IN THIS ISSUE

Estimated Global Nuclear Warhead Inventories and Abolition Events 1945 – 2017

Who and Where. A Wider Problem

Some Lesser Known Effects of Nuclear Weapons

Long-term Human Costs of Nuclear Weapons Tests in the Pacific

In Nuclear Disarmament Campaigns, the Messenger Matters

What does Masculinity and East/West Thinking Have to do With Nuclear Weapons?

The Importance of Devaluing Nuclear Weapons

Too Close and Too Strong. U.S. Power and Proximity Contributing to North Korea’s Nuclear Ambitions

What Else We Are Reading at the Peace Science Digest

Voices in the Field
Our vision is a world beyond war by 2030 and humanity united by a global system of peace with justice.

Our mission is to advance the Global Peace System by supporting, developing and collaborating with peacebuilding efforts in all sectors of society.

DIRECTORY

Patrick Hiller, Ph.D.
DIRECTOR

David Prater
PROGRAM MANAGER

Molly Wallace, Ph.D.
CONTRIBUTING EDITOR

Paloma Ayala
GRAPHIC DESIGN

221 NW Second Ave; Suite 204
Portland, Oregon 97209
United States

Phone: 503.505.5721
digest@warpreventioninitiative.org
www.warpreventioninitiative.org

SOCIAL MEDIA

Facebook.com/
PeaceScienceDigest

@PeaceSciDigest

youtube.com/user/
WarPreventionTV

flickr.com/photos/
warpreventioninitiative

Disclaimer

Research featured in the Peace Science Digest is selected based on its contribution to the field of Peace Science, and authenticated by the scientific integrity derived from the peer-review process. Peer-reviewed journals evaluate the quality and validity of a scientific study, giving us the freedom to focus on the articles’ relevance and potential contribution to the field and beyond.

The editors of the Peace Science Digest do not claim their analysis is, or should be, the only way to approach any given issue. Our aim is to provide a responsible and ethical analysis of the research conducted by Peace and Conflict Studies academics through the operational lens of the War Prevention Initiative.
Peace and Conflict Studies (henceforth: Peace Science) has emerged as an academic discipline with its own graduate programs, handbooks, research tools, theories, associations, journals, and conferences. As with most scientific communities, the slow migration of academic knowledge into practical application becomes a limiting factor of a field’s growth, its impact, and the overall effectiveness of its practitioners.

The expanding academic field of Peace Science continues to produce high volumes of significant research that often goes unnoticed by practitioners, the media, activists, public policy-makers, and other possible beneficiaries. This is unfortunate, because Peace Science ultimately should inform the practice on how to bring about peace.

The research and theory needed to guide peace workers to produce more enduring and positive peace, not only more peace studies, have come to stay. Bridging the gap between the peace movement moralism and foreign policy pragmatism is a major challenge facing everyone who seeks to achieve peace on Earth. (Johan Galtung and Charles Webel)

To address this issue, the War Prevention Initiative has created the Peace Science Digest as a way to disseminate top selections of research and findings from the field’s academic community to its many beneficiaries.

The Peace Science Digest is formulated to enhance awareness of scholarship addressing the key issues of our time by making available an organized, condensed, and comprehensible summary of this important research as a resource for the practical application of the field’s current academic knowledge.
Dear Readers,

"At dozens of locations around the world - in missile silos buried in our earth, on submarines navigating through our oceans, and aboard planes flying high in our sky - lie 15,000 objects of humankind's destruction." These somber words were delivered by Beatrice Fihn when she accepted the 2017 Nobel Peace Prize on behalf of the International Campaign to Abolish Nuclear Weapons. It is a reminder that nuclear weapons and their dangers are not some relic from the Cold War. The nuclear threat is alive and well, most visible in offensive rhetoric and brash military posturing between the U.S. and North Korea, risking hundreds of millions of lives and global nuclear famine. Yet, the mere efficacy of nuclear weapons is still debated in the public and political spheres.

We do not arrive at this debate with an open mind about the role of nuclear weapons in the world. As part of our efforts to prevent all wars, we strongly support all efforts towards the complete abolition of nuclear weapons. They are a danger to humanity and the environment and must not exist. While advocating for complete abolition, we acknowledge the importance of smaller goals and priorities as part of the large trajectory. Is this advocacy compatible with our commitment to scientific rigor? We believe it is.

Advocacy and research can be compatible—in fact, honest advocacy is always informed by the best science available. We are interested in advancing the debate and the realistic steps toward the abolition of nuclear weapons. Peace researchers take a position—that of providing "research and theories to guide peace workers to produce more enduring and positive peace" (Johan Galtung and Charles Webel†).

To this aim, peace scientists have an obligation and opportunity to frame a debate that places nuclear weapons into a new context. First, there is no scientific debate as to whether nuclear weapons are extremely harmful to people and the planet. Second, the inconvenient truth is that if humans continue hosting and developing nuclear weapons, they will be used at some point. Third, the notion that "nuclear shields" can completely defend us—or anyone—is a technological myth. Fourth, when someone strongly condemns nuclear weapons in the hands of someone specific (read: North Korea, Iran, Trump), s/he is simultaneously making the case that nuclear weapons cannot be trusted in anyone's hands. If a leader’s fitness or legitimacy elicits concern regarding his/her authority to launch nuclear weapons, then this concern stems from discomfort with the mere existence of nuclear weapons. Let us remember that nuclear weapons are out-of-ratio weapons designed to kill millions of people and designed to be fired by a small number of persons†.

This issue of the Peace Science Digest is "special" in many ways. First, we provide our usual format of analyses of recent research contributions on nuclear weapons. This time we have cast a wider net, transcending peace and conflict studies journals to include other disciplines such as political science, gender studies, and medicine—all with important contributions to the nuclear weapons debate. We also compiled various sources of data to provide an overview the nuclear weapons over time and their impacts on human health, the environment and the economy. Finally, we have added references to informative sources and material that we were not able to fully integrate.

The first analysis inside this issue sheds light on the negligent dismissal of environmental and health considerations during the world’s race to develop nuclear weapons. The second analysis examines how the perceived legitimacy, power, and language of certain people can influence thinking and policy on nuclear disarmament efforts. The third analysis examines how gender and Western domination of knowledge shape nuclear discourse. In the fourth analysis, we highlight the importance of devaluing nuclear weapons not only as material, but as social objects. Finally, we examine empirical research that considers U.S. proximity and power as the main contributor to North Korea’s nuclear ambitions.

We are well aware that one special issue of the Peace Science Digest does not do justice to the dangers these weapons pose. At the same time, we are hopeful that by highlighting some research contributions, we can elevate the call for more of the same. In our ongoing work through the Peace Science Digest, we are committed to closely follow peace research on nuclear weapons and make it accessible, understandable and useful beyond this special issue.

Your Peace Science Digest Editorial Team

Patrick Hiller
David Prater
Molly Wallace

# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Global Nuclear Warhead Inventories and Abolition Events 1945 – 2017</td>
<td>6</td>
</tr>
<tr>
<td>Who and Where. A Wider Problem</td>
<td>8</td>
</tr>
<tr>
<td>Some Lesser Known Effects of Nuclear Weapons</td>
<td>9</td>
</tr>
<tr>
<td>Long-term Human Costs of Nuclear Weapons Tests in the Pacific</td>
<td>10</td>
</tr>
<tr>
<td>In Nuclear Disarmament Campaigns, the Messenger Matters</td>
<td>16</td>
</tr>
<tr>
<td>What does Masculinity and East/West Thinking Have to do With Nuclear Weapons?</td>
<td>20</td>
</tr>
<tr>
<td>The Importance of Devaluing Nuclear Weapons</td>
<td>24</td>
</tr>
<tr>
<td>Too Close and Too Strong. U.S. Power and Proximity Contributing to North Korea’s Nuclear Ambitions</td>
<td>28</td>
</tr>
<tr>
<td>What Else We Are Reading at the Peace Science Digest</td>
<td>32</td>
</tr>
<tr>
<td>Voices in the Field</td>
<td>33</td>
</tr>
</tbody>
</table>
Estimated Global Nuclear Warhead Inventories and Abolition Events 1945–2017
Source | Kristensen/Norris, Federation of American Scientists 2017

Interpreting the curve:

The number of nuclear weapons in the world has declined significantly since the Cold War, down from a peak of approximately 70,300 in 1986 to an estimated 14,900 in early-2017.1

The timeline and events show that humans have been uncomfortable with nuclear weapons ever since they were invented.

The data points show that regional and global collaboration has had some success in generating agreements on ridding the world of nuclear weapons.

