information services
gwasanaethau gwybodaeth

Author Queries

Dear Author/Editor,

Greetings, and thank you for publishing with SAGE. Your article has been copyedited, and we have a few queries for you. Please respond to these queries when you submit your changes to the Production Editor.

Thank you for your time and effort.

NOTE: Please answer the queries by editing within the article: follow the AQ hyperlink below and edit the text directly. Add a "New Comment" (in the "Review" tab), if the correction cannot be done directly or for further queries.

Below, please tick the boxes to the right of the query, to indicate the query has been dealt with.

Please assist us by clarifying the following queries:

	Please confirm that all author information, including names, affiliations, sequence, and contact details, is correct.	☐
	Please review the entire document for typographical errors, mathematical errors, and any other necessary corrections; check headings, tables, and figures.	☐
	Please ensure that you have obtained and enclosed all necessary permissions for the reproduction of artworks (e.g. illustrations, photographs, charts, maps, other visual material, etc.) not owned by yourself. Please refer to your publishing agreement for further information.	☐
	Please note that this proof represents your final opportunity to review your article prior to publication, so please do send all of your changes now.	☐
AQ 1	'Hymans (2013)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 2	'Mueller (1989, 2010)' are not listed in the references. Please provide reference details or delete the citations.	☐
AQ 3	'Kaplan (1983)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 4	'Waltz (1981)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 5	'Waltz and Sagan (2010)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 6	'Wendt (1999)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 7	'Deudney (2015)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 8	Please clarify whether 'Morgenthau (1962)' refers to 'Morgenthau (1962a)' or 'Morgenthau (1962b)' throughout the text.	☐
AQ 9	'Malloy (2008)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 10	'Ikenberry (2011)' is not listed in the references. Please provide reference details or delete the citation.	☐
AQ 11	Please update 'Craig and Ruzicka (in press)'.	☐
AQ 12	'Deudney (2011)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 13	'Deudney (2017)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 14	Please update 'Deudney (2017)'.	☐
AQ 15	Please provide page range for 'Einstein (1956)'.	☐
AQ 16	'Gavin (2015)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 17	'Jervis (1984)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 18	'Kroenig (2015)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 19	'Lieber and Press (2013)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 20	'McQueen (2013)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 21	Please update 'McQueen (2013)'.	☐
AQ 22	'Morgenthau (1946)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐

AQ 23	Please note that 'a' has been added to reference 'Morgenthau (1962)' to avoid confusion between two references with identical name and year. Please check.	☐
AQ 24	'Morgenthau (1962b)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 25	Please provide date of publication and page range for 'Morgenthau (1962b)'.	☐
AQ 26	'Morgenthau (1964)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 27	'Scheuerman (2011)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 28	Please provide page range for 'Van Benthem van der Bergh (2012)'.	☐
AQ 29	'Walker (2012)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐
AQ 30	'Waltz (1990)' is not cited in text. Please indicate where a citation should appear or delete the reference.	☐

Solving the nuclear dilemma: Is a world state necessary?

Campbell Craig
Cardiff University, UK

Abstract
The unique dangers raised by the possibility of nuclear warfare have long prompted intensive debates about what political action is needed to avoid it. While most scholars contend that it is possible to prevent a nuclear war without fundamental political change, others argue that a substantial solution to the problem demands the abolition of the existing interstate system. Two such 'radical' positions are the 'Weberian' school, which insists that an authoritative world state is necessary, and Daniel Deudney's alternative, a liberal order based upon republican traditions of mutual restraint, internal power balancing and powerful arms control institutions. In this essay, I argue, using both historical and theoretical analyses, that the regime Deudney envisions would amount to the establishment of a Pax Americana. This would be rejected by illiberal nuclear powers and therefore fail to solve the nuclear problem.

What political action is necessary to prevent nuclear war? This question, debated even before the bombardment of Hiroshima and Nagasaki, cuts to the heart of thinking about international politics (Boyer, 1985). Does the avoidance of a possibly omnicidal nuclear conflagration necessitate radical political change, or can it be reliably prevented by reform within the existing international system?

The dilemma facing scholars who contend with this problem is plain. At present, we face two incontestable realities: the continued possession of thermonuclear weapons systems by several sovereign states and an anarchical international order in which there is no authority capable of preventing these states from using them. The combination of anarchy and arsenals portends an eventual nuclear war, if one accepts the standard definition of anarchy as precisely a condition in which major war is possible (Mearsheimer, 2001; Waltz, 1959). It is a dilemma because the threat posed by this combination would logically seem to require transformative change if we are to avert a

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

war that could exterminate humanity; yet, transformative change would, presumably, unravel an international order kept unusually stable at least in part because most of its major powers possess nuclear weapons systems. In other words, the kind of action necessary to rid ourselves of the danger of nuclear war threatens to increase the chances of it happening (Jervis, 1989; Van Benthem van der Bergh, 2012). We ride the back of a nuclear tiger.

In this essay, I introduce reformist and radical attempts to deal with the nuclear dilemma and then focus upon the debate between two radical solutions: a 'Weberian' world state and Daniel Deudney's republican alternative. I show that historical evidence from the Cold War bolsters the claim that only a Weberian state can adequately solve the problem, and that Deudney's alternative today, in the post-Cold War world, would be rejected by illiberal nuclear powers for the same reasons they did during the Cold War – because it would amount to a Pax Americana. Only an authoritative world government can assure all states that the nuclear dilemma is solved for good, but they will not accept such a government if it is effectively dominated by one of them.

Solving the nuclear dilemma

Scholars have long tried to develop political solutions to the unique problem of nuclear war. We may categorise them as either *reformist* or *radical*.

Reformist

We can identify four general approaches to the nuclear dilemma which seek to solve it short of radical transformation. The first basically reflects the official policies of the major nuclear states and mainstream international organisations designed to reduce the threat of nuclear war. This approach, largely unchanged since the Cold War, seeks to maintain stable forms of nuclear deterrence among the major nuclear powers, a process facilitated by moderate arms control measures, the eschewing of offensive weapons arsenals, strategies and missile defence systems, and cooperative and sustained efforts to prevent the proliferation of nuclear weapons to more states (Debs and Monteiro, 2016). This approach is based upon the assumption that deterrence worked during the Cold War and can continue to do so today, but only, or at least ideally, in a stable international order (Harrington, 2016; Monteiro, 2014; Monteiro and Paci, 2017; Pelopidas, 2016; Walker, 2007). In other words, this first solution effectively aims at a freezing of nuclear international politics in its present form, with existing nuclear states maintaining their arsenals (despite rhetoric about disarmament) and preventing other ones from obtaining the bomb. In this sense, it is the most conservative means of dealing with the nuclear dilemma: the greatest danger is any kind of transformative change.

