

# Institutional Resilience and the Transition to Zero Nuclear Weapons\*

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## Abstract

The goal of a world free from nuclear weapons is directly related to the issue of international institutions. Because of the need to ensure compliance with zero nuclear weapons and to limit the effects of cheating, institutions are often referred to as potential political frameworks. Assuming that it would be possible, first, to move to significantly lower numbers and then to zero nuclear weapons, governing institutions would have to be resilient in order to respond in a timely manner and to uphold the bargain. But what factors determine as well as impact institutional resilience? This article will first assess what the general narratives of International Relations (IR) theory tell us about the determining factors. It will then examine two cases (the CFE and the NPT treaties) which are helpful in exposing the shortcomings of constructivist and neoliberal approaches by focusing instead on institutional effectiveness. Identifying a shared interest in overcoming the deterrence principle as a key variable for institutional cooperation and continued factor impacting resilience and effectiveness, the subsequent section will discuss three additional impacting factors. The last section will present conclusions.

## Keywords

Arms Control – Disarmament – Deterrence – CFE Treaty – NPT Treaty – Institutions – Resilience

## Introduction

Only eight years after four U.S. elder statesmen called for a world free from nuclear weapons<sup>1</sup>, the goal of *global zero* – that is, the complete and irreversible abolition of all nuclear weapons worldwide – seems to have dissipated. With the revival of Cold War style relations between NATO and Russia over Ukraine and Syria and the subsequent renaissance of ‘nuclear signaling’ and intimidation, there is currently more talk about how to modernize and upgrade the nuclear arsenals of the five officially recognized nuclear-weapons states<sup>2</sup> than about nuclear disarmament. If that were not enough, even the much more modest goals of regulating the bilateral nuclear relationship of the United States and Russia, through arms control and upholding multilateral efforts to prevent horizontal nuclear proliferation, have reached an impasse<sup>3</sup>. Against this background, some analysts already speak of the “end of history for nuclear arms control”<sup>4</sup>.

While it is too early to scrap nuclear arms control and disarmament altogether, the pending period of likely stonewalling and nuclear inertia presents an opportunity for academics as well as advocates of a world with zero nuclear weapons (‘abolitionists’) to engage in intellectual efforts to analyze the arms control failures of the past and scrutinize the likely future obstacles to zero nuclear weapons. The latter pertains particularly to explaining and planning the transitional period of reaching lower numbers of nuclear weapons – an intermediate period, intended to serve the role of a ‘stepping stone’ towards the complete abolition of nuclear weapons.

The related academic literature has mostly concentrated on issue-specific problems such as how to cope with stable deterrence relationships at lower numbers<sup>5</sup> or how to engage

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<sup>1</sup> See Shultz, George P., William J. Perry, Henry A. Kissinger and Sam Nunn. “A World Free of Nuclear Weapons.” *Wall Street Journal on-line* (January 4, 2007), accessed November 24, 2015. <http://www.wsj.com/articles/SB116787515251566636>.

<sup>2</sup> The officially recognized nuclear-weapons states under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) are China, France, Russia, the United Kingdom, and the United States – the so called “P5” states.

<sup>3</sup> Cf. Meier, Oliver. “The 2015 NPT Review Conference Failure: Implications for the Nuclear Order.” Berlin: SWP October, 2015), accessed November 18, 2015. [http://www.swp-berlin.org/fileadmin/contents/products/arbeitspapiere/mro\\_wp\\_NVV\\_October2015.pdf](http://www.swp-berlin.org/fileadmin/contents/products/arbeitspapiere/mro_wp_NVV_October2015.pdf).

<sup>4</sup> Arbatov, Alexei. “An Unnoticed Crisis: The End of History for Nuclear Arms Control?” Moscow: Carnegie Endowment June, 2015), accessed November 25, 2015. [http://carnegieendowment.org/files/CP\\_Arbatov2015\\_n\\_web\\_Eng.pdf](http://carnegieendowment.org/files/CP_Arbatov2015_n_web_Eng.pdf).

<sup>5</sup> Cf. Acton, James M. *Deterrence during disarmament: Deep nuclear reductions and*

differently situated international actors in the process<sup>6</sup>. What remains an underexplored issue is the long-term role of institutions<sup>7</sup> in that process. Whoever would govern such a future world – be it a concert of great powers, world government, security communities, *ad hoc* coalitions or a benevolent/malevolent hegemonic power – would most likely have to rely on at least some form of loosely institutionalized ‘rules of the road’ to verify compliance, to consult in cases of non-compliant behavior or to address crises occurring from outside the institutional framework. While institutions’ general value in that scenario (ensuring and enforcing compliance, preventing nuclear reversal, providing communication channels) is mostly undisputed in the arms control literature,<sup>8</sup> the specifics of institutional maintenance, such as institutions’ continued ability to be resilient to external shocks or internal shifts, have largely remained outside the focus and only little is really known about the factors that determine and impact institutional resilience in the realms of conventional and nuclear arms control.