What the data does not show us:

Less than one percent of the nuclear weapons in the world today could disrupt the global climate and cause nuclear famine. The thousands of nuclear weapons possessed by the US and Russia could bring about a nuclear winter, destroying the essential ecosystems on which life depends².

The pace of reduction has slowed significantly³.

Comparing today’s inventory with that of the 1950s is like comparing apples and oranges; today’s forces are vastly more capable⁴.

All nuclear weapon states continue to modernize their remaining nuclear forces and appear committed to retaining nuclear weapons for the indefinite future⁵.

Even the use of “small” nuclear weapons will result in severe and long-lasting consequences for human health, the environment, climate, food production, and socioeconomic development⁶. Accidental nuclear weapon detonations remain a very real danger. Malfunctions, mishaps, false alarms and misinterpreted information have nearly led to the accidental detonation of nuclear weapons on numerous occasions since 1945⁷.

---

Who and Where. A Wider Problem

Source | Federation of Atomic Scientists 2017; International Campaign to Abolish Nuclear Weapons

**NATIONS WITH NUCLEAR WEAPONS**

UNITED STATES (6,800)
RUSSIA (7,000)
BRITAIN (215)
FRANCE (300)
CHINA (270)
ISRAEL (80)
INDIA (115)
Pakistan (125)
NORTH KOREA (<10)

**NATIONS HOSTING NUCLEAR WEAPONS**

BELGIUM
GERMANY
ITALY
NETHERLANDS
TURKEY

**NATIONS IN NUCLEAR ALLIANCES**

ALBANIA
AUSTRALIA
BULGARIA
CANADA
CROATIA,
CZECH
DENMARK,
ESTONIA
GREECE,
HUNGARY
ICELAND
JAPAN
LATVIA
LITHUANIA
LUXEMBOURG
NORWAY
POLAND
PORTUGAL
ROMANIA
SLOVAKIA
SLOVENIA
SOUTH KOREA
SPAIN

**Environment – immediate and long-term effects**

**The big picture:**

A limited, regional nuclear conflict would severely disrupt the global climate and agriculture for two decades or more. The resulting food shortages would place at least two billion people at risk of starvation, no region would be spared. The massive arsenals still held by the US and Russia can create a nuclear winter, destroying Earth’s fundamental ecosystems, on which all life depends.

**Specifics:**

- Fewer than 1% of all the nuclear weapons currently deployed in the world can damage the global climate and disrupt agricultural production so severely that billions of lives could be lost.
- The lasting radiation of French nuclear tests in Polynesia, as well as the indiscriminate dumping of nuclear waste, poisoned local fishing grounds that many local communities relied on to survive.
- At the mostly decommissioned Hanford nuclear production complex in Washington State, 57 tons of plutonium—including the plutonium that was used for the bomb dropped on Nagasaki—and billions of gallons of nuclear waste were generated. The site now is one of the most contaminated areas in the Western Hemisphere. At least six tanks are leaking radioactive waste, and dozens more are under investigation. One million gallons of nuclear waste have leaked from underground tanks.

---

Some Lesser Known Effects of Nuclear Weapons

Health – immediate and long-term effects

The big picture:
Nuclear weapons have extreme blast and burn effects that kill people and destroy infrastructure on a scale and with an intensity that puts them in a class of their own compared with any other weapons. Radioactive fallout causes cancers, genetic damage, and other illnesses. To date, there are no effective means of assisting a substantial portion of survivors in the immediate aftermath of a nuclear detonation. Health effects can last for decades and genetic damage of survivors can spread to new generations.

Specifics:
• In 2004, the U.S. National Cancer Institute estimated that about half of the cancer cases that would occur as a result of Marshall Islands nuclear testing are still to come.
• Cancer studies have shown that workers during the British nuclear tests in Australia have a 23% higher cancer rate and are 18% more likely to die of cancer than the general public.
• French Polynesia, ground zero for France’s nuclear weapon testing, has the highest rate of acute myeloid leukemia and thyroid cancer in the world—both of these cancers are among those most strongly associated with radiation exposure.

Economy – immediate and long-term effects

The big picture:
In addition to the threats nuclear weapons pose to humans and the environment, the economic burden is unacceptable as well. While nuclear warhead stockpiles have been reduced significantly, maintenance and modernization of nuclear weapons cost billions of dollars every year. A conservative estimate is that the nine nuclear weapons nations will spend more than one trillion dollars on nuclear weapons over the next decade. The expenditures on nuclear weapons divert vast public resources from health care, education, climate action and other essential services.

Specifics:
• The Congressional Budget Office (CBO) projects that the 2017 plan for nuclear forces would cost a total of $1.24 trillion over the 2017-2046 period.
• In 2015, the United States has an estimated 7,300 nuclear weapons, but the average annual per-unit cost is about $1.8 million—a 500 percent increase in per-warhead cost [to 1985].
• Every year the US government spends more than $2 billion of taxpayer dollars cleaning up the Hanford Nuclear Reservation.


Photo credit: US Government
Long-term Human Costs of Nuclear Weapons Tests in the Pacific


The devastating toll of nuclear weapons was most obviously observed after their use in war. Less observed, but also extremely harmful to human life and the environment have been the decades of testing by nuclear-armed countries. This article provides an overview of the nuclear test programs of three counties and their devastating toll on the environment, the workers conducting the tests, and the colonized indigenous communities exposed to the nuclear fallout.

Since 1945, more than 2,000 nuclear explosions have occurred around the world. All but two explosions (the bombs dropped on Hiroshima and Nagasaki) have been for the purpose of development and testing. These tests caused dangerous nuclear fallout that led to physical and biological damage. In the name of national security, governments were willing to accept harm to their own populations and more so to others. The nations conducting the tests displayed colonial attitudes regarding the humans exposed to testing. Compared to the “civilized” test personnel, the “primitive” indigenous people had an acceptable radiation dose that was 15 times the acceptable limit proposed by the International Commission of Radiological Protection. The research examines atmospheric, underground and underwater nuclear weapons tests by three different countries illustrate their high human and environmental costs.

British Nuclear Tests in Southern Australia
Between 1952 and 1957, the Australian government allowed British nuclear weapons tests in the Monte Bello Islands, and in Maralinga and Emu Field in Southern Australia. The highest post-test radiation doses were recorded in local Aboriginal communities. Residents were often not evacuated or informed of the testing and, in some cases, were allowed to stay in contaminated areas for up to six years before monitoring organizations warned them of their risk to radiation exposure. Personnel working on the nuclear tests were also at high risk of radiation exposure and often lacked vital protective equipment or occupational safety standards. Workers were routinely exposed to radiation doses 80 times higher than the health standards of 1950. Compared to current safety standards, a single nuclear weapons test exposed workers to 20 times today’s acceptable yearly limit.
Three decades after the nuclear testing, a government-funded study found test veterans had 23% higher cancer rates and were 18% more likely to die of cancer than the general public. Unresolved long-term issues are indigenous dispossession, remaining contamination, inadequate clean-up and lack of compensation for indigenous people and workers exposed to hazardous radiation.

“It wasn’t long after that a black smoke came through... we all got crock, every one of us. We were all vomiting, we had diarrhea, skin rashes and sore eyes. I had really sore eyes. They were so sore I couldn’t open them for two or three weeks. Some of the older people, they died. They were too weak to survive all the sickness. The closest clinic was 400 miles away”.

Yami Lester, Yankunytjatjara elder and nuclear test survivor, referring to the “Black Mist” radioactive fallout after a nuclear test in South Australia on 15 October 1953.

United States Nuclear Tests in the Pacific Islands
After World War II, the United Nations granted the United States administrative authority over the Marshall Islands, where they ran their atmospheric nuclear weapons test program from 1946-1958. The Marshallese were removed by 42,000 U.S. soldiers, and their islands were subjected to 67 atmospheric tests, vaporizing entire islands and creating lasting fallout across their land and seas. The total explosive yield of nuclear weapons tested on the Marshall Islands was the equivalent of dropping 1.6 Hiroshima-sized bombs every day over the 12 years of U.S. nuclear testing.

During the 1954 “Castle Bravo” test of a warhead 1,000 times more powerful than the bomb dropped on Hiroshima, no warning or evacuation orders were given to local inhabitants. As a result of the test, two islands and part of a third were vaporized and radioactive fallout blanketed the surrounding islands. Nearly three days after the test, evacuation orders were finally given after most of the residents of Rongelap, Ailinginae, and Utrik Atolls had received near-lethal doses of radiation. These were the
highest doses following any test in the history of nuclear test explosions. Medical assessments of children on Rongelap during the time of the Castle Bravo test showed thyroid radiation exposure was more than 2,000 times above normal levels, and nearly all test subjects developed one or more thyroid diseases, including cancer.