The second reformist solution declines as well to advocate radical transformation of the existing international order, but argues that the danger of nuclear war can be substantially reduced, or even eliminated, if states and peoples come to reject the utility

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

of nuclear weaponry and deterrence, and, correspondingly, to regard the use of nuclear weapons as both abhorrent and ridiculous, as something absurd to even imagine. This approach, strongly shaped by the 'constructivist' school of international relations (IR) theory, contends, rightly, that nuclear weapons are only inanimate things and need never be used if political leaders refuse to do so; moreover, the condition of anarchy is only a construct of human thought and need not inexorably produce major war. International cooperation can increase, interstate conflict can diminish or even disappear (as it has among some European states, for example) and the assumption that war is an acceptable, much less inevitable, means of settling international differences can gradually become obsolete, like assumptions about slavery, simply if people come around to that way of thinking (Hymans, 2013; Mueller, 1989, 2010; Paul, 2016; Ritchie, 2013; Tannenwald, 2013; Wilson, 2013). Thus, the dilemma can be solved not by managing arsenals and anarchy, but by refusing to accept their salience, a process which could culminate in their obsolescence, as the recent 'humanitarian' initiative to ban nuclear weapons stresses (see Sauer, 2017).[1]**[AQ1] [AQ2]**

The third and fourth reformist approaches seek to solve the nuclear dilemma by proposing fundamentally new strategies towards nuclear weaponry. As Robert Jervis has noted, the third solution deals with the dilemma by denying the salience of the nuclear revolution. Nuclear strategists, whether in the late 1950s or (increasingly) over the past several years, contend that a nuclear war can be fought and won, and that states can and should develop new technologies and war-fighting strategies to try to win such a war in the future. While these strategists do not (and for the most part, did not) deny that a general nuclear war would be a catastrophe that threatens human existence, they argue that limited nuclear wars can be won and, under certain circumstances, would be rational to wage (see Kaplan, 1983). Contemporary advocates of this view stress, in particular, profound innovations in battlefield weaponry, counterforce intelligence, and missile defence systems as evidence that the nuclear dilemma can be overcome by technological advancement and strategic thinking (Kroenig, 2013; Lieber and Press, 2017; Long and Rittenhouse-Green, 2015). Indeed, if the United States (there is no other nation to which this argument remotely applies, at present) can obtain reliable superiority over all nuclear adversaries, it can reduce, if not eliminate, the nuclear dilemma by preponderant power rather than management or ideas (Lieber and Press, 2006). This approach fits within larger conceptions of US grand strategy aiming at primacy, particularly over potential rivals such as China and Russia.**[AQ3]**

On the contrary, advocates of the fourth solution argue that the nuclear revolution obtains so manifestly that the fear of nuclear war it creates solves the problem in the first place. Scholars such as Kenneth Waltz have contended that nuclear deterrence is essentially the perfect form of defence, and therefore that a world filled with nuclear-armed states would never see war. The catastrophic implications of the nuclear dilemma are so acute and apparent to all that it should be used to promote peace rather than reformed or overcome. Thus, Waltz and others have criticised official policies of disarmament and (especially) nonproliferation as both futile and counterproductive: the fear of nuclear war is to be welcomed as a force for peace rather than eliminated or

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

ameliorated (Craig, 2003; Mearsheimer, 2001; Waltz, 1981; Waltz and Sagan, 2010; see also Oren, 2009). If the nuclear strategists often favour US primacy, advocates of nuclear spread foresee a return of balance-of-power politics and recurrence of international rivalries like the Cold War. Ironically, leading scholars in these two latter reformist schools tend to self-identify as Realists, even though they advocate diametrically opposed policies.**[AQ4] [AQ5]**

Radical

The last two approaches in this introductory overview comprise the radical debate. These two schools contend that nuclear weapons are *not* compatible with interstate anarchy, and that therefore – since nuclear weapons cannot be disinvented – it is that system which must disappear if the problem of nuclear war is to be reliably solved.

The first, associated with early nuclear age thinkers such as Albert Einstein and Hans Morgenthau, the IR theorist Alexander Wendt, and my own work, can be expressed simply: the nuclear dilemma can only be solved in a reliable and permanent way by building an authoritative world state (Boyer, 1985; Craig, 2003, 2008, 2015; Einstein, 1956; Morgenthau, 1960 [1948], 1961; Wendt, 2003, 2015). This state could manifest itself in relatively weak or strong forms, but it would have irreducibly to take possession of all nuclear weaponry from existing states and the deploy the necessary power to prevent any 'sub-state' groups from building such weaponry in the future. In other words, it would have to be a *Weberian* state: it would have to possess a monopoly over war-making weaponry.

I take my definition of a Weberian world state from Alexander Wendt, who introduces the concept in his book *Social Theory of International Politics* and his 2003 article 'Why a World State is Inevitable' (Wendt, 1999, 2003). Wendt sees a Weberian state as having four characteristics. It must possess a monopoly of force; that force must be regarded as legitimate by the subjects of the state, that is, all the nations of the world; it must enjoy sovereignty, the ability to establish and enforce the law over all subjects; and it must become an 'actor', a corporate entity able to act as a unitary agent. This essay will not explore the latter political characteristics of a Weberian state, as important as that discussion must become. I am concerned here, rather, only with the objective sine qua non of securing a monopoly over war-making weaponry, and the acceptance of this by all other actors. My basic claim is that a world government which did not possess such a monopoly would be unable to coerce existing states into accepting its rule and obeying its laws, paving the way for an eventual conflict between the world state and a nuclear power that would lead to a war and/or the collapse of effective global government. As Wendt puts it, the 'key problem' for any putative world government which falls short of the Weberian threshold is 'unauthorized violence by rogue Great Powers' (Wendt, 2003: 506).**[AQ6]**

The alternative to this solution is provided by Daniel Deudney, who has established the case that nuclear weapons are incompatible with the existing interstate system at authoritative length in his book *Bounding Power* and several other pieces. Deudney develops the argument that the anarchical order must be replaced by a republican

