

The Politics of Nuclear Weapons – web resources

General

If you wish to deepen and expand your knowledge and understanding of more specialised topics you should consult the wide range of scholarly journals that deal with nuclear weapons issues.

Internationally renowned periodicals such as:

- *Comparative Strategy*
- *Contemporary Security Policy*
- *Defense & Security Analysis*
- *European Security*
- *Foreign Affairs*
- *Foreign Policy*
- *Global Change, Peace and Security*
- *International Affairs*
- *International Security*
- *Medicine, Conflict and Survival*
- *Orbis*
- *Security Dialogue*
- *Security Studies*
- *Survival*
- *The Nonproliferation Review*
- *The Journal of Conflict Resolution*
- *The Journal of Strategic Studies*
- *The RUSI Journal*
- *The Washington Quarterly*

These, as well as many other leading academic publications, all regularly cover nuclear weapons issues. This list is by no means exhaustive, and you should use academic search engines such as *googlescholar.com* or *LexisNexis* for further academic resources. Professional publications such as *Arms Control Today* and the *Bulletin of the Atomic Scientists* both provide excellent sources of up-to-date material and analysis.

Numerous think tanks publish high-quality policy-focused work on nuclear weapons issues, and you should also consult these sources for information. The *Royal United Services Institute* (RUSI), *Chatham House* (RIIA), the *International Institute for Strategic Studies* (IISS), and the *Centre for*

Science and Security Studies (CSSS) at Kings College London, in the UK; the *Arms Control Association* (ACA), *Brookings Institution*, *Carnegie Endowment*, *Centre for Strategic and International Studies* (CSIS), the *James Martin Centre for Non-proliferation Studies* (CNS) at the *Monterrey Institute for International Studies*, and the *Union of Concerned Scientists* (UCS) in the US, are all excellent resources. As are the *Russian Institute for Strategic Studies* (RISS) and the *Russian Centre for Policy Studies* (PIR) in Russia, the *Stockholm International Peace Research Institute* (SIPRI) in Sweden, the *Centre for International Security and Arms Control* (CESIM) in France, the *Peace Research Institute Frankfurt* (PRIF) in Germany, and the online *European Non-proliferation Consortium*, in Europe; the *China Arms Control and Disarmament Association* (CACDA) and the *China Institute for International Studies* (SIIS) in East Asia; the *Institute of Peace and Conflict Studies* in India and the *Institute for Strategic Studies* in Pakistan. Many of these institutions hold regular events that can be attended in person or watched via weblink, and most publish a wide variety of information on their websites, allowing you to remain up to date with the fast changing world of global nuclear politics. The Carnegie Endowment for International Peace holds a biannual “Nuclear Policy Conference” in Washington DC that anybody can attend: <http://carnegieendowment.org/2015/03/24/2015-carnegie-international-nuclear-policy-conference/h7cb>

Introduction

Resources

- I would strongly encourage those wanting up-to-date information about nuclear weapons issues to visit, and/or sign up to, the Nuclear Threat Initiative at www.nti.org; the Arms Control Association at www.armscontrol.org; the Ploughshares Fund at www.ploughshares.org; and the Federation of American Scientists at <http://fas.org>
- A great introductory resource to the topic is the 'nukemap' devised by Alex Wellerstein. This application will allow you to 'detonate' various different bombs on a target of your choice and gives a detailed overview of the impact. This can be accessed at <http://nuclearsecrecy.com/nukemap>

What are nuclear weapons?

Reports/online resources

- Perhaps the best online resource on nuclear weapons basics and science can be found at the Atomic Archive (www.atomicarchive.com), although there are a number of other websites that address similar themes that can be found online.

- The “Nuclear 101” tutorials put together by the Nuclear Threat Initiative and the James Martin Center for Nonproliferation Studies is also an excellent resource:
<http://tutorials.nti.org>
- Both the Hiroshima (www.pcf.city.hiroshima.jp/index_e2.html) and Nagasaki (www.city.nagasaki.lg.jp/peace/english/index.html) memorial museums have websites that contained fascinating resources and are certainly worth exploring.
- Robert Oppenheimer’s famous speech reflecting on the development of the Atomic Bomb can be found at www.youtube.com/watch?v=n8H7Jibx-c0. It gives a good insight into the moral dimensions of the decision to build and use the bomb.
- More information about the 'atomic spies' can be found on the FBI website at www.fbi.gov/about-us/history/famous-cases/the-atom-spy-case, while the BBC series *The Cambridge Spies* www.imdb.com/title/tt0346223 is also an interesting take on the topic.