“My island is contaminated. I have three tumors in me, and I’m frightened. I don’t know whether I should have children or not, because I don’t know if I will have a child that is like a jellyfish baby. All I know is that I must travel the world and share our story of the bombs, so that we can stop them—before they get you”.

Darlene Keju, Marshallese activist and educator (1951–1996)

“Of the survivors in the contaminated areas, some would be doomed by radiation sickness in hours, some in days, some in years. No survivor could be certain he was not among the doomed, and so added to every terror of the moment, thousands would be stricken with the fear of death and the uncertainty of the time of its arrival”.

1947 assessment from the U.S. Joint Chiefs of Staff Evaluation Board on the nature of radioactive fallout.

“There are only 90,000 of them out there. Who gives a damn?”

Former U.S. Secretary of State Henry Kissinger, on the U.S. invoking eminent domain powers to seize (rather than buy or lease) Pacific islands for nuclear testing.

French Nuclear Tests in Polynesia

From 1966 to 1996, France conducted over 200 nuclear test explosions (atmospheric and underground) in Polynesia. Their first nuclear test was one of the most dangerous when, after dismissing weather reports of shifting wind and rain, French President de Gaulle ordered an atmospheric test that carried radioactive fallout all the way to Samoa (3,700 km downwind) where radioactivity increased nearly 2,000 times the usual level. Similar fallouts were observed for other tests.

Many tests were conducted on floating barges or in underwater lagoons, causing underwater landslides resulting in tsunamis, and destroying large areas of coral reef. The lasting radiation from nuclear explosions, as well as the indiscriminate dumping of nuclear waste, poisoned local fishing grounds that many local communities relied on to survive. A 2012 study found French Polynesia has the world’s highest rate of acute myeloid leukemia. Similar studies show women in French Polynesia have the highest rates of thyroid cancer and myeloid leukemia in the world—both radiation-induced types of cancer.
The authors conclude by providing various implications of nuclear weapons tests in the Pacific on local and global health, the environment, and the unaddressed grievances of test survivors. Among these lessons is a warning to never allow the urgency of innovation to prevent considerations for the safety, environmental, and health effects of a project. Nuclear weapons are an extreme example of this, but many of the known health and environmental effects, as well as proper safety standards, were cast aside for the sake of speedy advances in the weapons program—leading to countless preventable deaths and long-term environmental consequences.

The use and testing of nuclear weapons have demonstrated their devastating immediate, mid- and long-term effects. Nuclear testing in several parts of the world has left a legacy of serious health and environmental consequences. Radioactive contamination from these tests disproportionately affects women and children. It contaminated food supplies and continues to be measurable in the atmosphere to this day.”

Chair’s Summary, Vienna Conference on the Humanitarian Impacts of Nuclear Weapons, 8–9 December 2014.
This research sheds light on the negligent dismissal of environmental and health considerations during the world’s race to develop and test nuclear weapons. Understanding the long-lasting and unacceptable consequences, we must ask ourselves what harm to people and the planet—if any—is acceptable in the name of national security?

In 2013, sixty-eight years after the bombings of Hiroshima and Nagasaki, world leaders finally sat down for a conference dedicated to the humanitarian effects of nuclear weapons. They heard testimony on the lasting environmental and health hazards from nuclear weapons tests, as well as accounts from nuclear weapons test survivors. As the author recounts, testimonies from survivors and scientists alike found that “the social impacts of disempowerment; victimization; abuse of basic human rights; disruption of traditional communities, ways of life and means of sustenance; displacement; justified concern about unpredictable long-term health impacts extending to future generations; and concern about transmitting genetic mutations to one’s children can all have profound and long-term direct and indirect physical and mental health consequences.”

In a note from 2015, the International Committee of the Red Cross (ICRC) and the Japanese Red Cross Society stated their concern that the health consequences of genetic damage to non-exposed children of survivors are an ongoing concern in the context of the Japanese atomic bomb survivors. This concern transfers equally to the populations exposed to nuclear weapons testing. Tragically, the indigenous communities of the Pacific Islands were made to suffer most of the consequences and casualties of nuclear weapons tests that they wanted no part of.

Even today, the communities most distant from decisions about war and violence are often the most affected. Civilian casualties from post-9/11 wars are in the hundreds of thousands, refugees fleeing wars are counted by the millions, and those doing the fighting are typically from marginalized or minority communities—further sheltering those in power from the consequence of their decisions. War-torn areas are forced into the long, difficult journey out of economic, social, and political recovery—where, much like the victims of nuclear weapons testing, they face lasting health effects, devastating environmental and infrastructure damage, and slow economic growth.

Since 2013, there have been three intergovernmental conferences dedicated to assessing the humanitarian effects of nuclear weapons testing. Each of the three conferences focused on highlighting the experience and consequences felt by those directly affected by the tests, as well as the expert opinions of health professionals and scientists. Although long overdue, the importance of highlighting voices from victimized communities, as well as related scientific findings, during these conferences is vital to the processes already in place to help prevent these types of atrocities from occurring again. Incorporating voices of those who have survived nuclear testing helps those unaware or unconcerned with these important issues recognize the physical harm being done. And by listening to the assessment and warnings from the best science available, decision-makers will be better equipped to view policy not only through the lens of national interest, but also considering how their decisions align with their professed humanitarian values.

The humanitarian initiatives with regards to nuclear weapons are partly responsible for recent movement towards an international treaty prohibiting nuclear weapons. The more activists and policy makers can do to talk about the real human impact of nuclear weapons and draw the framing of nuclear weapons away from abstract strategy and towards embodied humanitarian concerns, the more pressure will build on nuclear weapons states to eventually dismantle their arsenals.

**PRACTICAL IMPLICATIONS**

- The total explosive yield of nuclear weapons detonated in the Marshall Islands was the equivalent of dropping 1.6 Hiroshima-sized bombs every day for the 12 years of U.S. testing (1946 to 1958).
- In 2004, the U.S. National Cancer Institute estimated that about half of the cancer cases that would occur as a result of Marshall Islands nuclear testing are still to come.
- Cancer studies have shown that workers during the British nuclear tests in Australia have a 23% higher cancer rate and are 18% more likely to die of cancer than the general public.
- French Polynesia, ground zero for France’s nuclear weapon testing, has the highest rate of acute myeloid leukemia and thyroid cancer in the world—both radiation-induced types of cancer.

**TALKING POINTS**

- The total explosive yield of nuclear weapons detonated in the Marshall Islands was the equivalent of dropping 1.6 Hiroshima-sized bombs every day for the 12 years of U.S. testing (1946 to 1958).
- In 2004, the U.S. National Cancer Institute estimated that about half of the cancer cases that would occur as a result of Marshall Islands nuclear testing are still to come.
- Cancer studies have shown that workers during the British nuclear tests in Australia have a 23% higher cancer rate and are 18% more likely to die of cancer than the general public.
- French Polynesia, ground zero for France’s nuclear weapon testing, has the highest rate of acute myeloid leukemia and thyroid cancer in the world—both radiation-induced types of cancer.

Photo Credit: United States Department of Defense (either the U.S. Army or the U.S. Navy)
Derivative work: Victorrocha (Operation_Crossroads_Baker_(wide).jpg) [Public domain], via Wikimedia Commons.

The “Baker” explosion, part of Operation Crossroads, a nuclear weapon test by the United States military at Bikini Atoll, Micronesia, on 25 July 1946. The wider, exterior cloud is actually just a condensation cloud caused by the Wilson chamber effect, and was very brief.
In Nuclear Disarmament Campaigns, the Messenger Matters

Resonating with security elites, obtaining goals and spurring debate—if only all nuclear disarmament initiatives were effective on these levels. They are not. In this article, the authors apply philosopher Pierre Bourdieu’s social theory to gain insight into how the perceived legitimacy, power, and language of certain people can influence our thinking and impact policy concerning nuclear disarmament efforts.

The authors analyze the nuclear disarmament initiative by former United States statesmen, Shultz, Perry, Kissinger, and Nunn. From 2007 to 2011, the statesmen worked together to advocate for nuclear disarmament through interviews, high-profile speeches, an op-ed series in the Wall Street Journal, and other media sources. By analyzing text from the statesmen’s initiative, the authors study how and why their campaign stood apart from nuclear nonproliferation initiatives by other prominent public officials. To identify the kind of influence the initiative had, the study looked to three effects: (1) the number of published academic articles and books on the topics of nuclear disarmament before, during, and after the initiative; (2) the “peer-endorsement” of the statesmen’s push for nuclear disarmament; and (3) the policy impact of the statesmen’s initiative.