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

negarchical system, one characterised by limited and decentralised government, division of powers, and the rejection of a hierarchical world state (Deudney, 1995, 1999, 2007, 2015). For Deudney, the nuclear dilemma can be solved by an evolution towards a diffuse regime of supranational institutions, ones which aim at wholesale arms control and the creation of mutually restraining political binds and laws among existing states.**[AQ7]**

Deudney's critique of the Weberian model boils down to two overarching points. The first, normative, claim is that an authoritative world state, while ostensibly providing a more logical solution to the nuclear problem, poses unacceptably dire and irremediable risks to human liberty, and indeed human security. The survival of human beings, he stresses, is threatened not only by interstate war but also by the predation of hierarchical governments ('death by state'), and the latter threat could become unrestrained and inescapable were a Weberian world state to become tyrannical. If the core purpose of government is to protect human beings from external danger, then the creation of a powerful world state that could kill citizens with impunity does not constitute a proper solution to the security *problématique* (Deudney, 2007).

His second, more theoretical claim is that the Weberian assumption is obsolete: a traditional hierarchical world state built along the lines of a powerful nation state is not necessary to eliminate the nuclear dilemma. Because a world government need not concern itself with external threats (barring extraterrestial invasion) and therefore foreign policy, it can come into being in a qualitatively different form than the ones with which we are familiar today. Built without an external security edifice, and indeed not designed to consider outward policies at all, such a regime would not resemble the modern state, and so could be reliably and systematically deprived of the means to threaten human security and liberty. In short, Deudney argues that it is possible, as well as necessary, to imagine and build a global order which both effectively eliminates nuclear danger and is incapable of attaining repressive state powers: a 'fully nonhierarchical, fully republican, world federal government', as he put it in *Bounding Power* (Deudney, 2007: 20).

The rest of this article will argue, employing both historical and theoretical analyses, that such a regime cannot work in the nuclear age, because the order he envisions would amount to a Pax Americana which illiberal nuclear states can and will reject. During the Cold War, important thinkers and officials recognised this; their insights still apply today.

Two historical lessons from the Cold War

Because nuclear weaponry has existed for 70 years, and the nuclear revolution – the advent of megatonne thermonuclear weaponry and intercontinental ballistic missiles – took place more than 50 years ago, it is reasonable to ask why we have not seen global developments along the lines Deudney has proposed. Although he suggests that his vision of a global institutional order derives from the 'logic of arms control politics that have emerged over the decades' since the early Cold War, the fact remains that no powerful supranational arms control organisations emerged during

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

the Cold War (or since its end). Nuclear states are no more constrained by institutions now than they were 60 years ago and continue to avoid nuclear use for fear of its catastrophic consequences as a result of retaliation by other nuclear states rather than because there is a supranational institution that can stop them. Arms control remains the province of ameliorative negotiation among large nuclear states who have no intention of disarming, and, in the form of the nonproliferation regime, preventing other states from joining the club (Craig and Ruzicka, in press; Debs and Monteiro, 2016).

Why have we not seen the development of the institutional nuclear order Deudney envisions? This (or any) essay is not the place to answer this question fully. Rather, I will discuss two salient historical episodes, both of which show how attempts to develop systematic thought or policy about transformation of the international order ran up against the structural obstacles Weber identified a century ago.

Policy: The abortive Acheson–Lilienthal report and Baruch Plan, 1945–1946

For roughly 1 year, from mid-1945 to mid-1946, many atomic scientists, intellectuals, and some politicians in the West sought to develop a supranational order of atomic control.[2] Secretary of War Henry Stimson, New Deal executive David Lilienthal, diplomat Dean Acheson, atomic scientist Niels Bohr and many others urged (Bohr, since 1944) that the United States and its allies lead an initiative to establish an international arms control agency which could take possession of all atomic weaponry and regulate atomic energy (Boyer, 1985). Reports of the destruction of Hiroshima and Nagasaki intensified their efforts, and President Truman agreed, in late 1945, to commission a State Department report which would lay out a blueprint for such a scheme. In January of 1946, the 'Acheson–Lilienthal' report was completed (and immediately leaked to the press): it proposed a detailed plan for the establishment of international agencies of verification and inspection, centralised regulation of atomic energy and the gradual transfer of US atomic materials, facilities and 'know-how' to the just-created United Nations Atomic Energy Commission (UNAEC).

As the report's authors (and many of its critics) understood, the key obstacle to this proposal lay in its reception by the Soviet Union. That nation would have to open up its territory to full inspection by (Western) officials, dismantle any ongoing atomic production and agree to a permanent regime of verification and further inspection by an agency that would naturally be composed of scientists, military figures and administrators from the West. Moreover, it would have to do this, *while* the United States still kept its arsenal, and it would have to trust that an international organisation dominated by the West would eventually take control over American weaponry and remain independent of it (Craig and Radchenko, 2008; Herken, 1988; Sherwin, 1975).

Stalin, as we now know, would never have agreed to this in a million years (Craig and Radchenko, 2008). Yet, even this plan was deemed too risky for the United States to pursue, particularly after revelations in late 1945 and early 1946 of Soviet atomic espionage, discoveries which had been the subject of absolute secrecy in Washington

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

until a reporter revealed them in a radio address in February 1946 that rocked the nation. Even though the United States would certainly have largely controlled the UNAEC, supervised international inspection and verification, and kept its bombs until the agency's work was finished, the possibility of Soviet cheating dissuaded Truman, and all of his key advisors, from going ahead with the Acheson–Lilienthal report. The prospect of ceding the bomb to an international agency, only to discover that the Union of Soviet Socialist Republics (USSR) had successfully built its own bomb on the sly (with the help of American spies), was so utterly intolerable to the White House that the idea of international control was effectively shelved. Indeed, it is difficult to imagine any American leader deciding otherwise.

