freedman, 2003; Buzan and Hansen, 2009). On this view, critical readings of nuclear weapons are mainly associated with the post-positivist

turn in the discipline during the 1990s, when a range of analyses started problematizing the

ontological, epistemological and political assumptions that underpinned the theory and

practice of deterrence.[1]

In this paper we challenge this historical narrative by recovering, re-evaluating and

synthesizing an important, yet generally overlooked, body of literature that we refer to as

'nuclear realism'. This label refers to a way of digesting the nuclear revolution bound together

by the central conviction that liberal modernity could survive collective suicide only by

radically rethinking and transforming its foundations. It is a transnational, interdisciplinary and

temporally bound intellectual phenomenon that in important respects overlaps with, but does

not exhaust, political realism as it is currently conceived in IR and political theory.[2] Our main

focus in this paper is on four nuclear realists – Günther Anders, John H. Herz, Lewis Mumford

and Bertrand Russell – who were not just quicker to recognize the implications of the nuclear

revolution than most of their contemporaries; their pre-war interest in the matrix of political

organization, freedom, and technology led them to broader, more incisive and ultimately more

interesting lines of questioning than most nuclear political thought of their time (and ours).

Spurred by the development of the H-bomb, nuclear realism foreshadowed some of the

profound theoretical and political issues that came to occupy critical, post-positivist writings

on nuclear weapons. At the same time, nuclear realists also reached beyond the post-positivist

critique of the meta-theoretical underpinnings of nuclear deterrence. Their strong

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[1] See e.g., Cohn (1987), Klein (1994), Booth (1997), Gusterson (1998) and Wyn Jones (1999).
[2] For a more detailed discussion, see van Munster and Sylvest (forthcoming).

epistemological critique ultimately served a radical ethico-political project focused on survival and liberty under conditions of globality, understood as the material existence of the globe as a single physical and socio-political space.

We proceed in four steps. The first section sketches the contours of nuclear realism and the attempt to come to grips with the anxiety and desolation caused by the thermonuclear revolution. In contrast to civilian strategists who saw nuclear war as something to be managed through the application of rationalist principles, nuclear realists maintained that political action should be understood as an art or craft, not as the process of applying a theory. The following section goes on to examine how this view informed their critique of the dominant strategic paradigm of their time, deterrence, and its underlying knowledge economy. The third section follows from this and sketches how the alternative nuclear realist assessment of military force in the thermonuclear age led to radically different conclusions about the role and place of war, the balance of power and diplomacy in international relations. Ultimately, nuclear weapons technology brought about a condition of globality. The fourth section unearths this globalist vision and concludes that, despite some manifest limitations, it has significance for our historical understanding of the thermonuclear revolution as well as for contemporary attempts to navigate global politics.

Nuclear Realism and the Limits of the Enlightenment

The twentieth century human experience is one of repeated cycles of violence and destructiveness, phenomena spreading with a parasitic ease that clearly outmatched those nineteenth century harbingers of peace and progress, trade and technology. It was against this backdrop of increasing chaos and a patent crisis of civilization that nuclear realists came to view the development of the hydrogen bomb as positing an existential threat to human life on planet Earth. Clearly, this was more than a standard trope of doom. This conclusion was reached against a backdrop of previous concerns about the role of science and technology in social and political life. The thermonuclear revolution was not an isolated moment, but embedded in a modern industrial and technological civilization, which had made the horrendous acts and events of the twentieth century possible. The holocaust in particular came to play an important role as a reference point, fable and symbol of a thoroughly disenchanted and technologized world. Despite Günther Anders' difficult yet sensitive discussion of the differences between Auschwitz and Hiroshima – two central markers in his philosophy – it is clear that they were part of the same historical development: Where total warfare and the holocaust had transformed the old adage that 'all men are mortal' into 'all men are exterminable', thermonuclear weapons came to symbolize the absurdity and finality of history, since now '[m]ankind as a whole is exterminable' (Anders, 1956: 148). To Anders, the bomb became a symbol of *naked* nihilism, in a century shot through with nihilism.

Lewis Mumford and John H. Herz went even further in pointing to the similarities between the nuclear stalemate and the concentration camp. Mumford never tired of pointing out how strategic bombing had turned war into genocide and every country or city into potential concentration camps (Mumford, 1957: 19; Mumford, 1961: 2). When re-appraising his early work on *Technics and Civilization* (1934) twenty-five years on, this idea culminated in his suggestion that a proper description of the topic would now demand an analysis of "The World as Extermination Camp" (Mumford, 1959a: 533). Similarly, Herz held that '[t]he moral predicament of which the Nazi extermination camp was a symbol is now duplicated by the potentialities of thermonuclear warfare' (Herz, 1962: 124). For nuclear realists, streamlined killings and push-button warfare were highly significant markers of the thermonuclear predicament and life on the limit.