Examining the published articles and books, the authors’ analysis of publication activity from security scholars between 1990 and 2011 showed a significant increase following the statesmen’s initiative. Over half of the nuclear disarmament related books and articles were published following the initiative, suggesting that their plea attracted attention and spurred debate in the academic community. Comparing the publication rate of this time period to the years following other major nuclear disarmament efforts (McNamara, 1992; Butler, 1996; Canberra Commission on the Elimination of Nuclear Weapons, 1996; Goodpastor, 1995; Nitze, 1999; WMD Commission, 2006), the sustained scholarly debate was much more pronounced after Shultz, Perry, Kissinger, and Nunn’s push.

Second, “peer-endorsement” was examined by looking at the written support of other states(wo)men and political leaders who publicly responded to Shultz, Perry, Kissinger, and Nunn’s initiative. In the
statesmen's second article in the Wall Street Journal, the main outlet of the initiative's public declaration, the statesmen provide a list of former U.S. Secretaries of State and Defense and National Security Advisors (including Albright, Allen, Baker III, Cohen, McNamara, Powell, and many others) supporting their initiative, as well as supporters from outside the United States (including Gorbachev, Hurd, Schmidt, and others). The list of supporters for the statesmen’s initiative was larger and more significant than those found in previous initiatives.

Finally, policy impact was measured by analyzing the sitting U.S. President’s support for Shultz, Perry, Kissinger, and Nunn’s initiative. Notably, in the 2008 primary campaign, candidates McCain and Obama endorsed nuclear abolition. Once president, Obama paid tribute to the four statesmen by meeting with them at the White House, embracing the goal of a nuclear weapons-free world in a 2009 speech in Prague. Nuclear disarmament was included as an overarching goal of U.S. nuclear policy in the official 2010 U.S. Nuclear Posture Review. While other sitting U.S. presidents have paid lip service to the idea of nuclear disarmament, at the time, Obama’s public rhetoric and action were noticeably more proactive in support of this goal.

The effects examined above led the authors to believe the nuclear disarmament efforts of Shultz, Perry, Kissinger, and Nunn were more significant and better received than other prominent anti-nuclear weapons initiatives. The authors suggest that possible factors contributing to this significance may have included the end of the Cold War conflict, the growing threat of catastrophic terrorism, and public frustration with the slow progress of nuclear nonproliferation/disarmament (following weapons tests by India, Pakistan, and North Korea, and growing knowledge of weapons programs in Iran and Israel)—all of which led to an environment that was receptive to a disarmament initiative. The authors also point to the statesmen’s high symbolic capital, afforded by their roles as political and nuclear experts, which enabled their initiative to stand apart from other advocates and commentators on nuclear issues.

Finally, the authors suggested that by using commonplace understandings of global security threats and by framing nuclear abolition as “a possible way out” of the existential threat nuclear weapons pose to all nations, the statesmen’s narrative was more appealing to security elites than other efforts. These factors suggest that the favorable historical conditions during the era of their plea and the high symbolic, political, and social capital of the statesmen were crucial factors in accounting for the support received by the statesmen’s initiative.

“The extent to which an utterance has an effect in the world depends not only on its intrinsic qualities, but also on the symbolic power of the speaker” (Bourdieu, 1991: 107–116). Symbolic Capital and Symbolic Power: French Philosopher Pierre Bourdieu refers to symbolic capital as accumulated reputation for competence, respectability and honorability. Symbolic Power is considered the power to make people see and believe certain visions of the world rather than others.
In the contemporary context, nuclear abolition advocates, most notably represented by 2017 Nobel Peace Laureate the International Campaign to Abolish Nuclear Weapons (ICAN), have far more symbolic capital than do the advocates of nuclear weapons proliferation. U.S. President Trump’s dangerous rhetoric on the use of nuclear weapons is recognized widely, adding to much of the international community’s lack of respect for him and the low level of competence they attribute to him. In other words, as far as nuclear weapons are concerned, Trump lacks the symbolic capital to command the respect and authority needed to make progressive change. Yet his symbolic power—his ability to make his followers see and believe certain views—sets a dangerous stage and puts humans at serious risk of nuclear war.

It therefore becomes important to examine the current context—just like the elder statesmen Shultz, Perry, Kissinger, and Nunn did—and determine who can threaten Trump’s symbolic power and offer an alternative vision of the world that constructively involves Trump’s supporters, while also exposing and educating about the risks of nuclear war. This task will be ongoing but one that nuclear weapons abolition advocates must not shy away from. By looking at symbolic capital and power—and transforming it when necessary—nuclear abolition advocates can make advances in “preaching beyond the choir.”

**CONTEMPORARY RELEVANCE**

- When considered competent, respectable, and honorable, nuclear abolition advocates trigger increased attention and debate on disarmament issues.
- When considered competent, respectable, and honorable, nuclear abolition advocates are able to gather more peer support for their campaign.
- When considered competent, respectable, and honorable, nuclear abolition advocates can impact policy outside of political office.
- Nuclear abolition campaigns are more successful and reach larger audiences when campaign leaders are perceived as legitimate authorities on the issues they are campaigning for.

**TALKING POINTS**

- When considered competent, respectable, and honorable, nuclear abolition advocates trigger increased attention and debate on disarmament issues.
- When considered competent, respectable, and honorable, nuclear abolition advocates are able to gather more peer support for their campaign.
- When considered competent, respectable, and honorable, nuclear abolition advocates can impact policy outside of political office.
- Nuclear abolition campaigns are more successful and reach larger audiences when campaign leaders are perceived as legitimate authorities on the issues they are campaigning for.
Who are the best messengers to convey the dangers of nuclear weapons? What messages are most important to convey? These are core questions nuclear abolition advocates struggle with on an ongoing basis. First, there is no “one-size-fits-all” template for communicating the dangers of nuclear weapons. What this research has shown, however, is that certain narratives of nuclear abolition campaigns can grasp the attention of nuclear weapons and security experts, thus elevating the entire debate to a more prominent and mainstream level. In this context, successful campaigns use commonplace understandings of security and geopolitical issues to frame abolition as a necessary condition for the future of all nations.

While the geopolitical security framing might not be the preferred one for grassroots nuclear abolition groups, it offers these groups an opportunity to step into an elevated environment of raised awareness on nuclear weapons and provides access to key players that may have otherwise been out of reach. Moreover, abolition groups can use this opportunity to challenge larger defense and security agendas by offering alternative conceptions of security within the framework of the nuclear weapons debate.

We have to recognize that as important as nuclear abolition activists are, sometimes it is more effective to have mainstream foreign policy figures who can sway those who are unlikely to take “traditional” anti-nuclear/peace activists seriously. These statesmen had a sort of symbolic capital (with certain audiences) that anti-nuclear activist groups like ICAN did not.

The authors of this study also highlight the importance of timing and the social environment most conducive for a successful abolition campaign. In 2017, debate on issues regarding nuclear weapons has arguably been at the highest level since the end of the Cold War, elevating the world’s awareness of the dangers posed by nuclear weapons. Using the authors’ factors of a successful abolition campaign, the contemporary threat of nuclear war between North Korea and the United States has created an environment where the historical context and “timing” is primed for a successful abolition campaign.
What does Masculinity and East/West Thinking Have to do With Nuclear Weapons?


To the untrained eye, nuclear politics may appear very far from considerations of gender in international politics. Political leaders generally justify their nuclear policies on the basis of national security or economic cooperation, both of which seem neutral and ungendered at first glance. The author aims to demonstrate the fundamental ways in which gender actually influences nuclear politics globally, reinforcing unequal power relations between different countries and legitimizing particular nuclear policies. The focus of the author’s analysis is post-9/11 nuclear cooperation between the U.S. and India, and she is interested in finding out the extent to which masculinity and orientalism inform U.S./Indian nuclear discourse and politics.

Tracing the history of U.S./Indian relations since World War II, with special attention to nuclear politics, the author notes an evolution from a somewhat strained relationship during India’s post-independence commitment to economic development and their non-alignment during the Cold War—to warmer relations when India shifted to a more liberal market economy. Cooperation grew between the two countries despite India’s move to acquire nuclear weapons and refusal to sign the Nuclear Non-Proliferation Treaty (NPT) in the 1960s-1970s. After the end of the Cold War, U.S./Indian relations were generally positive, the U.S. insisted on the two-tier “nuclear apartheid” system (enshrined by the NPT). In this system, certain states were/are considered legitimate nuclear powers and others were/are considered unfit to possess nuclear weapons. India (and Pakistan) were punished for their 1998 nuclear tests, but the U.S. softened this stance when it began prioritizing economic and anti-terrorism cooperation with India after 9/11.