If the issue of a stable transition to zero nuclear weapons is to be treated more seriously, this gap in research needs to be closed. By contrast to the arms control literature, “institutional resilience” *per se* has attracted a good deal of attention in general IR theory and different case studies have tried to explore the matter.<sup>9</sup> As this article argues, theoretical assumptions from IR theory in combination with historical accounts of the effectiveness of two important arms control and disarmament treaties (the Treaty on the Non-

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*international security*. Adelphi 417. Abingdon, Oxon: Routledge, for the International Institute for Strategic Studies, 2011.

<sup>6</sup> Cf. Kelleher, Catherine M. and Judith Reppy, eds. *Getting to zero: The path to nuclear disarmament*. Stanford, Calif.: Stanford University Press, 2011.

<sup>7</sup> As Thomas Risse correctly noted, “there are at least as many definitions of (international) institutions as there are theoretical perspectives”. Risse, Thomas. “Constructivism and International Institutions: Toward Conversations Across Paradigms.” In *Political Science: The State of the Discipline*. Edited by Ira Katznelson and Helen V. Milner, 597–629. New York: Norton, 2002. “Institutions” as defined in this paper can comprise: (1) bilateral or multilateral, legally or politically binding treaties and agreements; (2) regimes and regime complexes; and (3) International Organizations. For an overview of the debate see: Duffield, John S. “What Are International Institutions?” *International Studies Review* 9, no. 1 (2007): 1–22.

<sup>8</sup> Cf. for example: Cortright, David and Raimo Väyrynen. *Towards nuclear zero*. Adelphi 410. London: International Institute for Strategic Studies, 2010, pp. 123 et seq. Hinderstein, Corey, ed. *Cultivating Confidence: Verification, Monitoring, and Enforcement for a World Free of Nuclear Weapons*. Hoover Institution Press publication no. 596. Chicago: Hoover Institution Press, 2010. Zedillo, Ernesto. “The Role of International Institutions in the Disarmament Process.” In *Abolishing Nuclear Weapons: A Debate*. Edited by George Perkovitch and James M. Acton, 287–94. Washington: Carnegie Endowment, 2009.

<sup>9</sup> See for example: Demchak, Chris C., Arjen Boin and Louise K. Comfort. *Designing resilience: Preparing for extreme events*. Pittsburgh, Pa.: University of Pittsburgh Press, 2010. Aligica, Paul D. “Institutional Resilience and Institutional Theory.” In *Institutional Diversity and Political Economy*. Edited by Paul D. Aligica, 101–33. Oxford: Oxford University Press, 2013. Barany, Zoltan and Robert Rauchhaus. “Explaining NATO’s Resilience: Is International Relations Theory Useful?” *Contemporary Security Policy* 32, no. 2 (2011): 286–307.

Proliferation of Nuclear Weapons (NPT), and the Treaty on Conventional Armed Forces in Europe (CFE)) can help to shed new light on the issue of institutional resilience. These perspectives may help to generate new thinking on how to better conceptualize the stable transition to zero nuclear weapons.

### What IR Theory Tells Us

In IR theory, there are different narratives on the factors which determine the evolutionary life-cycle of institutions and, thus, also institutional resilience. In a very generalized way, they read as follows. Neorealists argue that institutions depend on shifts in the acquisition of power in the international system and that the waxing and waning of power more or less determines their fate.<sup>10</sup> The most powerful states predominantly make use of institutions to achieve their preferred interests.<sup>11</sup> Constructivists infer that institutions, once they are set up, can acquire lives of their own and are much more resilient to perturbations from the power realm than usually assumed by neorealist proponents.<sup>12</sup> Neoliberals see cost considerations as determining factors and suppose that the ‘costliness’ of establishing institutions in the first place may prevent states from tearing down what had once been built up.<sup>13</sup> This argument rests – in part – on the assumption that states are uncertain about what the costs would be to re-establish or replace a certain institution. In short, the neoliberal narrative asserts that states are wary and cost-sensitive because they seem to know, to a certain degree, that establishing cooperation is harder than getting rid of it.<sup>14</sup>

How do these arguments relate to nuclear and conventional arms control? Let me first turn to the neorealist narrative of power and interest. In accordance with this, underlying the establishment of institutions and – as I would argue – also institutional resilience, are two determining factors: a certain distribution of power amongst states, which, ac-

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<sup>10</sup> Mearsheimer, John J. “The False Promise of International Institutions.” *International Security* 19, no. 3 (1994/95): 5–49.