The existence of nuclear weapons could thus not be downplayed as 'an unintended consequence of the scientific enlightenment' (Walker, 2007: 431). To the contrary, the thermonuclear revolution was made possible by science, technology and rationality. In that sense, nuclear realists would have strongly agreed with Adorno's (1966: 320) famous remark that 'there is no universal history leading from savagery to humanitarianism, but there is one leading from the slingshot to the megaton bomb'. At any rate, a blind faith in the principles of science and rationality was unwarranted in light of the horrors of the twentieth century. It could even be outright dangerous, as Herz realized after having witnessed, at close range in Geneva, the breakdown of the reformed international order with the League of Nations at its

center – an order he as an ardent liberal had politically supported (Herz, 1939; Herz, 1942; Herz, 1951). Mumford underwent a similar conversion. Having visited Germany in the early 1930s during a time when the national socialist movement was growing rapidly and making its political presence felt, he had failed to note both the movement's presence and the intensity of its anti-liberal ideals. When Mumford belatedly realized what was at stake, his atonement took the form of a fight against what he termed "pragmatic liberalism" and its isolationist implications for American foreign policy. As he argued, such a liberalism was 'too noble to surrender, too sick to fight', plagued by 'a total incapacity to face the worst' and thereby risking the ultimate perversion: being 'too virtuous to live'.[3]

Nuclear realists therefore argued for a more sober and humble calibration of liberalism and its optimistic belief in progress. What was needed was a language and understanding of politics in the face of dark realities that no rational theory could provide a bulwark against.[4] Such a language had to be formulated between the optimist belief in universal values of a rational science and progress on the one hand and a pessimistic retreat from emancipation and liberty on the other. Given the absolute materiality of nuclear weapons and the political context in which they existed at the height of the Cold War, liberalism required a healthy dose

[3] Mumford (1940: 56, 57, 107). For example, Mumford argued that '[t]hose who think that evil can be permanently abolished always feel grossly betrayed when they find it has come back again: they are like the heroine in the old-fashioned village melodrama whose innocence permits her to be seduced in every act'. Mumford (1940: 221).
[4] As such, nuclear realism shares important traits with the type of postwar thinking that has been referred to as 'political studies enlightenment' (Katznelson, 2003) and 'IR enlightenment' (Williams, forthcoming). Interestingly, Katznelson and Williams pay little attention to the role of thermonuclear war as the issue that most radically exposed the limits of science and rationality.

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of 'realism without illusions' (Philp, 2012) that should not begin from an idea of how people

ought to act ideally or rationally, but from an appreciation of the context within which

politicians and policy-makers have to make choices as well a critical examination of their actual

conduct. This realist form of liberalism has strong affinities with Foucault's later injunction that:

> We must try to proceed with the analysis of ourselves as beings who are historically determined, to a certain extent, by the Enlightenment. Such an analysis implies a series of historical inquiries that are as precise as possible; and these inquiries will not be oriented retrospectively toward the "essential kernel of rationality" that can be found in the Enlightenment and would have to be preserved in any event; they will be oriented toward the "contemporary limits of the necessary," that is, toward what is not or is no longer indispensable for the constitution of ourselves as autonomous subjects (Foucault, 1986: 42, 43)

For nuclear realists, the 'contemporary limit of the necessary' was nothing less that the

question of survival of the species. In their view a state-dominated configuration of

international politics was bound to produce a politically suicidal and morally unacceptable

great power nuclear war (or a great power conventional war that risked escalating into a

nuclear war), something that classical realists familiar to IR scholars, even if somewhat

belatedly, also came to accept (Craig, 2003). This appreciation of the limits of science and

means-ends rationality guides for political action also informed their critique of deterrence

and the dangerous illusion amongst government officials that the H -bomb was a usable, if not

a winning, weapon rather than a technique of extermination.

The Epistemological and Moral Fallout of Deterrence

The central element in the nuclear realist critique of deterrence was an appreciation of how the politics of deterrence coalesced with the changing knowledge economy of the emerging military-industrial complex. Although civilians managed to break the military monopoly on strategy in these years, they did so from positions of intellectual authority established by funds from *within* this ever-expanding complex; whether in think tanks like RAND or in the several centers dealing in nuclear strategy that were established at major universities during this period (Kuklick, 2006; Ghamari-Tabrizi, 2000). To nuclear realists this reconfiguration of knowledge production failed to adequately face the challenge of these new weapons; indeed, it merely signaled how the scientific method that had spurred (and been spurred by) modern civilization was incapable of confronting the moral and existential dimensions of military force after the thermonuclear revolution. Clearly, science and technology had brought wonders to the modern world, but when dictated and pursued by power-intoxicated agents the prospects for civilization were dim (see also Sylvest, 2013a). Nuclear realists kept stressing that the focus on short-term order and stability amounted to moral failure: it produced a false sense of security, a host of negative side-effects and precluded a sustainable long term solution.