The author looks to various official documents and speeches in order to analyze the nuclear discourse between the U.S. and India post-9/11. This period is characterized by a neo-liberal emphasis on international interdependence and cooperation to facilitate political and economic freedom and fight terrorism. This analysis leads her to three central findings. First, the discourse outlining U.S./Indian cooperation—especially in the area of nuclear energy—is informed by a “globalized masculinity”.

---

**Key words**

nuclear weapons
masculinity
Orientalism
nuclear apartheid
discourse
India
Pakistan

Continued Reading:

*Sex and Death in the Rational World of Defense Intellectuals*
By Carol Cohn. Signs: Journal of Women in Culture and Society, Vol. 12, No. 4 (Summer 1987).

*Sex, Gender, and Nuclear Weapons*

*The Relevance of Gender for Eliminating Weapons of Mass Destruction*
U.S. and Indian state identities are marked as rational, responsible actors who engage in strategic interdependence to meet their economic and political interests. Second, at the same time, these are hierarchically ordered masculinities informed by orientalist representations. India is infantilized and/or feminized vis-à-vis the U.S., due to its post-colonial status as a non-Western country that is potentially irresponsible and must be “watched” with its nuclear technology use. Third, India, in turn, engages in its own orientalist “internal” othering of Pakistan. It draws clear distinctions between the characteristics it (India) shares with the U.S.—“democracy, pluralism, and secularism”—and the characteristics of Pakistan, who is represented as home to terrorist groups and as not fully evolved politically. This orientalist move towards Pakistan is complicated, however, and does not directly replicate the U.S.’s orientalism towards India. Being self-conscious of its own post-colonial position in relation to the West/U.S., India also contains plenty of critics of U.S./Indian cooperation.

**Masculinity:** (in international relations): “a form of ‘symbolic gender-coding’ that represents a gendered and hierarchical ‘way of structuring relations of power’ in international politics.” For instance, gendering an actor or practice as masculine (through qualities widely associated with masculinity such as being “tough,” “rational,” “unemotional,” etc.) endows it with value and legitimacy, whereas gendering an actor or practice as feminine (through qualities widely associated with femininity such as being “weak,” “emotional,” “in need of protection,” etc.) devalues or delegitimizes it.


**Orientalism:** a term used most notably by Edward Said to refer to the process by which the West dominates knowledge production about the Orient/non-West, perceiving it through a Western lens and representing it in stereotypical terms as different, inferior, and/or dangerous.

**Discourse:** “a mode of organizing knowledge, ideas, or experience that is rooted in language and its concrete contexts (such as history or institutions).” (Merriam-Webster Dictionary)

Discourse is usually understood to, in a sense, produce reality rather than merely describe it, insofar as the language we use to represent the world around us shapes how we perceive and act on that world.

**Civil Society:** a web of human relationships made up of individual people, their networks, their organizations and institutions. Usually they are considered autonomous from the state.

This article is important for two main reasons. First, it reminds us of the widespread presence of gender as a tool for structuring value and legitimizing particular practices in global politics—including nuclear weapons possession. Once we begin to train ourselves to see the operation of gender in various spheres of political life, we can start to bring its operation to light. We then can call out the way in which, for instance, appeals to masculinity normalize nuclear deterrence or the feminizing of nuclear-abolition activists delegitimizes their concerns. Second, this article highlights the often-eclipsed two-tier system of “nuclear apartheid” that operates on the global level, one that divides the world into acceptable, responsible nuclear powers vs. those not civilized/developed/responsible enough to be trusted with nuclear weapons. As much as non-proliferation may be a laudable goal, one can understand the arguments of countries—including India, Pakistan, and now North Korea—who resist this unequal system and wish to develop nuclear capabilities themselves. As the only country to have ever used nuclear weapons against human beings in wartime, the U.S. has dubious standing when it comes to telling other countries that they are not fit to own nuclear weapons.

Although this double standard mostly applies to the distinction between the official nuclear countries identified in the NPT (the U.S., the U.K., China, Russia, and France), and everyone else, it is worth mentioning that it also applies to different ways of viewing the various countries that have acquired nuclear weapons despite—or outside the parameters of—the NPT, such as India, Pakistan, North Korea, and Israel. While the U.S. clearly tolerates Israel’s (and to some extent India’s and Pakistan’s) nuclear weapons, it declares North Korea’s nuclear weapons possession (and Iran’s potential nuclear weapons possession) wholly unacceptable.

On a final related note, the nuclear non-proliferation regime centered on the NPT is based on a fundamental premise: non-nuclear states agree not to acquire nuclear weapons if nuclear states agree to move towards complete disarmament. So far, the official nuclear states have not taken this aspect of the treaty seriously, despite the 2017 UN treaty prohibiting nuclear weapons.

CONTEMPORARY RELEVANCE

TALKING POINTS

- Masculinity operates in U.S./Indian nuclear discourses, marking both U.S. and Indian state identities as rational, responsible actors who engage in strategic interdependence to meet their economic and political interests.
- Orientalism operates in U.S./Indian nuclear discourses, marking India as inferior to the U.S. as a potentially irresponsible non-Western country that must be “watched with its nuclear technology use.
- India engages in its own orientalist “internal” othering of Pakistan in the way that it draws clear distinctions between the characteristics it shares with the U.S.—“democracy, pluralism, and secularism”—and the characteristics of Pakistan, who is represented as home to terrorist groups and as not fully evolved politically.
PRACTICAL IMPLICATIONS

As noted by various feminist scholars and anti-nuclear activists such as Carol Cohn, Sara Ruddick, Ray Acheson, Felicity Hill, and others, employing a gender lens in our analysis is critical to understanding both how nuclear weapons are legitimized and normalized and how to abolish them. One step to take is to bring seemingly “feminine” concerns and voices into discussions on nuclear weapons and to value—rather than denigrate—they (easier said than done, as noted by Cohn). For instance, even if you feel like you are the only one with this concern in the context of abstract political discussions about nuclear deterrence—and even if you fear that voicing it will mark you as “emotional” and “naïve” (qualities with feminine connotations)—vocalize your concern about the embodied human beings whose lives are put at risk by the very existence of these weapons. Even when it seems out of place, bring up the negative physical and environmental effects of nuclear testing or the opportunity costs (in terms of education, healthcare, economic well-being, and so on) of devoting massive amounts of money to upgrading the nuclear stockpile.

When it comes to the matter of orientalism and so-called “nuclear apartheid,” practical implications of this research include drawing out and publicizing the inconsistencies apparent in the nuclear policies of official nuclear weapons states vis-à-vis non-nuclear weapons states. Why is it that the only country to have ever used nuclear weapons against actual human beings is considered more responsible—and therefore a more legitimate possessor of nuclear weapons—than countless other countries who have not? Furthermore, it is important to keep drawing attention to Article 6 of the NPT, in which nuclear weapons states agreed to engage in good-faith negotiations towards complete nuclear disarmament. It is unreasonable to expect non-nuclear weapons states to deny themselves a right to nuclear weapons acquisition when the nuclear weapons states are not holding up their end of the bargain with nuclear disarmament. —especially in light of the new UN treaty prohibiting nuclear weapons, the negotiations for which none of the nuclear weapons states participated in and which none of the nuclear weapons states have yet signed.
The Importance of Devaluing Nuclear Weapons


Thinking on nuclear disarmament usually revolves around the political and technical steps necessary to accomplish such a feat. But nuclear weapons are not simply hardware; they are “social objects” that gain their meaning and value from the social context. Whether on the domestic or global level their context currently endows them with various forms of value and legitimacy. As such, moving towards nuclear abolition requires more than just political and technical problem-solving; it requires the devaluing of nuclear weapons, as “states are unlikely to voluntarily surrender highly prized national assets.” The author’s purpose in this article is to explore what devaluing nuclear weapons means and what the devaluing process might look like.

The author begins by clarifying what he means by “devaluing” nuclear weapons, a term he sees as encompassing two other terms: marginalizing and delegitimizing. Marginalizing nuclear weapons entails changes to national policy and force structure that sideline nuclear weapons in broader military planning. Delegitimizing nuclear weapons entails either formal rulings of nuclear weapons’ illegality or the evolution of more informal norms that stigmatize their use. To fully understand the process of devaluing nuclear weapons, however, the author insists that we must first understand nuclear value—something that does not exist objectively but rather emerges from specific contexts and discourses that create particular “truths” regarding what nuclear weapons are and what they can do. In other words, nuclear value comes from dominant modes of representing particular security practices and tools—including nuclear weapons—as legitimate and/or effective and others as illegitimate and/or ineffective. These dominant modes of representation take on the guise of “truth” and therefore have powerful effects on how we think and act.