<sup>11</sup> Drezner, Daniel W. *All politics is global: Explaining international regulatory regimes*. Princeton, N.J., Woodstock: Princeton University Press, 2008.

<sup>12</sup> Adler, Emanuel and Peter M. Haas. “Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Program.” *International Organization* 46, no. 1 (1992): 367–390.

<sup>13</sup> Keohane, Robert O. “International Institutions: Two Approaches.” *International Studies Quarterly* 32, no. 4 (1988): 379–396.

<sup>14</sup> Cf. Keohane, Robert O. *After hegemony: Cooperation and discord in the world political economy*. Princeton, NJ: Princeton Univ. Press, 1984, pp. 103 et seq.

ording to neorealist Kenneth N. Waltz, is structurally<sup>15</sup> there – and of which we know only little in terms of its propensity to propel or inhibit cooperation – and a certain convergence of interest<sup>16</sup>.

In terms of the cooperation propensity of the relative distribution of power (meaning the power states have relative to each other), the historical record of international conventional and nuclear arms control policies tells us that the period of an almost perfect equilibrium of power (the Cold War) was more fruitful for establishing and maintaining institutions than periods during which the relative distribution of power was uneven and/or in flux (the post-Cold War period and the current “New Cold War”<sup>17</sup>). To illustrate that point, the Cold War years produced eight milestone agreements<sup>18</sup> between 1963 and 1991 of which three are still in operation, three have been replaced, one never entered into force, and one has been abandoned. The total of eight agreements divided by 28 years makes an average of ~0.3 agreements per year. The shorter post-Cold War period (1992-2015) has seen five agreements<sup>19</sup> of which two are operational, two never entered into force, and one was replaced. This makes an average of ~0.2 agreements per year. While a plus of only 0.1 of the Cold War period in comparison to the post-Cold War period is not extremely striking in terms of the propensity for agreement-making, more interestingly, of the five post-Cold War agreements, four are direct extensions (or adaptations) of original Cold War agreements. This circumstance seems to point to additional factors that are outside of the realm of power and which might have to do more with the neorealist variable of interest.

In terms of convergence of interest, the superpower relations of the Cold War produced a wealth of arguments for a shared interest in cooperation under the title of “strategic stability”<sup>20</sup> and mutual survival. Interestingly, the maintenance of the concept of “stra-

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<sup>15</sup> Waltz, Kenneth N. *Theory of international politics*. 1st ed. Boston: McGraw-Hill, 1979.

<sup>16</sup> Ibid.

<sup>17</sup> Bob Legvold was amongst the first to label the renewed confrontation between the West and Russia, following the annexation of Crimea in March 2014, a “new Cold War”. Legvold, Robert. “Managing the New Cold War.” *Foreign Affairs* 93, no. 4 (2014): 74–84.

<sup>18</sup> The Partial Test Ban Treaty (1963), the Treaty on the Non-Proliferation of Nuclear Weapons (1968), the Strategic Arms Limitation Talks I and II (1972, 1979), the Anti-Ballistic Missile Treaty (1972), the Intermediate-range Nuclear Forces Treaty (1987), the Conventional Armed Forces in Europe Treaty (1990), and the Strategic Arms Reductions Treaty (1991).

<sup>19</sup> The Comprehensive Nuclear-Test-Ban Treaty (1996), the Strategic Arms Reductions Treaty II (1993), the Adapted Conventional Armed Forces in Europe Treaty (1999), the Strategic Offensive Reductions Treaty (2002), and the New START Treaty (2010).

<sup>20</sup> The term “strategic stability” refers to a concept in which both sides (United States and the Soviet Union/Russia) have a survivable nuclear second-strike capability even in case of a surprise first strike by the other side.

tegic stability” continues to inform the debate amongst experts and policy-makers in both Russia and the United States until this very day<sup>21</sup>. This points to an inherent (and mutually shared) interest in the concept, one that has not vanished with the end of the Cold War and which has survived the shifts in power that followed its demise. I will return to this shared interest after the next section.

Turning to constructivist and neoliberal arguments, the traceable resilience of certain conventional and nuclear arms control institutions seem to be in line with their assumptions of the autonomy of institutions and the cost considerations of states. As already stated, of the eight Cold War agreements, three are still with us today and another three have morphed into agreements that continue to operate. Two concrete examples of the long-term operation of institutions are the NPT and CFE treaties. The NPT opened for signature in 1968 and was extended indefinitely in 1995. The last review of the treaty only took place in May 2015. The treaty’s aims are to prevent the further spread of nuclear weapons, to assist non-nuclear-weapon states in the peaceful uses of nuclear energy, and to help achieve complete disarmament.<sup>22</sup> The CFE Treaty was concluded between NATO and the Warsaw Pact in 1990 with the aim of downsizing heavy conventional military equipment and providing mutual confidence through transparency mechanisms in Europe.<sup>23</sup> In 1999, States Parties to the Treaty negotiated an adapted version (the ACFE Treaty) to take into account NATO enlargement and other changes to the European security landscape. States Parties continue to meet regularly at the CFE decision-making body, the Joint Consultative Commission (JCG) in Vienna.