The moral critique of deterrence was strongly rooted in epistemological concerns and nuclear realists maintained that the majority of politicians and strategists relied on an overtly thin or too rationalist concept of deterrence that in their realist conception of politics was untenable. While both Herz and Russell conceded in the late 1950s that deterrence had been

paradoxically successful, they also argued that it was based on rather optimistic assumptions. When Herz made these points he also offered a knowledgeable and in some respects sympathetic discussion of nuclear strategy. He began by noting that security through nuclear weapons meant complete insecurity and that the most potent weapon was shot through with paradoxes and ambivalences. In making these points, Herz clearly grasped that credibility was the crucial issue (Herz, 1959: 198, 202, 215). But then a host of problems remained, none of them negligible: lunatics, application of rationality in a context of uncertainty, risks of misinterpretation, different kinds of "trigger-happiness" in officials running so-called fool proof systems and, not least, the endless second-guessing of intentions (Herz, 1959: 183f.; Herz, 1962: 131-133). With respect to the latter Herz sarcastically remarked that '[i]t may be doubted that even the theory of games as applied to international relations can cope with this one' (Herz, 1959: 207n.). Against the background of the elevation of deterrence to 'dogma' (Herz, 1959: 184) Herz examined both 'unilateral' and 'mutual' deterrence. The former – mainly based on the concept of massive retaliation was found wanting: it was plagued by confusion and lack of precision (a common refrain among critics of Eisenhower administration's policies in the 1950s). The notion of mutual deterrence was not straightforward either and Herz argued that only a strict concept of mutual deterrence, only threatening retaliation against *nuclear* attacks, could work (Herz, 1959: 189).[5] Everything else would be illogical, since it would presume an adversary (or *deteree*) to be deterred by something that would not deter the *deterrer*. Unfortunately, Western policy was founded on

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[5] Herz criticized Reinhold Niebuhr for believing so (or having believed so, in 1956). Herz (1959: 188).

such shaky foundations. A policy of retaliation that was not precise and determinate, i.e. based on a proclamation of no-first use, might 'provoke' rather than prevent war and especially coupled with a defense policy underemphasizing conventional military force it could mean 'an involuntary rush into the very conflict we want to avoid' (Herz, 1959: 194-5).

Russell made many similar points (Russell, 1959: 30-31, 39, 70-1), but he was more outspoken about the motivation behind his dissection of nuclear strategy and simulation; namely to counter the widespread belief that the H-bomb constituted a 'winning weapon' and to unmask the long-term instability of the concept of deterrence (or what Dulles called "brinkmanship"). Russell did this by invoking an analogy to the 'game' of *chicken* made popular in a Hollywood movie a few years previously. For Russell, the game – played by running two cars against each other, testing the resolve of both drivers before being decided by a crash or the first turn away from it – symbolized the inherent instability of deterrence. Russell was at pains to refute the argument that there was no alternative to continue playing a suicidal game or surrendering to the Soviet adversary (Russell, 1959: 30-1). The *chicken* analogy was Russell's most insightful contribution to contemporary nuclear strategy and secured for him a supporting role in the development of strategic thought: the following year RAND theorist Herman Kahn used Russell's analogy in his notorious treatise *On Thermonuclear War* (1960). The virtue of Russell's analogy was its perceptiveness in relation to the crucial issue of

credibility.[6] In Kahn's hands, however, *chicken* became an argument for blind, automated resolve along the lines of the infamous doomsday machine that later made it into Western folklore through its appearance in Stanley Kubrick's *Dr. Strangelove.* Although Russell engaged in the kind of simulation that characterized Kahn's strategizing, he did so in order to expose the absurdity and futility of considering the use of military force after the thermonuclear revolution. His purpose was completely contrary to that of Kahn, who thought it important to think the unthinkable and contemplate the possibility of nuclear war. Indeed, when it came to American policy, Russell pointed out 'I can find almost nothing that seems to me compatible with rationality' in Kahn's adoption of deterrence (Russell, 1961: 17). The fact that Kahn thought thermonuclear war in some instances rational and that he underestimated, according to Russell, the effects of this phenomenon landed Kahn in a paradox not unlike that presented by the weapons he strategized about: the notion that thermonuclear war could be fought led to 'a bleak and cheerless outlook, but it is the best that Mr. Kahn can offer us even by stretching optimism to the very limits of credibility' (Russell, 1961: 17). In an environment populated by fallible, pugnacious and occasionally mad human beings, a concept based on how decision-makers rationally ought to act was not just unrealistic, but also extremely dangerous.[7]

Given the 'limited intellectual capacities of humans', always 'open to erratic promptings', the existence of the hydrogen bomb demanded drastic action (Mumford, 1954b: 157). Locked

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[6] Russell was also alert to the importance of retaliatory capacity (Russell, 1959: 22-3), another central contribution in contemporary strategic debates. See Wohlstetter (1959).