To measure nuclear value in the case of the United Kingdom the author looks to discourse, analyzing “formal reports, statements, and interviews with current and former policy-makers.” And to measure nuclear weapons devaluation in the same case, he looks not only at “changes in material force structure and operations” and “formal nuclear policy” but also at the interpretations of these changes in nuclear policy discourse.
Nuclear value in the UK is categorized into six different domains: domestic, ontological, institutional, systemic, relational, and operational. Domestic political value includes the retention of skilled jobs in various nuclear industries, the party politics implications of being viewed as “strong on defence,” organizational value accorded to the Ministry of Defence, and public opinion in support of nuclear possession. Ontological value inheres in the value of stable national identity, which for the UK is tied up with nuclear weapons possession—the UK’s roles both as a “militarily moral ‘force for good’” that “uphold[s] international peace and security” and as a country with a “special relationship” with the United States.

Institutional/governance value relates to the way in which nuclear weapons have come to symbolize status and prestige in international politics. This is largely due to the way in which the official Nuclear Weapons States (N5) identified in the Non-Proliferation Treaty (NPT) correspond with the five permanent members of the UN Security Council (P5), “fetishiz[ing] [nuclear weapons] as a currency of international power” and creating a strong incentive for non-nuclear states to acquire the weapons. Systemic and relational value refer to general and specific deterrence value, respectively; the former relates to the role nuclear weapons are understood to play in maintaining international order and stability, and the latter relates to the presumed deterrent value nuclear weapons can have against specific adversaries, particularly Russia and Iran in the case of the UK. Finally, operational value entails what is believed to constitute “responsible” and “effective” practices to ensure minimum nuclear deterrence—for instance, the UK’s practice of always having at least one of its nuclear-armed submarines on patrol. Together, these six domains endow British nuclear weapons with significant value—value that is produced through both domestic and international discourses.

In turning to nuclear weapons devaluation processes, the author distinguishes between “surface” and “deep” devaluing: the former means reducing “the size and role of nuclear arsenals” while leaving the “logic of nuclear deterrence and nuclear prestige” largely intact; the latter means more fundamentally rethinking deterrence, as well as the prestige associated with nuclear weapons. The author suggests that deep devaluing will require the following changes, among others: a shift in conceptions of national identity such that nuclear weapons possession is not essential to the other roles that the UK performs; a decoupling of nuclear status from UN Security Council permanent membership; challenges to arguments about the effectiveness of nuclear deterrence in specific adversarial relationships; attention to economic concerns about dismantling nuclear industries; and greater “legal-normative restraints” on nuclear use. In short, these broader devaluation processes are necessary before political elites are likely to see nuclear abolition as consistent with national identity and national interest.

**Discourse:** “a mode of organizing knowledge, ideas, or experience that is rooted in language and its concrete contexts (such as history or institutions)” (Merriam-Webster Dictionary)

Discourse is usually understood to, in a sense, produce reality rather than merely describe it, insofar as the language we use to represent the world around us shapes how we perceive and act on that world.
CONTEMPORARY RELEVANCE

This past year has demonstrated dramatic movement in opposite directions when it comes to the valuing and devaluing of nuclear weapons. On the one hand, the current escalation between the U.S. and North Korea demonstrates—and reinvigorates—the value both countries attribute to nuclear weapons. To North Korea, no doubt, nuclear weapons are attractive both because they signal prestige and power and because their possession of them has so far averted a U.S. military attack. In the case of Iraq, for example, the U.S. attacked and invaded a country that did not have nuclear weapons. Nuclear weapons to North Korea also provide a symbol of national pride and resistance for a population that might otherwise have ample reason to resent their leadership. Likewise, for the U.S. under the current administration, nuclear weapons are tools of masculine bravado. Leaders can inflate their egos and strengthen their position when domestic approval ratings are plummeting. On the other hand, earlier this year, the UN adopted the Treaty on the Abolition of Nuclear Weapons, which is the first legally binding treaty to prohibit the possession of nuclear weapons (as well as their threat and use). This represents a huge step forward in delegitimizing these weapons and helps shift the normative context in which nuclear weapons states act, even if they continue to possess nuclear weapons and refuse to become signatories.

TALKING POINTS

• Nuclear weapons are “social objects” that gain their meaning and value from the social context—both domestic and global—within which they are embedded, therefore the value attached to them is subject to change.
• Movement towards nuclear abolition must include the devaluation of nuclear weapons if political elites are to be expected to voluntarily rid themselves of them.
• Key areas of focus for devaluing nuclear weapons include shifting to de-nuclearized conceptions of national identity; decoupling UN Security Council permanent membership from nuclear status to decrease the prestige associated with nuclear weapons possession; and challenging arguments about the effectiveness of nuclear deterrence.
This article provides an excellent avenue for action on the part of civil society actors and disarmament-minded political leaders who wish to bring the world closer to nuclear abolition. The analysis here lends credence to activities antinuclear activists are already engaging in to delegitimize nuclear weapons. These activities can slowly transform the standards and discursive context that has so far made nuclear weapons ownership acceptable but one day will not. The more nuclear weapons possession is viewed by the political elite as a liability rather than an asset, the more likely they will be to move towards disarmament.

An important point here is that the discourses that make nuclear weapons appear acceptable and effective are unstable and fraught with inconsistencies. One glaring inconsistency is, of course, the fact that nuclear deterrence requires threatening millions of innocent lives in order to protect them. Another is that nuclear weapons provide absolutely no protection against a non-state actor who decides to detonate a conventional or nuclear device in a civilian area. If activists can draw out such instabilities and inconsistencies, they can create cracks in the seeming inevitability of nuclear weapons ownership. What are considered established interests and strategies tied up with nuclear weapons possession can become unclear, contested and divisive among power holders. Those moments of schism are when real change can occur, as what was once taken as natural or inevitable is revealed no longer to be.
This article critically examines common arguments explaining North Korea’s nuclear weapons ambitions. Testing the arguments against a set of hypotheses, the author offers an alternative perspective he considers better grounded in evidence. The article is situated in the context of questioning U.S. foreign policy, which calls for a complete, verifiable, and irreversible denuclearization (CVID) of North Korea.

The existing dominant explanations for North Korea’s nuclear weapons ambitions are presented around two main positions. First, the so-called “doves” argue that U.S. and South Korean policies of military threats, political isolation, and economic underdevelopment drive North Korea’s nuclear behavior. Second, the so-called “hawks” argue that psychology, domestic political incentives, the desire to extort humanitarian aid, and the desire to revise the status quo drive North Korean leaders’ nuclear weapons stance. Most generally speaking, the arguments can be viewed in the contrasting terms of “policy” vs. “personality.”

The two lines of argumentation are evaluated through a set of hypotheses alongside historical and quantitative evidence. The author measured the “policy” and “personality” arguments in relation to North Korea’s nuclear development trajectory. The latter, he reminds us, has varied little over time if one considers the plutonium program, the highly enriched uranium program, and the ballistic missile program as the three main components. Neither the “policy” nor the “personality” arguments were clearly related to North Korea’s nuclear development trajectory. All examined hypotheses show significant variation in the factors of military threats, diplomatic isolation, food aid, leadership, domestic priorities and pressures, and military and non-military provocations, while the long-term nuclear policy remains constant.

These findings lead the author to provide alternative arguments. Importantly, he adds that the dominant arguments are not wrong but need to be viewed as contributing factors to some of North Korea’s nuclear ambitions. He attempts to offer insights into what is left unexplained, by arguing that the U.S. power and position on the Korean Peninsula are the primary driv-
ers for the North Korean nuclear program. This argument acknowledges that foreign threats and U.S. foreign policies play important roles. However, central to North Korea’s nuclear program are the U.S.’s overwhelming military capabilities and geographic position of forward deployment. The previously mentioned variables have undergone multiple changes, while U.S. forward deployment and military power have been constants vis-à-vis North Korea. The author maintains that evidence viewed through this lens provides a clearer picture of North Korea’s nuclear ambitions.

The primary policy question, that of complete, verifiable, and irreversible denuclearization (CVID) of North Korea, then becomes clear as well. As long as the U.S. maintains their strong military presence on the Korean Peninsula, North Korea will be highly unlikely to abandon its nuclear program regardless of the “policy” and “personality” factors. CVID, as the author suggests, in this context will be a non-starter. The U.S. will have to choose between its military presence or a denuclearized North Korea, which might seem like a catch-22 for US policy-makers. Concluding, the author provides important foreign policy prescriptions, most notably the suggestion to drop CVID as the defining feature of U.S. foreign policy. This would allow the conflict parties to make progress in other areas such as officially ending the war, addressing the remains of prisoners of war, and improving diplomatic relations. Without CVID as a precondition, the author argues, progress in those areas is far more likely.