Both agreements have gone through periods of extreme power shifts, such as the end of the Cold War and the dissolution of the Soviet Union. Both are still with us. And it might be that institutional autonomy and cost considerations are (partly) responsible for this fact. However, as I will point out in the next section, it is not only institutional resilience *per se* which matters, but also institutional effectiveness.

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<sup>21</sup> Cf. Deep Cuts Commission. “Strengthening Stability in Turbulent Times.” Hamburg, Moscow, Washington: IFSH (April, 2015), accessed November 18, 2015.  
<http://deepcuts.org/publications/reports>.

<sup>22</sup> For the treaty text see: <http://www.un.org/disarmament/WMD/Nuclear/NPTtext.shtml>.

<sup>23</sup> For the treaty text see: <http://www.osce.org/library/14087?download=true>.

## What Reality Tells Us

In a future world where arms control institutions shall help to achieve a stable environment at lower numbers and, ultimately, the disarmament goal of zero nuclear weapons, the sheer fact of the continued existence of these institutions will most likely not be enough to avert backsliding into vertical and horizontal nuclear proliferation. Institutional resilience alone, as understood in constructivist and neoliberal terms, tells us little about the political role that institutions play.<sup>24</sup> Instead of focusing too much on resilience from an artificial institutionalist point of view, we should rather ask: are the institutions still effective?

To make my point, I will return to the CFE and the NPT treaties. As already explained, the CFE Treaty is still in existence *de jure*. However, Russia, the most important CFE participant, is no longer taking part in the regular meetings of the JCG since “suspending” the treaty in 2007.<sup>25</sup> Moscow claims to be in compliance with the overall ceilings limiting Russian conventional military hardware – a claim no one can actually verify. While this state of affairs is already unsatisfactory, the more important points are that the treaty *de facto* no longer reflects the European security landscape (in fact, it reflects the year 1990), that parties have not been able to bring into force the updated ACFE version for the last 15 years, and that one of the main provisions (military transparency through notifications and on-site inspections) is not being implemented by either Russia or NATO states with respect to one another. In short: the institution is still there, but it is largely ineffective.<sup>26</sup>

The NPT is a bit of a different story. Resting on three ‘legs’ (non-proliferation, peaceful use, and disarmament), nuclear-weapon states agreed to strengthen the disarmament ‘leg’ in exchange for the indefinite extension of the treaty in 1995. Two particular initiatives – the establishment of a Middle East WMD-free zone and strengthened efforts by the “P5” to achieve nuclear disarmament – were to have served as means to achieve this end.<sup>27</sup> Twenty years later, a Middle East WMD-free zone is still no more than wishful

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<sup>24</sup> Cf. also Barany and Rauchhaus 2011.

<sup>25</sup> Cf. Boese, Wade. “Russia Suspends CFE Treaty Implementation.” Washington: ACA (January 25, 2008), accessed November 24, 2015. [http://www.armscontrol.org/act/2008\\_01-02/cfe](http://www.armscontrol.org/act/2008_01-02/cfe).

<sup>26</sup> Cf. Kulesa, Lukasz. “The Role of Arms Control in Future European Security.” *Security and Human Rights* 25, no. 2 (2014): 221–234.

<sup>27</sup> Cf. Rydell, Randy. “Looking Back: The 1995 Nuclear Nonproliferation Treaty Review and Extension Conference.” Washington: ACA (April 1, 2005), accessed November 24, 2015. [https://www.armscontrol.org/act/2005\\_04/LookingBack](https://www.armscontrol.org/act/2005_04/LookingBack).

thinking and the so called “P5 process” has not yielded any tangible results<sup>28</sup>. Taking into account the ongoing massive nuclear weapons modernization programs in the five states<sup>29</sup>, non-nuclear-weapons states have become increasingly frustrated with the disarmament goal not being met. A new initiative focusing on the humanitarian and environmental impact of nuclear weapons brings together these more than 160 states with the aim of finally closing the legal gap for the elimination of nuclear weapons.<sup>30</sup> Critics infer that a turn to a nuclear weapons convention or a ban treaty would only help to further undermine the NPT.<sup>31</sup> In short: the institution is still there but it is, at least in part, ineffective and greatly disputed.