Questions for discussion

1. Should we think of nuclear weapons as being distinctly different from conventional weapons?
2. Have nuclear weapons fundamentally changed the way we think about warfare?
3. Was the USA right to keep the Manhattan Project secret?
4. Was President Truman right to use atomic weapons against Japan in 1945?
5. What were the long-term implications for nuclear strategy of the strikes on Hiroshima and Nagasaki?

Testing, defining and delivering nuclear weapons

Reports/online resources

- The best resource on nuclear testing is the CTBTO at www.ctbto.org. The CTBTO also offer a number of different free online tutorials at <https://cdi.ctbto.org/elearning/course/view.php?id=26>
- A fascinating video providing an overview of nuclear testing is available on YouTube at www.youtube.com/watch?v=WAnqRQg-W0k. You can also access declassified videos of US nuclear testing on www.youtube.com/playlist?list=PLEFFE6316B694B346
- Robert Alvarez’s May 2015 piece about the protests made by the Marshall Islanders is available here: <http://thebulletin.org/marshall-islands-and-npt8341>
- The 'Nuclear Notebook' provided by the Bulletin of the Atomic Scientists is a good way to keep up to date with current global nuclear inventories and capabilities (<http://bos.sagepub.com/cgi/collection/nuclearnotebook>). The World Nuclear Stockpile

Report published by the Ploughshares Fund also provides details of current stockpiles:

<http://www.ploughshares.org/world-nuclear-stockpile-report>

- The Nuclear Threat Initiative offers a useful resource on WMD delivery systems:
<http://tutorials.nti.org/delivery-system/introduction/?mgs1=4e7ckfDn6t>
- The films *The Day After* and *Threads* provide compelling fictional accounts of the impact of nuclear use, and the film *Blowing up Paradise* provides an interesting account of French nuclear testing.
- The Nevada nuclear testing museum in Las Vegas is well worth a visit:
<http://nationalatomicmuseum.org>
- On nuclear winter see, the documentary “On the 8th Day”:
<https://www.youtube.com/watch?v=WCTKcd2Ko98>

Questions for discussion

1. Should all nuclear testing be banned?
2. Is there such a thing as a 'peaceful nuclear test'?
3. Are all nuclear weapons inherently 'strategic'?
4. Should the use of low-yield nuclear weapons on the battlefield be permissible?
5. Should the use of nuclear devices for peaceful or civilian purposes be allowed?

Nuclear proliferation: why states build or don't build the bomb

SAGE journals

- Robert Norris & Hans Kristensen, 'Global nuclear weapons inventories, 1945–2010',
Bulletin of the Atomic Scientists, 66:7 (July/August 2010) pp.77-83

Reports/online resources

- The country profiles provided by the online Nuclear Threat Initiative website are a great resource for past and future nuclear proliferation cases, and these can be accessed at www.nti.org/country-profiles/ and used in conjunction with the 'Nuclear Notebook' provided by the Bulletin of the Atomic Scientists mentioned above.
- A televised debate between Kenneth Waltz and Scott Sagan on nuclear proliferation, courtesy of University of California Television, can be accessed at www.uctv.tv/shows/Scott-Sagan-and-Kenneth-Waltz-The-Spread-of-Nuclear-Weapons-A-Debate-Renewed-9491
- For a more lighthearted view of proliferation see,
<https://www.youtube.com/watch?v=oRLON3ddZIw>

Questions for discussion

1. Why have some states that could, chosen not to acquire nuclear weapons? Think of examples.
2. Do different states have different reasons for building and keeping the bomb?
3. Is vertical or horizontal nuclear proliferation a greater risk to security?
4. Do optimists or pessimists have a better view of nuclear proliferation?
5. How serious is the problem of nuclear latency?