[7] Russell's downbeat view of human nature was longstanding. See e.g. Russell (1916: 3-4); Russell (1917a: 35) and Russell (1954a: 15).

into their disastrous approach dictated by a purported scientific rationality, the strategists

fabricated a 'deathtrap' yet continued to look upon themselves as hard-headed realists: 'How

far can human self-deception go?', Lewis Mumford (1958: 15) asked. One of the central

obstacles to this diagnosis gaining wider recognition was the submission to 'the machine' that

characterized modern society and the nuclear age in particular. Not only did this machine

involve a massive perversion of the scientific method – 'careful of quantities, ignorant about

qualities, knowing much about causes and probabilities but indifferent to purposes' (Mumford,

1954b: 189) – but it produced submissive minds, thereby turning society into 'a mechanically

engineered coma' (Mumford, 1956: 174; cf. also Herz, 1962: 143). This critique arguably

reached its pinnacle in the early 1960s, when Mumford harshly indicted nuclear strategists:

> 'As a nation we are now under the control of under-dimensioned minds with five-
> year perspectives, immune to humane concerns: indifferent alike to the rich
> historic past they would nullify or the endless potentialities of the future they
> would abort or sterilize. Such demoralized minds are capable in fantasy of wiping
> out sixty million of their fellow-country-men, and congratulating themselves on
> contriving shelters that might save, also largely in fantasy, the bodies of some
> fraction of those that would remain. These Genghis Khans of strategy have
> conditioned their countrymen to ignore the fact that this unseemly massacre may
> still be avoided by adroit changes in military and political policy which a more
> humane intelligence could bring about. But in a world like ours, empty of historic
> values or purposes, the crassly optimistic reassurances of scientific fortunetellers
> are treated as oracles, while the well-grounded warnings of its humane Einsteins
> and Schweitzers and Russells are disregarded' (Mumford, 1962: 213-214; cf. also
> Herz, 1959: 215).

In this critique from Mumford's ever-sharper pen, the moral and epistemological dimensions

of dominant nuclear weapons discourse ran together. This was only natural, since for

Mumford technology did not have determinist qualities but was rather aided –

epistemologically – by new ideas. Thus, the hold that nuclear weapons had taken on American

society was if not a consequence of, then greatly facilitated by, ideas of mass extermination

developed and impressed on modern societies during World War II. And exactly for this reason,

'the unqualified commitment to nuclear technology' involving specialists advising the

government was an acute danger that had to be countered by the double realization that any

human life sacrificed in this futile cause would be morally unacceptable. To Mumford, the

lesson was clear: '[t]he chief enemy we must come to grips with is ourselves' (Mumford,

1959b).

The Obsolescence of the Balance of Power, Diplomacy and War

The political rationality underlying the traditional conduct of international politics, whatever its

severe shortcomings in the pre-nuclear era, reached an absolute limit in the mid-twentieth

century. The horrifying nature of World War II – both its increasingly total, unstrained

character, the German extermination policy towards the Jews and the atomic bombing of

Hiroshima and Nagasaki that(virtually) brought the war to a close – obviously contributed to

this increasing realization, but it was the advent of thermonuclear weapons that finally

undermined time-honored practices of international society. Three interrelated institutions are

of particular importance: the balance of power, diplomacy and war. Herz, who had much in

common with other classical realists of his time, had argued that the traditional European

balance of power policy was a safeguard against imperial ambitions that, with Britain

strategically placed at the center as the holder of the balance, had achieved near-perfection in

the eighteenth century. In contrast to a more mechanical system – where order was achieved

at random – Herz stressed that '[b]alance of power politics is an applied art, not an applied

science' (Herz, 1951: 216).[8]   Two challenges to this (idealized) construction of the balance of

power presented themselves in the post-war era. First, the power shifts of the international

system made it doubtful whether a balance of power (policy) could function in a more rigid

configuration with only two major players and no holder of the balance. After the arrival of the

thermonuclear bomb, furthermore, combating 'Kremlin's false ideology' required an

altogether different strategy of genuinely appealing to the people in the communist world.

Emphasis should not be put on a fabricated, hollow fantasy of the American dream but on 'the

actual pluralistic system which allows the greatest variety and play to whatever economic

forces and institutions, private or public, will efficiently further the common good' (Mumford,

1954a: 8). Second, the classical balance of power had, when it worked best, depended on the

existence of a system of diplomacy that allowed for frank exchanges of view and, in case

diplomacy failed, war as a continuation of diplomacy by other means. Again, however,

injecting thermonuclear weapons into this already fragile and dangerous organization of

international politics exposed the limits of traditional political rationality and diplomacy.

Drawing on George F. Kennan, Herz (1959: 180) pointed out how the nature of new weapon

made it unsuitable for being used as a threat in diplomatic relations. Russell repeatedly

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[8] See also Morgenthau (1973 [1948], ch. 14) and the discussion in Little (2007, ch. 4).

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stressed this same point during the 1950s. With the existence of the thermonuclear bomb, he

argued,

> [d]iplomats ... are deprived of their traditional weapon. They are in fact reduced
> to a game of bluff and blackmail. If it is thought that the other side would rather
> exterminate the human race than yield, it is rational to give way to the lunacy of
> opponents. There is thus a premium on madness, and one-sided rationality entails
> defeat for the less insane.[9]

War, or the threat of war, similarly lost its meaning in the modern Clausewitzian sense.