Given the poor state of these two institutions, it could be asked why states have not yet abandoned them. Is it for reasons of cost considerations or because the institutions have acquired lives of their own (like ‘institutional zombies’)? The answer is: it doesn’t matter. In both cases the conundrum is not why they are still there, but why they are so ineffective. The general constructivist and neoliberal narratives are not helpful in explaining this conundrum. Therefore, in the next section, I will return to the neorealist narrative of interest by focusing on the problematic principle of deterrence and its consequences for a stable transition to lower numbers and ultimately zero nuclear weapons.

### The Problem of Deterrence

As previously noted, the near-perfect state of equilibrium of power of Cold War days was (comparatively) more conducive to institutionalized cooperation in the conventional and nuclear realms than the period of power shifts that followed the end of the Cold War. However, U.S.-Russian mimicking of Cold War institutional frameworks in post-Cold War agreement-making (see the 2010 New START Treaty) points to a somewhat more important variable: a shared interest. The question is, what interest is it and how does this interest interact with the vision of a stable transition to lower numbers and ultimately zero nuclear weapons?

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<sup>28</sup> Arbatov, Alexei. “The ‘P5’ Process: Prospects for Enhancement.” Deep Cuts Working Paper 3, Hamburg: IFSH (January, 2015), accessed November 18, 2015. [http://deepcuts.org/images/PDF/DeepCuts\\_WP3\\_Arbatov\\_UK.pdf](http://deepcuts.org/images/PDF/DeepCuts_WP3_Arbatov_UK.pdf).

<sup>29</sup> See Mecklin, John. “Disarm and Modernize.” Washington: Foreign Policy on-line (March 24, 2015), accessed November 27, 2015. <http://foreignpolicy.com/2015/03/24/disarm-and-modernize-nuclear-weapons-warheads/>.

<sup>30</sup> Sauer, Tom. “The NPT and the Humanitarian Initiative: Towards and Beyond the 2015 NPT Review Conference.” Deep Cuts Working Paper 5, Hamburg: IFSH (April, 2015), accessed November 24, 2015. [http://deepcuts.org/images/PDF/DeepCuts\\_WP5\\_Sauer\\_UK.pdf](http://deepcuts.org/images/PDF/DeepCuts_WP5_Sauer_UK.pdf).

<sup>31</sup> Meier, Oliver 2015.



According to neorealists, the prime concern of states in a world of anarchy is to ultimately ensure their survival.<sup>32</sup> During the Cold War days, this interest in survival took on the dyadic form of mutual nuclear deterrence *and* the regulation of the deterrence relationship through arms control agreements.<sup>33</sup> The United States and the Soviet Union shared an interest in mutual survival through threatening mutual extinction. It is for this reason, amongst other justifications, that nuclear weapons proponents infer that it is *exactly* the principle of nuclear deterrence that ultimately ensures survival.<sup>34</sup> This perception<sup>35</sup> is still prevalent amongst political and military elites in a number of states, particularly in nuclear-weapons states. Today, this shared interest takes on the strange form of virtually continuing the basic preconditions for cooperation during the Cold War, even though the power variable has undergone strong alterations in realms other than the nuclear (e.g., economic, defense budgets, size of population, living standards, and so forth). While there is no longer a near-perfect state of equilibrium of power, its practical manifestation in the realm of nuclear arms control – the equal numbers agreed upon under the bilateral U.S.-Russian New START Treaty<sup>36</sup> – persists. In short, the nuclear deterrence relationship of the United States and Russia still works as a limited cooperation enabler. At the same time, it also strongly discourages large-scale cooperation which goes beyond the narrow focus of controlling nuclear arms at equal levels.

The deterrence relationship of the United States and Russia is essentially a security relationship based on mutual mistrust and permanent caution.<sup>37</sup> Its fundamentals are survivable second-strike capabilities with hundreds of American and Russian nuclear weapons on hair-trigger alarm and able to be aimed at targets within the United States and Russia in only a few minutes. It is not far-fetched to assume that the principle of nuclear deterrence would most likely be at the core of an institutional framework for stability at lower numbers. If nuclear-weapons states were already to have enough confidence in the

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<sup>32</sup> Cf. Waltz 1979, p. 91.

<sup>33</sup> Cf. Schelling, Thomas C. *Arms and influence*. Westport, Conn.: Greenwood Press, 1966.

<sup>34</sup> Cf. for example, Tertrais, Bruno. “In Defense of Deterrence: The Relevance, Morality and Cost-Effectiveness of Nuclear Weapons.” Paris: IFRI (2011), accessed November 24, 2015. <http://www.nonproliferation.eu/web/documents/other/brunotertrais4ebbd42d7115.pdf>.