This map is a slightly modified version of the map developed by Kelly Martin and David Vine available at http://investigativereportingworkshop.org/investigations/lily-pads/hmmultilily-pad-multimedia/

The Martin and Vine write: This map reflects the number and positioning of bases given the best available information as of August 2015. Installations vary in size from giant “Little Americas” hosting tens of thousands of troops and family members, to small, radar facilities and lily pads built or acquired since around the turn of the 21st century.

With the advent of the Trump administration, the already troubled relationship between the U.S. and North Korea has deteriorated dramatically. In a September 2017 address at the United Nations, Trump threatened to “totally destroy North Korea.” In November, Trump announced that the U.S. will designate North Korea a state sponsor of terror. North Korea conducted missile tests, and their leader Kim Jong-un responded in kind to Trump’s threats and insults. We are witnessing a very dangerous pattern of conflict escalation by two nuclear armed leaders whose power rests upon strong-man talk and action. In this pattern, a move by one must be answered with a stronger countermove by the other. This is unacceptable to Americans, North Koreans, and humanity.

The escalating violent rhetoric and provocative action between nuclear-armed U.S. and North Korea have caused considerable concern beyond the nuclear nonproliferation advocacy communities. U.S. lawmakers have introduced bills that would require congressional authorization for a nuclear strike and make it a policy of the United States to not use nuclear weapons first. The U.S. Senate held its first hearing in 41 years on whether the president should have the sole authority to launch a nuclear first strike. Military leaders feel compelled to openly state that they would disobey an illegal order by President Trump to launch nuclear weapons.

Americans are rightfully concerned and recognize this exceptional moment in what has been the first notable public debate on nuclear weapons since the end of the Cold War. Experts overwhelmingly agree that there are no military solutions to the current nuclear dilemma. It then becomes important to inject research findings such as the ones discussed in this analysis, not brash rhetoric, into public discourse and policy-making.

**CONTEMPORARY RELEVANCE**

- The U.S.’s overwhelming military capabilities and the presence of U.S. troops on the Korean Peninsula are primary motivators for North Korea’s nuclear program.
- The U.S. and South Korea’s use of military threats, political isolation, and economic underdevelopment are not the primary drivers of North Korea’s nuclear behavior.
- Psychology, domestic political incentives, the desire to extort humanitarian aid, and the desire to revise the status quo are not the primary drivers of North Korea’s nuclear weapons stance.

**TALKING POINTS**
Philip Yun, COO of the Ploughshares Fund, asserts that there are only lousy options to the U.S.-North Korean nuclear crisis. Taunting Kim Jong-un is dangerous, not sound policy, and not a solution. He argues that we need to get away from tit-for-tat mentalities and the rhetoric of escalation. Suzanne DiMaggio from New America suggests that there is only a diplomatic solution. Any belief that this can be solved militarily is a myth. Despite “lousy” and limited options, it is important to use a broad spectrum of nonviolent approaches which are based on an accurate understanding of the conflict context.

By centering the U.S.’s overwhelming military capabilities and geographic position of forward deployment as motivators for North Korea’s nuclear ambitions, practitioners and policy-makers need to develop responses accordingly. For example, as the author of this article asserted, CVID is simply not feasible at this point. For the North Korean regime, their nuclear capacity is a guarantee of survival. Much better short- and long-term actions exist. Global Zero’s Nuclear Crisis Group released recommendations, emphasizing the immediate steps of refraining from nuclear threats and provocative military action. Additional steps include: talk with North Korea without preconditions; engage with the adversary through multiple levels of diplomacy; move away from the tit-for-tat mentality and towards problem-solving approaches through recognition and respect, even in an adversarial relationship; reference and implement the difficult but successful diplomatic strategies at our disposal (e.g., the Iran Nuclear Agreement); engage conflict resolution experts in policy-making and the media; acknowledge the fears and the need for security in all parties involved; and initiate citizen-diplomacy efforts to humanize “the other.”

In light of the new research insights, North Korea’s fear of overwhelming U.S. power and position on the Korean Peninsula needs to be acknowledged publicly. Talks with North Korea should include long-term visions of U.S. troop withdrawals. As we know from anthropologist David Vine, military bases abroad undermine national security and cause global harm. By including power and position in the narratives of diplomacy, constructive shifts in the U.S./North Korea relationship can move the entire situation away from merely “lousy” options to little diplomatic wins on all sides.
WHAT ELSE WE ARE READING AT THE PEACE SCIENCE DIGEST

NUCLEAR WEAPONS: WHO HAS WHAT AT A GLANCE
BY ARMS CONTROL ASSOCIATION (2017).
https://www.armscontrol.org/fact-sheets/Nuclearweaponswhohaswhat

NUCLEAR NOTEBOOK. NUCLEAR ARSENALS OF THE WORLD
BY BULLETIN OF ATOMIC SCIENTISTS (2017).
https://thebulletin.org/nuclear-notebook-multimedia

IRAN NUCLEAR AGREEMENT
BY PLOUGHSHARES FUND (2017).
https://www.ploughshares.org/topic/iran-nuclear-agreement

NUCLEAR NONPROLIFERATION INITIATIVES: A MAPPING PROJECT
BY ARMS CONTROL ASSOCIATION (2016).
http://nuclearnonpromap.org/
Interactive mapping project report illustrating and exploring nuclear non-proliferation initiatives.

WHAT ARGUMENTS MOTIVATE CITIZENS TO DEMAND NUCLEAR DISARMAMENT?

SCIENTISTS AND NUCLEAR WEAPONS, 1945-2015

RISE UP PLOUGHSHARES FUND ANNUAL REPORT 2017.

THREE TWEETS TO MIDNIGHT: NUCLEAR CRISIS STABILITY AND THE INFORMATION ECOSYSTEM
2017 POLICY MEMO BY THE STANLEY FOUNDATION.

PEACE AND SECURITY FUNDING INDEX 2017 – NUCLEAR ISSUES
BY PEACE AND SECURITY FUNDERS GROUP.
http://peaceandsecurityindex.org/issues/nuclear-issues/

NUCLEAR WEAPONS. ADVOCACY FOR DISARMAMENT AND NONPROLIFERATION FRIENDS COMMITTEE ON NATIONAL LEGISLATION
https://www.fcnl.org/about/policy/issues/nuclear-weapons

TRENDS IN WORLD NUCLEAR FORCES, 2017 SHANNON N. KILE AND HANS M. KRISTENSEN. STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE.

TRUMP’S NUCLEAR ARSENAL.
THE EDITORIAL BOARD. NEW YORK TIMES. 2017

CROSSROADS. THE JOURNAL OF NUCLEAR SECURITY INNOVATION / SEPTEMBER 2045. BY N SQUARE
This is not your grandma's anti-nuclear movement. In this age of renewed concern about nuclear weapons we need new resources and updated arguments to build a movement to save us all from nuclear annihilation. This issue of Peace Science Digest makes a major contribution to building this movement, putting the research tools in the hands of organizers and campaigners and allowing us access to the analysis that we can use to help shape a modern movement for a nuclear weapons-free world.

Kelly Campbell. Executive Director, Oregon Physicians for Social Responsibility

Nuclear weapons have for far too long been surrounded by secrecy, and mystique and an elitism that has made it nearly impossible for real public debate. There is an entire lexicon particular to nuclear weapons and policy that is a high hurdle for most people to overcome, and these barriers to entering the conversation have reinforced this elite status. Making the nuclear weapons arena more democratic and less elite is essential for thorough, broad and legitimate public debate.

Paul Carroll. Senior Advisor, N Square

Nuclear weapons only succeed when they aren't used, making them irrelevant for war fighting, and innovative research can help us figure out ways to convert this irrelevance to abolition."

Bruce Lowry. Director, Policy and Advocacy, Skoll Global Threats Fund

ICAN welcomes this Peace Science Digest "Nuclear Weapons Special Issue" as an important contribution to the critically important global debate about nuclear weapons policy. It is critical that accurate knowledge about the humanitarian consequences of nuclear war inform that debate. And it is critical that we all understand that the danger of nuclear war is greater than it has been since the Cold War. The need to eliminate these weapons, before they are used, has never been more urgent.

Ira Helfand MD. Member; International Steering Group, ICAN, the recipient of the 2017 Nobel Peace Prize; co-President, International Physicians for the Prevention of Nuclear War, the recipient of the 1985 Nobel Peace Prize

At a time when half-truths and even blatant lies are uttered from government officials, and when the general public gets its information from highly biased, corporate owned media conglomerates which repeat these lies, it is so important to have real facts that are easily understood and readily available about nuclear weapons. There can never be any ethical justification for the use of nuclear weapons. This is the ethos that should be delivered and taught by any sort of ethical entity, but instead we are taught to take pride in our world dominance. If the facts are not available, then the public has no alternative influence.