To avoid being held responsible for the failure of atomic control, Truman authorised Bernard Baruch, a veteran Democratic party financier, to develop a new plan to submit to the United Nations in June 1946. Against the wishes of some of the original report's supporters, Baruch altered the plan, announcing that the United States would not cede any material or information to the UNAEC until a thorough regime of inspection and verification was complete. Moreover, he declared that any nation discovered to have an atomic project would be subject to immediate sanction from the United Nations Security Council, whose new remit was to act with force against states deemed to be threatening international security. And unlike all other issues, in this case, there was to be 'no veto' against Security Council action against a suspected violator. Because American officials knew that the USSR had commenced an atomic project, and Stalin knew that they knew, the United States was effectively communicating to Moscow that agreement to the Baruch Plan, as it was now called, would invite Security Council action against it in the name of atomic peace which the Soviet Union could not veto. The chances of Stalin even considering this, much less accepting it, were zero, which allowed the United States to blame Moscow for the failure of atomic control when it abstained from the final Security Council vote in late 1946 (Craig and Radchenko, 2008; Herken, 1988; Messer, 1982).

Why did both the United States and the Soviet Union end up opposing any kind of supranational order to eliminate the possibility of atomic war in 1946? The essential reason was that both states were wholly unwilling to even consider relinquishing their atomic project without having ironclad guarantees that the other side would also be permanently and verifiably disarmed. This was true not only of the United States but also the Soviet Union, which did not yet have a bomb or even much of an atomic programme. As the US Joint Chiefs of Staff put it, in the atomic age, 'no system of inspection can be expected to be one hundred per cent effective in such a world, and ninety-nine percent effectiveness is no guarantee' (US State Department, 1967: 744). The revolutionary nature of atomic weapons (much less thermonuclear missiles) made it too risky to rely upon a supranational order which could not guarantee the absolute disarmament of all other states.

Which is to say, neither state, even in the devastating aftermath of the Second World War, and even at a time when only one nation possessed only a few rudimentary bombs, was willing to accept anything short of an authoritative world government if they were to disarm themselves permanently and irretrievably. Not only would a

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

supranational order weaker than that be incapable of preventing a state from building weapons surreptitiously, there was also the problem, central to Stalin, of who exactly would be in charge of the supranational institutions. In 1945 and 1946, there was one, and only one, nation capable of populating an international regime of atomic verification and inspection, and of providing the armed forces necessary to invade a violator: the United States. For Moscow, a supranational order with the actual power to control atomic weaponry could only mean one thing: Pax Americana (Craig and Radchenko, 2008).

Thought: The 'nuclear one-worldism' of Hans Morgenthau[3]

A second episode in the history of attempts to develop a supranational response to the nuclear problem during the Cold War comes in the form of scholarly thought – that of the dominant Classical Realist Hans Morgenthau. The advent of the nuclear revolution in the late 1950s and early 1960s, marked not only by the development of thermonuclear bombs and missiles but also Cold War crises in Berlin and Cuba, led Morgenthau to conclude that a world state was the only sure means of solving the nuclear dilemma. Jettisoning his earlier categorical rejection of world government, and indeed his brief flirtation with limited nuclear war strategies, Morgenthau determined by 1960 that the spectre of nuclear omnicide necessitated a Weberian world state. The threat of nuclear war, he declared, 'suggests the abolition of international relations itself through the merger of all national sovereignties into one world state which would have a monopoly of the most destructive instruments of violence' (Morgenthau, 1961: 231). However, he failed to pursue this idea in any systematic fashion, instead turning his attention during the twilight of his career in the 1960s towards the Vietnam War, of which he was one of America's earliest and most vocal critics.

Morgenthau had long understood quite well that the solution to the nuclear dilemma could not be achieved by piecemeal reform. If the world were to be rid permanently of the spectre of nuclear war, nothing short of a world government capable of verifying and enforcing total global disarmament would do. Without it, nations would be able to cheat, to withhold nuclear weapons secretly, and the fact that everyone knew this was possible would stop a more modest initiative in its tracks. 'Effective over-all disarmament', he told a subcommittee of the Senate Foreign Relations Committee in early 1957, 'is tantamount to the establishment of a world government' (Morgenthau, 1962: 142). Why then did he not advocate just that?**[AQ8]**

The problem, he perceived, lay in the structure of Cold War politics. Nuclear peace could not be had without a serious world government, but such a government could not come into being unless the two Cold War superpowers were willing to establish a new entity that had more power than either of them did. The situation by the early 1960s was particularly tragic: on one hand, the danger of war had now become omnicidal, making the creation of a world government an urgent task, on the other hand, the USSR was now an established power, with its own massive nuclear arsenal, and so could be even less expected to agree to a world government that would be acceptable to the United States. There was no other way: a political resolution to the Cold War had to

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

occur before the nuclear dilemma could be solved. In the third edition of *Politics among Nations*, published in 1960, Morgenthau put it like this:

> Competition for armaments reflects, and is an instrument of, competition for power. So long as nations advance contradictory claims in the contest for power, they are forced by the very logic of the power contest to advance contradictory claims for armaments. Therefore, a mutually satisfactory settlement of the power contest is a precondition for disarmament. (Morgenthau, 1960 [1948]: 411)

The two superpowers could, and should, Morgenthau incessantly argued, reach negotiated settlements on outstanding issues, pursue arms control and resume diplomatic contacts. They should act more like the European states of the nineteenth century. But actual disarmament was a different issue entirely. That would require a mutually satisfactory settlement of the power contest, and this, he presciently stated in 1959,

> cannot be settled by the give-and-take of negotiations. It will be settled, after negotiations have done their work on the political plane, by the nobler and weightier act of performance. Which system will prove capable of meeting basic human aspirations for itself and for mankind? (Morgenthau, 1962: 320)

Morgenthau could not recommend substantial change because the anarchical condition of Cold War international politics, which he believed still prevailed, would prevent either superpower from disarming completely without being sure that the other side was doing the same. In the nuclear age, the only way to be sure that the other side was not cheating is to construct a world government, and that could not happen as long as the two sides 'advanced contradictory claims in the contest for power'. The only other logical alternatives to waiting for the Cold War to end was for the United States to disarm unilaterally and leave the field to the Soviet Union, or, conversely, for the West to launch a general war to conquer the USSR and establish a world state by might. For Morgenthau, both of these options were so unacceptable that muddling through the Cold War was the only possible course of action.

Deudney suggests that Morgenthau failed to conceive of a world state because he was concerned about its tyranny and unable to conceive of a world order which did not resemble a nation state. The first claim is not supported by the historical record. He did describe a world state as a potential 'totalitarian monster', but this was in 1947, well before the nuclear revolution altered his views. In 1960, he stated clearly that the challenge in developing a world state lay in preventing tyranny: but the whole point was that such a state had to be developed in a way that somehow avoided tyranny, a point to which we will return in the conclusion. As for the second point, this is correct, but that is because Morgenthau believed in the necessity of a Weberian world state.