<sup>35</sup> It could also easily be termed a conviction or belief. See: Wilson, Ward. “How nuclear realists falsely frame the nuclear weapons debate.” Washington: Bulletin of the Atomic Scientists online (May 7, 2015), accessed November 24, 2015. <http://thebulletin.org/how-nuclear-realists-falsely-frame-nuclear-weapons-debate8306>.

<sup>36</sup> Arms Control Association. “New START at a Glance.” Washington: ACA (October 15, 2010), accessed November 18, 2015. <http://www.armscontrol.org/factsheets/NewSTART>.

<sup>37</sup> Cf. Oelrich, Ivan. “U.S. Nuclear Force Structure and Deep Reductions.” Hamburg: IFSH (October, 2013), accessed December 7, 2015. [http://deepcuts.org/images/PDF/DeepCuts\\_WP1\\_Oelrich.pdf](http://deepcuts.org/images/PDF/DeepCuts_WP1_Oelrich.pdf)

actions of one another (the trust factor) and the conventional military capabilities of one single state would not allow that state to dominate all others (one crucial aspect of the power factor), a world of zero nuclear weapons should at least become a possible future option. However, if the level of mistrust were still too high and/or the relative distribution of power were too uneven, nuclear deterrence would probably continue to serve the role of a final reassurance measure. And – more important – it could ultimately block the road to zero, even at significantly lower numbers.

Even more discouraging (at least for those nuclear abolitionists who argue from a moral point of view), nuclear deterrence at lower numbers could take on some extreme forms since the targeting policies of nuclear-weapons states could move from predominantly targeting military assets (counterforce) to targeting civilian assets (countervalue) instead, because these assets might be viewed as having a relatively higher value from the viewpoint of ‘threat credibility’ under the condition of low numbers.<sup>38</sup>

Given these obstacles, it should be asked seriously whether the goal of final abolition provides the same shared interest as the policies of “strategic stability” by means of deterrence and arms control during the Cold War days did (but this time also including all other nuclear-weapons states). Toward that end, the key question is whether it will be possible to fundamentally alter the way security elites in nuclear-weapons states define security (i.e., survival). Will it be possible to increase the intellectual, moral, and practical incentives for moving beyond nuclear deterrence relationships?

The arguments in favor of final abolition are well-known and include, amongst others, the unproven claim of stability through deterrence, the inherent immorality of the principle of nuclear deterrence and retaliation threats, the mistrust inherent in nuclear deterrence relationships, nuclear weapons mishaps and close calls, the scenario of nuclear holocaust, the devastating effects of nuclear winter, and so forth.<sup>39</sup> It is exactly these arguments that should provide the necessary basis for a shared interest in terms of overcoming nuclear deterrence relationships in the world. However, as long as those arguments remain as disputed as the policies of “strategic stability”, making the case for zero nuclear weapons will most likely only end up by reinforcing the nuclear taboo of

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<sup>38</sup> This conclusion is disputed in the literature on ‘small’ nuclear deterrence. For an opposing viewpoint see: Acton 2011, pp. 35–36.

<sup>39</sup> For an overview see: Shultz, George P. and James E. Goodby, Eds. *The war that must never be fought: Dilemmas of nuclear deterrence*. Hoover Institution Press publication no. 658. Stanford, California: Hoover Institution Press, Stanford University, 2015.

the non-use of nuclear weapons, but not their complete and irreversible abolition<sup>40</sup>. This might help to achieve lower numbers but most likely not zero nuclear weapons.

And here the conundrum of institutional effectiveness comes into play. Both the NPT and the CFE Treaty have a disarmament and an arms control objective. In the case of the NPT the disarmament objective is directly tied to nuclear weapons and, depending on the interpretation of Article VI, also to conventional weapons. With roughly 16,000 nuclear warheads in stocks worldwide, its disarmament objective is far from being fulfilled, not mentioning the amount of conventional weapons spread all over the globe. In the disarmament realm, the NPT is not effective, particularly not if effectiveness is measured against the objective of zero nuclear weapons. In contrast, one could certainly argue that the NPT's effectiveness in the realm of arms control, that is preventing the horizontal proliferation of nuclear weapons (with the exception of North Korea), is in much better shape. In the CFE case, it is the other way round. The disarmament objective of significantly downsizing conventional weapons and forces was already reached at the end of 1995. However, the arms control objectives of regulating the NATO-Russia military balance and achieving a mutually satisfactory level of transparency and predictability have gone lost during the last 15 years.

What both have in common is that they are negatively affected by the prevailing interest of certain states – first and foremost the United States and Russia – in the continuation of the principle of deterrence. Both are part and parcel of the overall deterrence equation of the United States/NATO and Russia. Their effectiveness stands and falls with the level of mistrust that guides general relations; a level that constantly interacts with the principle of nuclear deterrence. In the end, both treaties are ineffective because they are based on a security definition by nuclear-weapons states – that is deterrence – which does not allow for full-fledged cooperation of the magnitude of nuclear abolition.