Although the dictum that war is a continuation of policy 'has been true hitherto, it is true no

longer' (Russell, 1954b: 251), since '[i]n a war using the H-bomb, there can be no victor'.[10] Of

the nuclear realists treated here, Russell was the most outspoken in stressing the novelty of

situation that the thermonuclear revolution had brought about. The Bikini tests, his early grasp

of the physics and scale of the H-bomb, as well as his attention to those few facts and

judgments about the new weapon made available by politicians and military officials at the

time, led him to stress 'the wholly new fact' (Russell, 1954d: 51) that the ends of war can no

longer be achieved with the most advanced weapons. As he starkly put it, '[w]e can all live or

all die, but it is no longer possible to think that only our enemies will die'.[11] Towards the end of

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[9] Russell (1957: 347). See also Russell (1956: 24): 'Diplomacy, ever since there was such an art, has depended upon war or the threat of war. If that is removed, diplomats are at a loss how to proceed'.

[10] Russell (1955a: 303). See also Russell (1954c: 60). The latter essay was commissioned by Norman Cousins, editor of *The Saturday Review*, and author or *Who Speaks for Man?* (1953).

[11] Russell (1954e: 22). These beliefs hardened during 1954and formed the backbone of both Russell's *BBC* talk on 'Man's Peril' (broadcast on 23 December 1954 to an estimated audience of 6-7 million listeners and later widely reprinted) and the Russell-Einstein manifesto of 1955.

the 1950s, when John Herz published *International Politics in the Atomic Age* (1959), he

entirely agreed with Russell's point: 'Unlimited war … can no longer bestow on any power

waging it in the form of nuclear war that which used to be the fruit of "superiority" and thus of

"victory": the attainment of war aims, whether security or any others' (Herz, 1959: 21). This

situation was brought about by guided, intercontinental missiles and the revolutionary force of

fusion bombs that achieved 'an uncanny absoluteness of effect' (Herz, 1957: 488).

Consequently, security meant insecurity, while victory was a mere word. This state of affairs

was particularly dangerous, in Herz's analysis, in a situation where war was increasingly

"bureaucratized" or reified (Herz, 1959: 274) and where the dynamics of the security dilemma

played itself out in a context of ideological conflict and mutual suspicion. Oppenheimer's

metaphor of two scorpions in a bottle was highly appropriate (Herz, 1959: 13).

Lewis Mumford was in complete agreement with Herz and Russell about the

fundamental point: '*There will be no victor in World War III*', Mumford argued, since 'a genuine

war of extermination would bring about our own downfall' (Mumford, 1954b: 88 [italics in

original], 77). In re-publishing and developing ideas published as a reaction to the atomic bomb,

Mumford warned that modern war 'pursued to its logical end' would mean 'not the defeat of

the enemy but his total extermination: not the resolution of conflict but the liquidation of the

opposition' (Mumford, 1954b: 170). Anders concurred and drove home the point with

characteristic simplicity: because nuclear weapons overwhelm their targets, their almightiness

is their defect ['*Ihre Allmacht ist ihr Defekt*'] (Anders, 1956: 258). The H-bomb flouts the

conventional understanding of "a means" by entailing the destruction of the end. Or simply: the bomb is too big. In Anders' words, 'the end discovered its own end in the effect of the means', which signaled nothing less than the degeneration of the conceptual distinction between means and end. Nowhere was this more obvious than in the context of arms racing, where '[t]he production of means has become the end of our existence [*Dasein*]' (Anders, 1956: 251).

For these reasons, nuclear realists were also sceptical about the possibility of fighting a limited nuclear war. After it was clear that the Soviet Union had obtained a thermonuclear device, the combination of a nuclear standoff and a doctrine of massive retaliation that – despite several attempts at qualification (e.g. Dulles, 1954) – was still seen as risking a major nuclear exchange over a minor conflict led to an attempt to make war fighting possible and plausible again. It was feared that the credibility of the nuclear threat was compromised by touting it in the context of minor conflicts or any kind of aggression. Lodged in such moves was a tacit recognition that the H-bomb (a strategic weapon) transgressed the category of a military weapon that could be used for political purposes *and* a conviction that tactical nuclear weapons were a weapon like any other. As Henry Kissinger phrased it in *Nuclear Weapons and Foreign Policy* (1957), '[t]he prerequisite for a policy of limited war is to reintroduce the political element into our concept of warfare and to discard the notion that policy ends where war begins or that war can have goals distinct from those of national policy' (Kissinger quoted in Freedman, 2003: 97).

Although nuclear realists had some sympathy with the argument that the superpower conflict needed a safety valve,[12] they ultimately were unconvinced by the argument for limited nuclear war. The main problem they foresaw here concerned escalation, a problem which advocates of limited nuclear war has never convincingly cracked (Freedman, 2003: xiv). As Herz put this point in 1959:

> None of the various suggested distinctions as to "graduated deterrence, targets, "tactical" as opposed to "strategic" atomic weapons, and so forth, seems to offer a sufficient guarantee against eventual (or even immediate) outbreak of all-out nuclear war; only avoidance of the first use of any and all "atomic" and "nuclear" weapons (in the sense of fission and fusion weapons) might guarantee this (Herz, 1959: 200).

This was an argument that Herz shared with Russell (as well as with more conventional strategic thinkers opposed to limited nuclear war). Indeed, this discussion of limited nuclear war led straight back to the overriding theme in the nuclear realist analysis of how military force was reconfigured in the wake of the thermonuclear revolution. By falsely considering the H-bomb a weapon let alone a winning weapon – in effect by even entertaining the notion that they were usable – military strategists and defenders of deterrence failed to appreciate the reorganization of basic truths that followed in the wake of technological "progress".