These two historical episodes provide a sense of the insurmountable obstacles facing those who were sought to imagine some kind of supranational order that could have effectively ended nuclear danger during the Cold War (see also Van Munster and Sylvest, 2016). In both cases, politicians and scholars alike concluded that such a

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

project was impossible, for basic Weberian reasons, *before even worrying about* the dangers of world state tyranny. There was no way for any Western leader to accept a serious regime of supranational arms control which could not guarantee that the USSR could not cheat, could not emerge as a 'rogue state' in an ostensibly global order; and, because even a few nuclear missiles are strategically decisive and easy to hide, there was no way to ensure that could not happen without building a world state which possessed a monopoly over such weaponry, a reality that the Joint Chiefs of Staff presciently recognised as early as 1946. Engaged leaders and thinkers such as Bohr, Stimson and Morgenthau at least tried to conceive of some kind of new order (on Bohr and Stimson, see Craig and Radchenko, 2008; Malloy, 2008; Sherwin, 1975). Most in the West, not to mention the USSR, did not even bother, settling for a condition of mutual assured destruction (MAD) and managed deterrence – our first means of solving the nuclear dilemma – after the Cuban crisis of 1962. MAD provided a means of reducing nuclear danger without forcing American or Soviet leaders to collaborate on a world state or to choose between surrender or a catastrophic war of global conquest: or, as it was put in the United States, 'Red or Dead'. Plans for world government got nowhere during the Cold War because neither superpower was willing to take the colossal risks of subordinating themselves to a state which they themselves could not control, and because, after the traumatic crisis years of the late 1950s and early 1960s, they found in the condition of MAD an easier way to avoid nuclear war.**[AQ9]**

The Weberian problem after the Cold War

The struggle for power among rival states during the Cold War prevented fundamental global nuclear reform because there could be no agreement about the political orientation of a supranational system, and because the unique nature of nuclear weaponry dissuaded states, even the supreme United States after Second World War, from placing their trust in a global order which fell short of the Weberian bar. The United States would only have pursued supranational atomic control if it was in complete control of that regime, a political reality which manifested itself in the Baruch Plan of 1946. As that plan specified, the United States would have been responsible for verifying that all other states disarmed, enforcing sanctions against violators, while retaining its arsenal under effective American control. To put it another way, the United States would only have agreed to supranational atomic control if it itself became a Weberian world state.

The core question underlying this debate is whether a new nuclear order can be established today, now that the Cold War is over and we live in a world of unipolarity, which can avoid this quandary. Can an authentically nonhierarchical regime emerge which effectively rids us of the spectre of thermonuclear war?

Liberal nuclear order in an illiberal world

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

In *Bounding Power* and other recent writings, Deudney develops two distinct conceptions of the global order he foresees. The first is theoretical and materialist. For Deudney, external threats to human security come from disequilibria in what he calls conditions of 'violence-interdependence', when the destructive power of military technologies overtake the capacity of states to protect their citizens from it. As he shows in the book, throughout history states have consistently increased in size in order to contend with the 'bounding power' of technologies of destruction, a process culminating in the ascent of continental-sized superpowers such as the United States and the Soviet Union in the aftermath of an industrial Second World War which overwhelmed 'European'-sized states. With the advent of the nuclear revolution, even continental states are not large enough to survive major warfare, suggesting powerfully that a global 'state' is necessary to protect its 'citizens' from the omnicidal prospect of general thermonuclear war (Deudney, 1995, 2007).

As we have already noted, Deudney goes on to argue that a global state formed to cope with the planetary threat created by the nuclear revolution need not take the form of the modern nation state, because it would not need an external security policy and so could be developed irrespective of any concerns about what he calls the 'second anarchy', that is, external threats from other states. In *Bounding Power*, he lays out, with great imagination, a series of ideas on how a 'negarchical' global government might eventuate, one based upon institutional forms of mutual restraint and republican political foundations. This move allows him, as we have also seen, to address the violence-interdependence nuclear revolution problem without advocating a hierarchical world state and the 'death-by-state' violence it could engender. These claims fit within his human security/materialist theorising seamlessly.

Deudney's second conception, which would seem naturally to follow from the first, is that the political orientation of the global order he advocates must be liberal. In one sense, this is only self-evident: a republican global order would presumably be governed according to liberal/republican principles. A liberal regime would be best able to accommodate the restraint and decentralisation inherent in negarchy; a liberal regime would respect the security and liberty of its citizens, thus avoiding the death-by-state violence an illiberal regime would threaten. In a paper for the Council on Foreign Relations, Deudney and John Ikenberry call for a new US grand strategy, 'Democratic Internationalism', which would seek to use American power to extend these principles. They advocate heavy and increasing US involvement in global institutions and democracy promotion, aiming, as they say, at the 'worldwide triumph of the liberal vision' (Deudney and Ikenberry, 2012: 10) The order he advocates, therefore, must have a *political* orientation – liberal – and be associated with the power of a liberal state – the United States. In making these preferences evident, he departs from his materialist argument that a generic security-providing order must emerge to contend with a planetary condition of thermonuclear violence-interdependence: the order must not only be effective and nonhierarchical but also liberal and American-led.

Would such a liberal world order be acceptable to all powerful states in our contemporary world? Deudney and Ikenberry appear to assume that it would, but their article does not address this question substantially. The issue, however, is fundamental.

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

As Stalin perceived in 1946, the question that really matters is not how a world government is formally conceived, but who actually runs it. The American plan for atomic control purported to be international, but in fact it would have been dominated by the United States, and so not actually a world government. Stalin's rejection of the Baruch Plan, similar to his rejection of earlier US proposals (such as the Bretton Woods agreement) lay in his correct understanding that accepting such plans would mean ceding global supremacy to the United States, whatever the merits of the proposals.