The neorealist variable of interest provides an important analytical starting point for assessing long-term cooperation (and thus institutional resilience in terms of effectiveness) with the aim of controlling and, later, abandoning nuclear weapons. The shared interest in the principle of deterrence works twofold: it allows for limited cooperation which leaves the general principle of deterrence untouched and only manipulates certain deterrence means according to mutually negotiated standards. It might be possible to

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<sup>40</sup> Hymans, Jacques E. "The psychology of nuclear restraint." Washington: Bulletin of the Atomic Scientists on-line (October 12, 2015), accessed November 24, 2015. <http://thebulletin.org/psychology-nuclear-restraint8796>.

move to significantly lower numbers with the deterrence principle intact. At the same time, deterrence prevents its own removal as it is cause and consequence of mistrust. It fundamentally stands in the way of nuclear abolition and impairs the effectiveness of institutions that deal with disarmament and arms control objectives. Beyond these more general observations, the following section will highlight three additional factors that could impair the daily routine of arms control and disarmament institutions.

### Resilience *and* Effectiveness: Some Lessons Learnt

As argued before, a shared interest in overcoming the deterrence principle will be fundamental for achieving zero nuclear weapons. Once this interest has broad support amongst states, the problem of how to make the resulting institution(s) resilient to perturbations will still loom large because a world free from nuclear weapons will not be free from crises and disruptive developments. Therefore, in the last section of this paper I will treat the issue of a future world of zero nuclear weapons as accomplished, thereby limiting the role of institutions to upholding the grand bargain of complete abolition. As I will show, beyond the continuation of a shared interest, institutional resilience and effectiveness will depend on three additional factors: adaptability, courtesy, and clarity. Current cases of failed policies in the CFE and NPT frameworks are taken to make the case.

*Adaptability.* Any institution must be able to adapt in order to be resilient. Continuous adaptation of institutions to changed political, technical, environmental or societal circumstances remains a key component of strengthening institutional resilience and effectiveness. This becomes the more important as institutions at the level of zero nuclear weapons would have to have extremely intrusive and timely verification mechanisms which simply needed to be up to date.<sup>41</sup> The latest thoughts about the possible nuclear proliferation effects of “Additive Manufacturing” (3-D Printing) are just one example of the impact of rapid technological change.<sup>42</sup>

However, review cycles and efforts at ‘contractual engineering’ are as dependent on interest overlap as during the initial phase of institution establishment. Review cycles

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<sup>41</sup> Cf. Hinderstein 2010.

<sup>42</sup> See Kroenig, Matthew and Tristan Volpe. “3-D Printing the Bomb? The Nuclear Nonproliferation Challenge.” *The Washington Quarterly* 38, no. 3 (2015): 7–19.

which continually fail to yield significant political results (as in the cases of CFE and the NPT) are a strong indicator of a certain degree of dysfunctionality of an institution.

The handling of the CFE adaptation in the late 1990s underlines another problem that comes with institutional adaptation.<sup>43</sup> At that time, the Clinton administration tied the withdrawal of a few hundred Russian troops and additional military equipment from the breakaway regions of Transnistria (Moldova), South Ossetia and Abkhazia (both in Georgia) to the future of the treaty. While formally in line with the stipulations of the treaty, the U.S. demand created a political dead end which ultimately helped to collapse the CFE consensus.<sup>44</sup> Linkages to policy issues formerly out of the political scope of an institution can create enormous obstacles to the further operation of that institution.<sup>45</sup>

*Courtesy.* States involved in upholding and shaping institutional operations should be extremely wary of the first signs of frustration in the institutional framework. Too often, states do not pay enough attention to each other's charges and continue to act in the institutional framework as if, by some magic trick, the problem will disappear (again, the NPT disarmament debate is a case in point). However, contrary to such behavior, continued frustration might trigger a 'cascade of disaffection' which often starts with the act of norm-challenging speech. One of the unintended effects of norm-challenging speech is that acts of vocal dissatisfaction, even though aimed at preserving a certain norm (e.g. the NPT 'disarmament' Article VI), help to erode that norm, since the act of debate demonstrates the notion that basically something is 'wrong' with the norm.<sup>46</sup> Norm-challenging speech can lead to calls for re-negotiation, which can prepare the ground for norm-challenging behavior, ultimately leading to non-compliance and the collapse of institutionalized cooperation.

*Clarity.* Diplomats often refer to the formula of "constructive ambiguity" in the process of agreement-making in order to bridge divisive issues of divergent interests or to ease technical difficulties.<sup>47</sup> As in any other realm of international cooperation, conventional

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<sup>43</sup> For the negative consequences associated with regime adaptation see: Young, Oran R. "Regime dynamics: the rise and fall of international regimes." *International Organization* 36, no. 2 (1982): 277–297.