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[12] In fact, in 1950 (before the development of the hydrogen bomb), Mumford toyed with the idea of tactical nuclear weapons, in an attempt to 'reconventionalize' warfare. Although Mumford continued to argue for a US strategy based on conventional military force, he appeared to peddle this idea on only this occasion (Mumford, 1950). In the days of US atomic monopoly, Russell went even further, arguing that the US should use its atomic weapons capability to threaten the Soviet Union into submission (see the discussion in Sylvest, 2013b).

Away from the Brink: One Worldism and Globality

Beginning from the premise that war was likely but unacceptable (rather than merely unthinkable, which could paradoxically increase the likelihood of its occurrence), nuclear realists opposed a new strategic consensus, based as it was on a flight from reality that involved denying or failing to grasp the limits to traditional political rationality in the thermonuclear age. In offering this critique, the voices of nuclear realists reached a progressively higher pitch, they emerged as oppositional voices to the dominant trends of Cold War culture. Often this meant being dragged into debates about the virtues of being red rather than dead; something Mumford was willing to accept, while Russell, characteristically, remarked that faced with the choice he would probably commit suicide. To varying degrees their ideological commitments were counter-cultural and anti-establishment. In more ways than one, then, nuclear realists sowed 'seeds of the sixties' (Jamison and Eyerman, 1994). Mumford did not hold back in encouraging his audiences to 'speak truth to the power that can only will its own destruction' and to recognize how the notion 'that there is some neat technological way out of this impasse forms part of the strange pathology of our time' (Mumford, 1961: 3, 2). This required standing up to 'detached and de-moralized mechanical intelligence' that by its very nature excluded moral criteria (Mumford, 1959c: 14, 10). Anders, similarly, sought to wrench matters of public interest from the hands of specialists: 'If the word "Democracy" has any sense at all, then it means that precisely the province *beyond* our professional competence should concern us' (Anders, 1962: 500). Notoriously and repeatedly, Russell continued to shock his audiences with his radicalism, particularly in the US, and even

the most "academic" nuclear realist, Herz, came to realize that 'the ideal of the uncommitted, ivory-tower researcher' had to be substituted by that of the *homme engage*, if not *homme révolté*' (Herz, 1976: 258).

This commitment also produced deeper and more profound analyses of the commitments at stake in the conduct of politics after the nuclear revolution. Thus, despite many differences of detail and temper, nuclear realists all partook in a globalist discourse. Clearly, for some nuclear realists these global arguments extended previous commitments and tapped into a widespread belief that in some respects the nation-state had been overtaken by events making global reform necessary (e.g. Russell, 1931: 219; Mumford, 1940: 327). Still, in contrast to many previous proposals for a post-national authority, nuclear realist arguments were infused with a distinct urgency. Günther Anders clearly stated that the question of major political ideologies – one unjustly claiming to be 'free', another rightly portrayed as 'unfree' – could not (or no longer) take priority. Radioactivity knew no borders, and the 'one-world' thesis of the 1940s therefore held true (Anders, 1956: 7). Although approaching the matter from a different perspective, much more attuned to the power-political struggle of rival and fervently ideological superpowers, Herz agreed that 'the world today is "one" in that it can be grasped, comprehended, and surveyed as an entirety' (Herz, 1959: 314). He even devoted a chapter in his most successful book (if not the rest of his scholarly career) to advancing the cause of universalism, which he defined as 'that comprehension of mankind as a group, or entity, which imposes itself on those aware of the absolute peril in which the atomic weapon

has placed mankind as such' (Herz, 1959: 309). Already in 1948 Mumford argued that 'every nation or group, however isolated in appearance, is part of an infinitely complicated and involved ecological partnership of planetary dimensions' (Mumford, 1948: 8). Since the H-bomb served to widen 'to planetary dimension the catastrophe we have been preparing', '[u]nconditional co-operation on a world scale is … the only alternative to the certain disintegration of civilization and the probable extermination of the race' (Mumford, 1959c1959b: 2; Mumford, 1954b: 33). For Russell, the case was similarly clear: 'International government, whether pleasant or unpleasant, has become a condition of human survival. We must submit to it, or die. And I mean this in an exact, literal sense' (Russell, 1954c: 61).

In order to grasp the variety and significance of nuclear realist ideas of world government and governance, it is worth distinguishing between two modes of thinking about the subject; one top-down the other bottom-up. The first, represented by Russell, began from the growth of organization – and its corresponding threat to individual freedom – entailed by industrial civilization. Ways had to be found in which freedom could be safeguarded without destroying the increase in organization, which Russell – in common with many contemporaries – regarded as a defining, if not inevitable, element of modern civilization. From this perspective, Russell's longstanding and intensifying call for world government appears rather curious, since such a structure has, apart from charges of idealism, always been met with the response that it offers the least safeguard against the curtailment of the very same civil

liberties for which Russell campaigned so relentlessly.[13] Could this circle be squared?