The situation today, end of the Cold War notwithstanding, is identical (see Craig, 2009; Wohlforth and Brooks, 2007). Who, today, would take the leading role in establishing the liberal and nonhierarchical world government he foresees, a task requiring monumental resources, power, and political leverage? Of course, this is not even a question. The United States, a liberal hyperpower bestriding the world, is the only conceivable state which could do this; whether Deudney believes that the United States *should* lead such an effort is less important than the fact that it is the only state which *could* do it (see Ikenberry, 2011).**[AQ10]**

In his most recent paper on the subject, Deudney avoids the ideological argumentation of his earlier piece with Ikenberry and returns to the notion of a generic and powerful arms control regime. He argues that

> If completed, the nuclear arms control project produces an exit from interstate anarchy, but does not entail the erection of a world state. Borrowing and expanding the language of regime theory, the nuclear arms control project seeks to create a regime of such importance that all states, even the most capable, depend on it for their continued security, making such an arrangement a complementary regime. A world order with a regime serving such a central security function can no longer be said to be anarchical, but is at the same time not a hierarchical world state.

This proposal, however, begs the same questions that were asked by Stalin or Morgenthau during the Cold War. First, if the new arms control project is so powerful that all states, 'even the most capable', depend on it for their security, does this mean that these states, including the United States, would give up their nuclear weapons and so no longer depend on them for their security? This would seem inescapably to be the meaning of Deudney's suggestion. But would the United States, or Russia, or China, take such a step if they were not politically in control of this new regime? Would the United States disarm if such a regime were dominated by Russian and Chinese officials, and, more important for our purposes, would Deudney support such a decision? If the answers to these questions are 'no', as they at present certainly would be, then how could such a regime eventuate? How does this proposal not simply take us back to the Weberian problem?

Second, if the regime were somehow able to overcome this obstacle, and its overriding mandate was to prevent interstate nuclear war, how could it avoid becoming hierarchical? As observers of the Baruch Plan discerned 70 years ago, such a regime would have, above all, to reliably disarm all existing nuclear powers and to prevent all states from surreptitiously acquiring the bomb afterwards. Because nuclear weapons

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

are small and easy to hide, and the acquisition of nuclear weapons by a 'rogue' state would presumably constitute a mortal threat to the regime, how could it forestall developing the substantial state powers necessary to prevent such a disaster?

Given Deudney's earlier demands that a prospective world government be nonhierarchical, liberal and able to put a complete end to interstate nuclear anarchy, it is transparent that the regime he envisions must be dominated by the United States. The United States is the world's leading liberal state; it alone possesses the tools to prevent rogue states from rearming, and, as he argues at length in *Bounding Power*, America also has cultivated a political tradition of an anti-hierarchical, republican diffusion of state power, which he calls the 'Philadelphian system'.

But, as we have already noted, illiberal states such as Russia and China will not subordinate themselves to a regime effectively dominated by the United States, however, this regime is designated. For Deudney's project to succeed, this problem must be overcome. How?

In a pre-nuclear age, the United States could wage a Roman-style campaign of global military conquest to impose liberalism worldwide, but – and for reasons which Deudney himself spells out precisely in his work – this is a much more formidable task today, since China and Russia possess large nuclear arsenals (see Monteiro, 2014). If the United States chose not to coerce Russia and China, then it could presumably develop an incomplete regime along Deudney's lines, but this solves nothing. A liberal regime dominated by the United States but rejected by other nuclear states would not eliminate nuclear danger because 'rogue' states would retain their nuclear arsenals, thus making a war between them, or between one of them and the liberal regime, still possible. Anarchy would continue to obtain. It would therefore not be an effective government because it would be unable to compel 'rogue' states to obey its laws. China could deny its citizenry basic human rights, Russia could invade the Baltic states, and the liberal world government would either have to acquiesce or wage war against them.

Perhaps most significant of all, it would not, and could not, be nonhierarchical. As we have pointed out, even an authentically global regime would have to adopt some hierarchical powers; in a condition of incomplete nuclear order, it would have to adopt intensive ones. For unless the liberal regime wanted to run the risk of nuclear blackmail or destruction at the hands of illiberal nuclear powers, it would have to maintain an external security policy, retain hierarchical control over its war-making weaponry and deploy it against illiberal states. Indeed, liberals like Deudney would be the first to demand that the liberal regime remain hierarchical and armed to the teeth, and they would be right to do so. World politics would continue on as an anarchical condition in which a liberal state is pitted against illiberal ones. Such a scenario is the opposite of 'negarchical' republican order, and indeed is basically what we have today.

As is evident, the problem for Deudney is the simple existence of powerful illiberal states, which may be why they are hardly mentioned in his article with Ikenberry. For his nonhierarchical liberal world government to succeed, all major powers must become willing to take part in a US-led liberal regime.

There are two conceivable means of achieving this goal. The first, recalling Francis Fukuyama's 'End of History' thesis, would be to wait for liberalism's inevitable

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

victory (Fukuyama, 1992). If worldwide liberalism is necessary, then perhaps the West should effectively sit back and wait for it to happen. Deudney and Ikenberry (2012) hint at such a policy, arguing that the West should rely more on the 'pull of success' rather than the 'push of power' while cultivating alliances and cooperation among Democratic states and societies (Deudney and Ikenberry, 2012: 3). This answer would be consistent with Deudney's materialist teleology as well as his anti-militarism.

It is not consistent, however, with the normative claim that interstate anarchy is incompatible with nuclear weaponry and that this problem demands urgent solution. A policy of waiting represents the opposite of urgency and does nothing to contend with the possibility that Fukuyama was wrong, something that recent political trends in the West suggest may well be likely. China and Russia might liberalise, but then again they might not, and could well be joined by other illiberal nuclear powers in the meantime. Unless Deudney can demonstrate that all illiberal powers are certain to liberalise, and soon, he cannot simultaneously demand radical change in the name of nuclear peace and an American-led liberal order.

The second alternative offers a possible way out of that problem. This would be the adoption of the third 'reformist' solution to the nuclear dilemma: US nuclear primacy. Advocates of this approach argue that the United States can use its qualitative lead in nuclear technologies, sheer military might and economic power and its present preponderant position in the international system, to obtain meaningful superiority over all nuclear rivals. By combining offensive nuclear strategies with advanced forms of ballistic missile defence, the United States could overcome the nuclear deterrents of illiberal states like China and Russia and present them with a new environment in which they are invited to join the liberal fold or face the prospect of military defeat.