<sup>44</sup> Cf. Kulesa 2014.

<sup>45</sup> Cf. Müller, Harald. *Die Chance der Kooperation: Regime in den internationalen Beziehungen*. Darmstadt: Wiss. Buchges., 1993, pp. 43 et seq.

<sup>46</sup> See Rosert, Elvira and Sonja Schirmbeck. "Zur Erosion internationaler Normen: Folterverbot und nukleares Tabu in der Diskussion." *Zeitschrift für Internationale Beziehungen* 14, no. 2 (2007): 253–288.

<sup>47</sup> "Constructive ambiguity" is attributed to Henry Kissinger, see Keller, Bill. "Mitt and Bibi:

and nuclear arms control provide many examples of that kind. Take for instance the CFE Treaty which refers to two “Groups of States”, basically referring to NATO and the Warsaw Pact. At the time of negotiation in 1990, some members of the Warsaw Pact insisted on such a neutral formula because they did not want to further cement their future status as members of that alliance.<sup>48</sup> While such formulations help diplomats to overcome difficult hurdles in the short term, the formulations themselves can become bones of contention over the long run if interpretations start to diverge. The NPT Article VI speaks of negotiating “a treaty on general and complete disarmament”<sup>49</sup>. While most NPT member states interpret this, first and foremost, as stating the *nuclear* disarmament obligations of the “P5”, some of the latter (most notably Russia) interpret it as also including *conventional* disarmament and, thereby, as either a precondition or a development happening in parallel to nuclear disarmament<sup>50</sup>. If the latter view is taken as the ultimate goal of Article VI, nuclear disarmament would probably be deferred forever.

The point here is not to underestimate the historico-political or technical negotiation difficulties and considerations behind these contractual outcomes. The point is that a future institutional framework for a world free from nuclear weapons needs to close all possible loopholes for re-interpretation from the very beginning. It would have to be clear and precise in its provisions.<sup>51</sup> International security and stability at zero nuclear numbers is too serious an issue to rely on institutions that allow for divergent interpretations of principles, norms, and rules.

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Diplomacy as Demolition Derby.“ *The New York Times on-line* (September 12, 2012), accessed November 30, 2015. <http://keller.blogs.nytimes.com/2012/09/12/mitt-and-bibi-diplomacy-as-demolition-derby/?hp>.

<sup>48</sup> Cf. Zellner, Wolfgang. *Die Verhandlungen über konventionelle Streitkräfte in Europa: Konventionelle Rüstungskontrolle, die neue politische Lage in Europa und die Rolle der Bundesrepublik Deutschland*. Demokratie, Sicherheit, Frieden 87. Baden-Baden: Nomos, 1994.

<sup>49</sup> NPT Treaty.

<sup>50</sup> Statement by Mikhail I. Uliyanov, Acting Head of the Delegation of the Russian Federation at the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (Cluster 1: nuclear disarmament), New York, May 1, 2015, accessed November 24, 2015. <http://www.pircenter.org/media/content/files/13/14308848160.pdf>.

<sup>51</sup> Jacques Derrida, and before him Friedrich Nietzsche, have already pointed out that there is no such thing as non-ambiguous language from a philosophical point of view (I would like to thank Benôit Pelopidas for referencing this). However, the argument here is that from a practical policy-making point of view, ambiguous treaty language can become a ‘gateway’ for frustrated states in the above described process of a ‘cascade of dissatisfaction’ and should, therefore, be limited as much as possible.

## Conclusions

This article started off from the assumption that the stable transition to a world with lower numbers and ultimately zero nuclear weapons would most likely rely on international institutions to achieve and uphold these outcomes. According to the historical accounts of conventional and nuclear arms control policies in the NPT and CFE frameworks, the preconditions for their establishment will be a more even relative distribution of power in the international system and, more importantly, a shared interest in moving past the principle of nuclear deterrence relationships. So far, the nuclear deterrence relationship of the United States and Russia greatly discourages large-scale cooperation and helps to solidify the existing mistrust. In relation to arms control and disarmament institutions, nuclear deterrence works both as a limited cooperation enabler but also as a disabler since the institutions' effectiveness stands and falls with the level of mistrust that guides general relations; a level that constantly interacts with the principle of nuclear deterrence. As has been shown, the question of the resilience of arms control and disarmament institutions to different political or other pressures rests mainly on their continued ability to function effectively. Lessons learnt from the CFE and NPT treaties suggest that particularly the factors of institutional adaptability, participatory courtesy, and inherent clarity will have an impact on their resilience in terms of effectiveness.

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