Concerning the constitution of political order, Russell's view was strongly Hobbesian: authority was built on a monopoly of force. But in contrast to Hobbes, he deployed an analogy between the 'domestic' and the 'international' to further the cause of world government (see also Suganami, 1989). As he argued in 1954, '[t]he very same reasons which existed for the creation of national governments, exist now for the creation of an international government; and all the arguments against international government are the very same that could have been urged by turbulent barons in the fifteenth century against the power of centralized national governments.'[14] (Russell, 1954c: 61).s Even if one grants that the means of violence is central to the constitution of authority and obedience, Russell's expectations of the global political dynamics in such a world were not free from naivety and complacency, and after the thermonuclear revolution he occasionally came close to accepting a sacrifice of liberty for order. [15] Read more charitably, however, it is possible to argue that Russell thought of world government as an insurance policy against organized violence, and that it should be based on extended forms of democracy, subsidiarity, and federalism (e.g. Russell, 1952: 72). On this

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[13] Particularly during World War I, the (British) state had, according to Russell, demonstrated a proclivity to oppression born out of a grim combination of militarism and patriotism. But if Russell was worried about the "State God" (see *CP,* vol. 14), there would be equally good reasons to fear a "World State God".

[14] Russell (1954c: 61). Russell's skepticism towards proposals for the pooling of sovereignty after World War I was based on a cool assessment that the effectiveness of any such scheme would ultimately – and unreliably – depend on independent states (Sylvest, 2013b).

[15] See e.g. Russell (1917b: 270), Russell (1954f: 146) and Russell (1956). Russell (1955c: 12-13) did acknowledge, however, that the 'increase of inter-dependence makes it necessary to limit freedom in various ways which liberals in the past considered undesirable.'

view, even if Russell's world government was built from above, it was ultimately designed to secure the survival and enable the emancipation of individuals.

The second, bottom-up approach represented by Herz was markedly different although permeated by similar values. As a card-carrying political realist and professional pessimist, Herz based his discussions of global governance on two important provisos. First, he maintained that a holding operation, which could turn the world back from the brink was the absolute pre-condition for any attempt to discuss world order. This operation brought out every item in the (classical) realist toolbox in an attempt to install humility, limited objectives and peaceful co-existence in the superpower mindsets that, at the time, appeared rather unreceptive. Second, Herz stressed that the cart should not be put in front of the horse. If the world was conceivable as, indeed was, 'one' in many respects, institutional mechanisms were not the immediate task at hand. Rather, for Herz world governance was something to be built from below, through the development of what he called a 'universal "comprehensive" view'. It was not that Herz wavered in his belief in the reality or necessity of this *Gesamtschau* or 'planetary mind'; he argued that '[t]he underlying facts of "globality" must, and do, have their impact on minds and attitudes' (Herz, 1959: 317, 319). Rather his point was, common to much realist thinking at the time, that any solution to political problems had to take account of underlying sociological and ideational facts. Approvingly citing Hegel to the effect that '[t]hought achieves more in the world than practice, for once the realm of imagination has been revolutionized, reality cannot resist' (Herz, 1957: 493), Herz held discussion of the details

of 'a more integrated world structure' to be 'theoretical and detached from present realities'.[16]

The main task was to examine how universalism could be brought about. Always out to

unmask appearances, Herz also warned that universalism could be exploited for non-

universalists purposes. Still, in his estimation, true universalism was likely to be brought about

only through 'a revolution in minds and attitudes rather than in a shape of a mass movement'

(Herz, 1959: 349). He critically assessed functionalist ideas and discussed ways in which

international law, a *Sorgenkind* of the once legal positivist, could in their limited ways express

and help internalize a growing universalism (Sylvest, 2010). Political authority *ought* to (but so

far did not) reflect the sociological conditions of the modern world including global threats to

survival.

The distinction between the two modes of nuclear realist thinking about world

government and world governance – represented by Russell and Herz respectively – is not rigid.

The relationship between the top-down strategy of power and the bottom up strategy of ideas

and allegiances is not static. Russell would support any effort in the direction of enlarging

loyalties beyond the nation-state, and Herz was not categorically opposed to discussing

technicalities and blueprints.[17] Nevertheless, nuclear realists were well aware that the

procedural preconditions for the realization of this global vision, the safe-guarding of civil

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[16] Herz (1959: 303). In the same context Herz remarked that existing plans for supranational government – for example those described in Frederick L. Schuman's, *Commonwealth of Man* (1952) – did not sufficiently take the new, revolutionary conditions of the nuclear age into account.

[17] Indeed, Herz speculated already in 1959 about a 'global organization and of planning for the implementation of global needs' – a rather technocratic formulation – and later he envisaged a sort of now-medievalism in which new supranational agencies would constitute 'a new kind of permeability from above' that in turn could restore the nation state (Herz, 1959: 232, 342).

liberties and the radical diversity of views enjoyed grim prospects. Political culture and

democracy had been perverted with the expansion of nuclear statehood firmly rooted in the

complex of knowledge production that provided templates for ever more ambitious schemes

of total, scientific warfare in which any logistical and strategic problem, no matter how

complex, could be solved by rigorous, quantitative methods.