Although Deudney might be reluctant to admit it, nuclear primacy is the most logical strategy of attaining a US-led global order, as it could speed up the end of history and ensure US leadership of the new order that emerged. Moreover, if American nuclear coercion were successful, it could eliminate once and for all the possibility of a general nuclear war by replacing the current anarchical system with a Pax Americana in which only the United States possessed nuclear weaponry. Such an approach, of course, runs tremendous risks of nuclear war and portends an era of extreme US militarism. It would result in an American world state that would be the opposite of nonhierarchical. If nonhierarchy is what Deudney seeks, then he must oppose such an alternative, even if it were successful because hierarchy is hierarchy, whether it comes in the form of American rule or that of any other regime. On the other hand, if the triumph of an American-led regime is his real goal, then it is difficult to see why he would oppose nuclear primacy.

The Weberian imperative

If we wish to see the creation of a supranational order which reliably and durably eliminates the threat of nuclear omnicide, therefore, we cannot accept the position that it *must* be liberal and led by the United States. As Henry Stimson and Niels Bohr argued at the end of the Second World War, and Morgenthau a decade later, to create a

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

world government that actually solves the nuclear dilemma means cooperating, and compromising, with other great powers. Otherwise, illiberal states will simply refuse to be part of it, and an incomplete nuclear order is no order at all.

I have argued that a world government which does not possess a monopoly over war-making weaponry cannot work, and that Deudney's insistence that such a government must be liberal and American-led guarantees that it will not possess such a monopoly, barring a rapid end of history or a dangerous season of American nuclear primacy. Therefore, if solving the nuclear dilemma is a matter of urgency, it can only occur by acts of political compromise among the large nuclear powers, compromise driven by the recognition, common to all states, that the continuing status quo of interstate anarchy poses an existential threat to all of them and to humanity at large (see Schell, 1983). Moreover, the existential nature of the nuclear threat means that a compromise to eliminate anarchy cannot take place after a nuclear war: unlike previous after-the-deluge covenants, the nuclear threat must be pre-empted, eliminated before it happens. The few survivors of a global nuclear war might well see the logic of world government, but by then it would be too late.

A state built upon the objective of eliminating nuclear anarchy would therefore be unable to satisfy Deudney's demands that it must be liberal and nonhierarchical. It would only be acceptable to all nuclear states if it guaranteed to all of them, not least the United States, that no 'sub-state' retained sovereign possession over nuclear weapons or had the ability to rebuild them. The United States rejected a global nuclear order in 1946 when the USSR barely had an atomic programme, much less the bomb. The idea that it would tolerate the possibility of nuclear recalcitrance today is fanciful, and presumably Deudney (and I) would be the first to oppose nuclear disarmament by the West without ironclad means of ensuring the same by other illiberal states.

The 'unipolar moment' provides an opportunity to create a new world order which eliminates the risk of an omnicidal nuclear war, and which can provide other supranational goods, on matters such as climate change and migration, that our interstate system is categorically incapable of solving. Because these problems threaten all states, and humanity at large, the logic for a world state has never been more compelling. Deudney's response that the prospect of inescapable global tyranny makes an authoritative world state too dangerous is perfectly justifiable, and I do not for a moment dismiss the importance of this concern. Deudney's quotation of Morgenthau's comment in 1960 provides us precisely with the *problématique* we must confront. 'How, "he asks", can the atomic power be transferred to the control of supranational institutions that will prevent its use on behalf of a particular national interest without submerging the autonomous life of individual nations in a universal tyranny?' Morgenthau is not denying that it is imperative to avoid universal tyranny. But he is also stating that atomic power must be transferred to a supranational institution which can prevent its use. Only a Weberian world state can accomplish the latter task. It is better to confront that reality, and think of ways to prevent it from becoming tyrannical, than to advocate a third way which cannot work.

Notes

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

1. I acknowledge that this constructivist solution, however one regards its persuasiveness, could also be regarded as radical, insofar as it aims at the obsolescence of anarchy and/or abolition of nuclear weaponry. However, it does not seek to replace the current system with another kind of political order, which permits the ever-present possibility of a reversion to anarchy or reinvention of weaponry, something the constructivist way of thinking cannot rule out by definition. In other words, if there is nothing to stop people from choosing to disregard anarchy and eschew nuclear weapons as barbaric, there is also nothing to stop them from later changing their minds.
2. Deudney's (2007) brief discussion of this plan in *Bounding Power* is not in accord with the historical literature.
3. This section is adapted from Craig, in Van Munster and Sylvest (2016).

References

Boyer P (1985) *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age*. New York: Pantheon.

Craig C (2003) *Glimmer of a New Leviathan: Total War in the Realism of Niebuhr, Morgenthau, and Waltz.* New York: Columbia University Press.

Craig C (2008) The resurgent idea of world government. *Ethics and International Affairs* 22(2): 133–142.

Craig C (2009) American power preponderance and the nuclear revolution. *Review of International Studies* 35(1): 27–44.

Craig C (2015) Weberian world government in the nuclear age. Available at: wgresearch.org

Craig C and Radchenko S (2008) *The Atomic Bomb and the Origins of the Cold War*. New Haven, CT: Yale University Press.

Craig C and Ruzicka J (in press) *US Unipolar Preponderance and the Nuclear Nonproliferation Regime*. Ithaca, NY: Cornell University Press.**[AQ11]**

Debs A and Monteiro N (2016) *Nuclear Politics: The Strategic Causes of Proliferation*. Cambridge: Cambridge University Press.

Deudney D (1995) Nuclear weapons and the waning of the real-state. *Daedalus* 124(2): 209–231.

Deudney D (2007) *Bounding Power: Republican Security Theory from the Polis to the Global Village*. Princeton, NJ: Princeton University Press.

Deudney D (2011) Unipolarity and nuclear weapons. In: Ikenberry GJ, Mastanduno M and Wohlforth W (eds) *International Relations Theory and the Consequences of Unipolarity.* Cambridge: Cambridge University Press, pp. 282–316.**[AQ12]**

Deudney D (2017) Toward a modified nuclear one worldism.**[AQ13] [AQ14]**

Deudney D and Ikenberry GJ (2012) Democratic internationalism. Working Paper, Council on Foreign Relations, November.

Einstein A (1956) Towards a world government (1946). In: Einstein A (ed.) *Out of My Later Years: The Scientist, Philosopher and Man Portrayed through His Own Words.* New York: Wings Books.**[AQ15]**

Fukuyama F (1992) *The End of History and the Last Man*. New York: Free Press.