Leah Bolger. Chair; Coordinating Committee World Beyond War

Since the 2016 election, we’ve seen a dramatic upsurge in public attention and appetite for the nuclear issue. People in the U.S. and around the world are also engaging in the political process and grassroots activism at levels we haven't seen in decades. If we can de-mystify the nuclear problem and bring its solutions down to earth, there is a rising tide of engaged activists ready to pick up.

Meredith Horowski. Campaign Director, Global Zero

Disclaimer: These responses do not reflect an endorsement of the War Prevention Initiative and Peace Science Digest analyses.
This Magazine is where the academic field and the practitioners meet. It is the ideal source for the Talkers, the Writers and the Doers who need to inform and educate themselves about the fast growing field of Peace Science for War Prevention Initiatives!

John W. McDonald
U.S. Ambassador, ret.
Chairman and CEO, Institute for Multi-Track Diplomacy

As a longtime peace activist, I’ve grown weary of the mainstream perception that “peace is for dreamers.” That’s why the Peace Science Digest is such as useful tool; it gives me easy access to the data and the science to make the case for peacebuilding and war prevention as both practical and possible. This is a wonderful new resource for all who seek peaceful solutions in the real world.

Kelly Campbell
Executive Director, Oregon Physicians for Social Responsibility
Co-founder, 9/11 Families for Peaceful Tomorrows

The Peace Science Digest is the right approach to an ever-present challenge: how do you get cutting-edge peace research that is often hidden in hard-to-access academic journals into the hands of a broader audience? With its attractive on-line format, easy to digest graphics and useful short summaries, the Peace Science Digest is a critically important tool for anyone who cares about peace – as well as a delight to read.

Aubrey Fox
Executive Director (FMR), Institute for Economics and Peace

The field of peace science has long suffered from a needless disconnect between current scholarship and relevant practice. The Peace Science Digest serves as a vital bridge. By regularly communicating cutting-edge peace research to a general audience, this publication promises to advance contemporary practice of peace and nonviolent action. I don’t know of any other outlet that has developed such an efficient forum for distilling the key insights from the latest scholarly innovations for anyone who wants to know more about this crucial subject. I won’t miss an issue.

Erica Chenoweth
Professor & Associate Dean for Research at the Josef Korbel School of International Studies at the University of Denver

Peace Science Digest is a valuable tool for translating scholarly research into practical conclusions in support of evidence-based approaches to preventing armed conflict.

David Cortright
Director of Policy Studies at the Kroc Institute of International Peace Studies at the University of Notre Dame

How many times are we asked about the effectiveness of alternatives to violent conflict? Reading Peace Science Digest offers a quick read on some of the best research focused on that important question. It offers talking points and summarizes practical implications. Readers are provided with clear, accessible explanations of theories and key concepts. It is a valuable resource for policy-makers, activists and scholars. It is a major step in filling the gap between research findings and application.

Joseph Bock
Director, School of Conflict Management, Peacebuilding and Development

“We must welcome the expansion of peace awareness into any and every area of our lives, in most of which it must supplant the domination of war and violence long established there. The long-overdue and much appreciated Digest is filling an important niche in that ‘peace invasion’. No longer will anyone be able to deny that peace is a science that can be studied and practiced.”

Michael Nagler
Founder of the Metta Center for Nonviolence

The Peace Science Digest is a major contribution to the peace and security field. It makes complex issues more understandable, enabling professional outfits like ours to be more effective in our global work. The Digest underscores that preventing war is about more than good intentions or power; it is also about transferable knowledge and science.

Mark Freeman
Founder and Executive Director of the Institute for Integrated Transitions (IFIT).

The distillation of the latest academic studies offered by the Peace Science Digest is not only an invaluable time-saving resource for scholars and policymakers concerned with preventing the next war, but for journalists and organizers on the front lines, who can put their findings to good use as they struggle to hold the powerful accountable and to build a more just and peaceful world.

Eric Stoner
Co-founder and Editor, Waging Nonviolence

Peace Science Digest is an invaluable tool for advocates for peace, as much as for educators. In it one quickly finds the talking points needed to persuade others, and the research to back those points up.

David Swanson
Director, World Beyond War
RECOMMENDED SOURCES OF PEACE JOURNALISM AND ANALYSIS:

**PEACEVOICE**
A peace and justice op-ed distribution service and an extensive library of ready-to-publish commentary and op-eds written by peace professionals, focusing on changing the U.S. national conversation about the possibilities of peace and justice and the destructive cycle of war and injustice. PeaceVoice operates on the belief that presenting academically informed opinions that promote peace and nonviolent conflict resolution provides the public one of the best, and most absent, deterrents to war and injustice.

www.peacevoice.info

**Peace Policy**
A product of the University of Notre Dame’s Kroc Institute for Peace Studies, providing research-based insight, commentary, and solutions to the global challenge of violent conflict. Contributions include writing from scholars and practitioners working to understand the causes of violent conflict and seeking effective solutions and alternatives war and the use of force.

www.kroc.nd.edu/news-events/peace-policy

**OTHER WORDS**
A nonprofit peace network specializing in exclusive analysis, research and policy commentary on local and global affairs. Topic areas include political, economic and social issues; as well as global insight on nonviolence, activism conflict resolution and mediation.

www.otherwords.org

**TRANSCEND MEDIA SERVICE**
A nonprofit peace network specializing in exclusive analysis, research and policy commentary on local and global affairs. Topic areas include political, economic and social issues; as well as global insight on nonviolence, activism conflict resolution and mediation.

www.transcend.org/tms

**FOREIGN POLICY IN FOCUS**
A “Think Tank Without Walls” connecting the research and action of 600+ scholars, advocates, and activists providing timely analysis of U.S. foreign policy and international affairs, and recommends policy alternatives seeking to make the United States a more responsible global partner.

www.fpif.org

**POLITICAL VIOLENCE @ A GLANCE**
Political Violence @ a Glance answers questions on the most pressing problems related to violence and protest in the world’s conflict zones. Analysis comes from a distinguished team of experts from some of America’s top universities. The goal is to anticipate the questions you have about violence happening around the world and to offer you simple, straight-forward analysis before anyone else does. No jargon. No lingo. Just insightful content.

www.politicalviolenceataglance.org

See more issues and get a print subscription at: PEACESCIENCEDIGEST.ORG
<table>
<thead>
<tr>
<th>OUR VISION</th>
<th>Our vision is a world beyond war by 2030 and humanity united by a global system of peace with justice.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUR MISSION</td>
<td>Our mission is to advance the Global Peace System by supporting, developing and collaborating with peacebuilding efforts in all sectors of society.</td>
</tr>
</tbody>
</table>
| OUR CORE VALUES | Nonviolence – We promote strategic and principled nonviolent solutions over any kind of armed conflict.  
Empathy – We view social problems through the eyes of others and respectfully communicate with each other in the pursuit of mutual understanding.  
Planetary loyalty – We consider ourselves global citizens, living in harmony with humanity and nature.  
Moral imagination – We strive for a moral perception of the world in that we: (1) imagine people in a web of relationships including their enemies; (2) foster the understanding of others as an opportunity rather than a threat; (3) pursue the creative process as the wellspring that feeds the building of peace; and (4) risk stepping into the unknown landscape beyond violence. |
| WE SUPPORT | Support Rotary International’s focus on peace by aiding the Rotarian Action Group for Peace with human, logistical and content-related resources.  
Support development of effective strategies to convince Americans that the United States should not promote war, militarism or weapons proliferation, but rather embrace conflict resolution practices that have been shown to prevent, shorten, and eliminate war as viable alternatives to local, regional and global conflicts.  
Support building grassroots social movements seeking a world beyond war. |
| WE EDUCATE | Actively contribute to peace science and public scholarship on war prevention issues.  
Share information and resources with multiple constituencies in an understandable manner.  
Provide evidence-based information on peace and conflict issues with immediately potential doable policy advice to public policy makers.  
Advance the understanding and growth of the Global Peace System. |
| WE ENGAGE | Convene national and international experts in ongoing constructive dialog on war prevention issues via our Parkdale Peace Gatherings.  
Connect likely and unlikely allies to create new opportunities.  
Participate in peacebuilding networks and membership organizations. |
| UNDERLYING ASSUMPTIONS | We are at a stage in human history where we can say with confidence that there are better and more effective alternatives to war and violence.  
A Global Peace System is evolving.  
Poverty, employment, energy, education, the environment and other social and natural factors are interconnected in peacebuilding.  
Peace Science and Peace Education provide a path to a more just and peaceful world.  
Multi-track diplomacy offers a sectoral framework for creating peacebuilding opportunities. |