Against this background, there was one thing on which nuclear realists agreed, namely

that a more nuanced, perspectivist outlook was absolutely essential for the success of their

vision. Obsessed with interpreting rapid change in the *longue durée*, Mumford installed world

government – a term he was clearly comfortable with (e.g. Mumford, 1954b: 43, 71, 89, 98) –

in a civilizational perspective.

> Civilization is the process whereby a part of mankind threw off the limitations of a
> rigid, static, tribal society, increased the range of human co-operation,
> communication, and communion, and created a common instrument for the
> continued development of personality and community … Civilization is the never-
> ending process of creating one world and one humanity (Mumford, 1954: 31-32).

Such globalist views – whether couched in the language of authority or allegiance – depended

for their realization on a necessary change of outlook. Instead of worshipping power and force,

for nations and individuals to achieve their potential required a moral transformation involving

'the increase of self-understanding, self-control, self-direction and self-transcendence'

(Mumford, 1959d: 77). Only in that way could the paralyzed thinking of the superpowers be

surmounted. Citizenries were pacified by a form of political and ideological "knowledge" that

demanded but appeared resistant to close examination . 'Today the fallacy of "either-or" dogs us everywhere...' (Mumford, 1956: 317-18). Instead, he wanted more alternatives brought into view, a strategy that required 'sufficient flexibility of mind' as well as 'intelligence, imagination and audacity' (Mumford, 1954a: 7, 9). This quest to cultivate the aesthetic, eccentric, emotional, and imaginative faculties of human beings was a common nuclear realist response to the social and political stalemate of the Cold War.

Conclusion

In this paper we have examined nuclear realism as constituting an important but so far underexplored moment of thinking about security and global politics after the thermonuclear revolution. Nuclear realists not only criticized the positivist and rationalist assumptions that underpinned the theory and politics of Cold War strategy. Their critique of deterrence also functioned as a springboard for a wider, more fully fledged analysis of social and political life under conditions of globality. Departing from the view that balance of power politics had become obsolete, their political theory was action-focused and supported global reform as the only realistic policy in a situation, where great power war could all too easily escalate into omnicide. Considering the intensity of their incessant critique and the challenges that their ambitious calls for global reform entailed and, however, their positive vision remained, at the institutional level, somewhat disappointing. There are several reasons for this. Most obviously, the provision of blue-prints would run directly counter to their realist understanding of politics

and science as context-bound. After all, and despite twentieth-century experiments with international organization, many world order proposals of the past had provoked reactions similar to that of Rousseau who in writing a favorable introduction to the elaborate, rational and idealistic proposal authored by Abbé de Saint-Pierre nevertheless remarked that it is 'a sort of folly to remain wise in the midst of those who are mad.' This statement was not without relevance for nuclear realists, who occasionally came to resemble frustrated prophets thankful for any kind of airtime, however fragile and fanatic their appearance.

Yet the critique of nuclear militarism that they developed during the 1950s and early 1960s, and in particular that aspect of their critique that related to the intertwining of epistemology and ethics that informed the invention, operation, maintenance and deployment of this *hyper*-modern technology, also sharpened their grasp of wider social and political issues. The examination of military force played a crucial role here, since it refocused the attention of Mumford, Anders, Russell and Herz on the limitations and imperfections of social agents. In contradistinction to the strategists of the so-called 'golden age', their critique developed in tandem with a wider cultural diagnosis and led them (re)formulate a political theory extending far beyond, but remaining somehow dependent on, the analysis of military force. The thermonuclear revolution came, namely, to function as a supreme moment of both modernity and globality, which in turn required nuclear realists to examine the meaning of freedom, technology, and human life anew. Mumford perhaps put it best, when he argued against the notion that politics is the art of the possible. In the wake of the thermonuclear revolution, politics acquired an altogether different character, because its limits were irrevocably

transgressed: 'If politics means anything today, it must become "the art of the *im*possible."
The people who sacrifice every principle to expediency, every long-range plan to immediate
profit, are the people who live in a world of slippery fantasies and self-deceptions' (Mumford,
1954a: 7).

For these reasons alone, it is appropriate to revisit nuclear realism. Doing so now,
however, is especially apt, since these ideas can supply a more complex historical foundation
for the renewed campaign for a nuclear weapons free world, as it has been formulated by a
growing number of current or former politicians and practitioners.[18] Whatever the utopian or
cynical interests that may lay behind ostensible American policy shifts, "nuclear zero" has
become the linchpin of a movement spearheaded by the so-called "Prague generation" and its
attempt to reinvigorate a push for nuclear disarmament around the globe. In this light, the
contentions of nuclear realism regain their political urgency. Revisiting the ideas and practices
of its exponents and determining the strengths and weaknesses of nuclear realist politics can
provide inspiration, guidance and caution to those searching for new forms of global politics in
our century.

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[18] See also, Hugh Gusterson, 'The new abolitionists', *Bulletin of the Atomic Scientists*, 30 March 2012,
http://www.thebulletin.org/web-edition/columnists/hugh-gusterson/the-new-abolitionists

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