Gavin F (2015) Strategies of inhibition: U.S. grand strategy, the nuclear revolution, and nonproliferation. *International Security* 40(1): 9–46.**[AQ16]**

Harrington A (2016) Power, violence, and nuclear weapons. *Critical Studies on Security* 4(1): 91–112.

Herken G (1988) *The Winning Weapon*. Princeton, NJ: Princeton University Press.

Jervis R (1984) *The Illogic of American Nuclear Strategy*. Ithaca, NY: Cornell University Press.**[AQ17]**

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

Jervis R (1989) *The Meaning of the Nuclear Revolution*. Ithaca, NY: Cornell University Press.

Kroenig M (2013) Nuclear superiority and the balance of resolve: Explaining nuclear crisis outcomes. *International Organization* 67(1): 141–171.

Kroenig M (2015) Facing reality: Getting NATO ready for a new Cold War. *Survival* 57(1): 49–70.**[AQ18]**

Lieber K and Press D (2006) The end of MAD? The nuclear dimension of U.S. primacy. *International Security* 30(1): 7–44.

Lieber K and Press D (2013) The new era of nuclear weapons, deterrence and conflict. *Strategic Studies Quarterly* 7(1): 3–12.**[AQ19]**

Lieber K and Press D (2017) The new era of counterforce: Technological change and the future of nuclear deterrence. *International Security* 41(4): 9–49.

Long A and Rittenhouse-Green B (2015) Stalking the secure second strike: Intelligence, counterforce, and nuclear strategy. *Journal of Strategic Studies* 38(1–2): 38–73.

McQueen A (2013) *Hans Morgenthau and the postwar apocalyptic imaginary. Unpublished Book Chapter.***[AQ20] [AQ21]**

Mearsheimer J (2001) *The Tragedy of Great Power Politics*. New York: W.W. Norton.

Messer R (1982) *The End of an Alliance: James F. Byrnes, Roosevelt, Truman, and the Origins of the Cold War*. Chapel Hill, NC: University of North Carolina Press.

Monteiro N (2014) *Theory of Unipolar Politics*. Cambridge: Cambridge University Press.

Monteiro N and Paci S (2017) *Sharing the burden: Unipolarity, nuclear weapons, and world government. Unpublished manuscript.*

Morgenthau H (1946) *Scientific Man versus Power Politics*. Chicago, IL: University of Chicago Press.**[AQ22]**

Morgenthau H (1960 [1948]) *Politics among Nations*. 3rd ed. New York: Knopf.

Morgenthau H (1961) Death in the nuclear age. *Commentary*, 1 September, vol. 32. Available at: https://www.commentarymagazine.com/articles/death-in-the-nuclear-age/

Morgenthau H (1962a) *Politics in the Twentieth Century,* vols. 1–3. Chicago, IL: University of Chicago Press.**[AQ23]**

Morgenthau H (1962b) Truth and power. *Commentary*, vol. 32.**[AQ24] [AQ25]**

Morgenthau H (1964) The four paradoxes of nuclear strategy. *American Political Science Review* 58(1): 23–35.**[AQ26]**

Oren I (2009) The unrealism of contemporary realism: The tension between realist theory and realists' practice. *Perspectives on Politics* 7(2): 283–301.

Paul TV (2016) Self-deterrence: Nuclear weapons and the enduring credibility challenge. *International Journal* 71(1): 20–40.

Pelopidas B (2016) Nuclear weapons scholarship as a case of self-censorship in security studies. *Journal of Global Security Studies* 1(4): 326–336.

Ritchie N (2013) Valuing and devaluing nuclear weapons. *Contemporary Security Policy* 34(1): 146–173.

Sauer T (2017) How will NATO's non-nuclear members handle the UN's ban on nuclear weapons? *Bulletin of the Atomic Scientists* 73: 177–181.

Schell J (1983) *The Fate of the Earth*. New York: Knopf.

Scheuerman W (2011) *The Realist Case for Global Reform*. Cambridge: Polity.**[AQ27]**

Sherwin M (1975) *A World Destroyed*. New York: Knopf.

Tannenwald N (2013) Justice and fairness in the nuclear nonproliferation regime. *Ethics and International Affairs* 27(3): 299–317.

US State Department (1967) *Foreign Relations of the United States, 1946*. Washington, DC: US State Department.

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk

Van Benthem van der Bergh G (2012) Norbert Elias and the human condition. *Human Figurations* 1(2).**[AQ28]**

Van Munster R and Sylvest C (eds) (2016) *Nuclear Realism: Global Political Thought during the Thermonuclear Revolution*. Abingdon: Routledge.

Walker W (2007) Nuclear enlightenment and counter-enlightenment. *International Affairs* 83: 431–453.

Walker W (2012) *A Perpetual Menace: Nuclear Weapons and International Order*. London: Routledge.**[AQ29]**

Waltz K (1959) *Man, the State and War: A Theoretical Analysis*. New York: Columbia University Press.

Waltz K (1990) Nuclear myths and political realities. *American Political Science Review* 84(3): 731–745.**[AQ30]**

Wendt A (2003) Why a world state is inevitable. *European Journal of International Relations* 9(4): 491–542.

Wendt A (2015) Sovereignty and the world state. Available at: http://wgresearch.org/

Wilson W (2013) The Gordian knot: Moral debate and nuclear weapons. *Ethics and International Affairs* 27(3): 319–328.

Wohlforth W and Brooks S (2007) *World Out of Balance: International Relations and the Challenge of American primacy*. Princeton, NJ: Princeton University Press.

Author biography

Campbell Craig is Professor of International Politics at Cardiff University. He is the author of several books and many articles and reviews on nuclear politics and history, including *Glimmer of a New Leviathan: Total War in the Thought of Niebuhr, Morgenthau and Waltz* (Columbia University Press, 2007); *America's Cold War: The Politics of Insecurit*y (Harvard University Press, 2012, with Fredrik Logevall); and 'Who's In, Who's Out? The Nonproliferation Complex', *London Review of Books* 34, February 2012 (with Jan Ruzicka). Professor Craig has held senior fellowships at Yale University, the Norwegian Nobel Institute, and the European University Institute. His forthcoming book (co-authored with Jan Ruzicka), on US Unipolar Preponderance and the Nuclear Nonproliferation Regime, will be published by Cornell University Press.

Corresponding author:

Campbell Craig, Department of Politics and International Relations, Cardiff University, Cardiff CF10 3XQ, UK.

Email: craigc2@cardiff.ac.uk