Nuclear strategy: understanding the MADness

SAGE journals

- Tom Sauer & Bob Van Der Zwaan, 'US tactical nuclear weapons in Europe after NATO's Lisbon Summit: why their withdrawal is desirable and feasible', *International Relations*, 26:1 (2012)
- Robert Norris & Hans Kristensen, 'US tactical nuclear weapons in Europe, 2011', *Bulletin of the Atomic Scientists*, 67:1 (2011) pp.64–73
- Nate Jones, 'Countdown to declassification: finding answers to a 1983 nuclear war scare', *Bulletin of the Atomic Scientists*, 69:6 (2013) pp.47–57

Reports/online resources

- The online report 'Getting MAD' edited by Henry Sokolski and published by the US Army Strategic Studies Institute is a great resource on the development, history and central tenets of nuclear deterrence and MAD (www.strategicstudiesinstitute.army.mil/pdffiles/pub585.pdf).
- Details about NATO's extended deterrence guarantee can be found in the organisation's most recent Defence and Deterrence review (www.nato.int/cps/en/natolive/official_texts_87597.htm?mode=pressrelease).
- For resources and learning activities on the Cuban Missile Crisis see www.cubanmissilecrisis.org/for-educators/tools-for-teachers. The Hollywood film *13 Days* focuses on John F Kennedy and the Cuban Missile Crisis.
- The films *Fail Safe* and *Dr Strangelove* are a good way of highlighting the problematic nature of MAD and nuclear deterrence.

Questions for discussion

1. Can we escape the nuclear security dilemma?
2. Is MAD a good strategy or simply a lucky one?
3. Is relying on vulnerability to nuclear attack a sensible way to manage the nuclear arms race?

4. Are nuclear-armed states rational actors?
5. Can a first nuclear strike ever be justified?
6. Can you have a limited nuclear war?
7. Can a nuclear war be 'won'?

Vertical proliferation challenges: assessing Article VI of the NPT

SAGE journals

- Hans Kristensen & Robert Norris, 'US nuclear forces, 2013', *Bulletin of the Atomic Scientists*, 69:2 (2013) pp.77–86
- Hans Kristensen & Robert Norris, 'Russian nuclear forces 2013', *Bulletin of the Atomic Scientists*, 69:2 (2013) pp.71–81
- Hans Kristensen & Robert Norris, 'Indian nuclear forces, 2012', *Bulletin of the Atomic Scientists*, 68:4 (2012) pp.96–101
- Robert Norris & Hans Kristensen, 'The British nuclear stockpile 1953-2013', *Bulletin of the Atomic Scientists*, 69:4 (2013) pp.69–75
- Malcolm Chalmers, "'Bombs away'? Britain and nuclear weapons under New Labour', *Security Dialogue*, 30:1 (1999) pp.61–74

Reports/online resources

- A recent report on the P5 process published by RUSI is currently the best resource on that initiative and is found at:
www.rusi.org/publications/whitehallreports/ref:O5220A834AB3A4
- The full text of the 2010 US nuclear posture review can be accessed at
www.defense.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf.
- The 2006 UK White Paper, “The future of the United Kingdom’s nuclear deterrent”, available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/27378/DefenceWhitePaper2006_Cm6994.pdf
- John Ainslie’s, “The Future of the British bomb” is an excellent overview of the British nuclear weapons systems: <http://www.swordofdamocles.org/pdf/future.pdf>
- The text of the UK Trident alternatives renewal review is also available at
www.gov.uk/government/uploads/system/uploads/attachment_data/file/212745/20130716_Trident_Alternatives_Study.pdf

- “The Trident Commission” by the British American Security Information Council (BASIC), available here: <http://www.basicint.org/publications/trident-commission/2014/trident-commission-concluding-report>
- A interesting insight into the 2015 Trident Whistleblower saga by Heather Williams is available here: <http://thebulletin.org/britain's-trident-and-need-support-nuclear-personnel8363>
- A guide to reading and resources on the UK nuclear weapons programme is available at www.parliament.uk/briefing-papers/SN04207/the-future-of-the-british-nuclear-deterrent-suggested-reading
- On recent Chinese developments see:
<http://www.ucsusa.org/sites/default/files/attach/2016/02/China-Hair-Trigger-full-report.pdf>

Questions for discussion

1. Has the P5 process been a success?
2. Does the move towards a new triad of strategic forces by the United States help or hinder progress towards nuclear reductions?
3. What are the major obstacles in US-Russia arms reductions? Can they be overcome?
4. Why are nuclear weapons perceived to be so important for Russia?
5. Does the UK need nuclear weapons?
6. What would it require for France to give up nuclear weapons?
7. Is the Chinese policy of minimum nuclear deterrence sustainable?

Horizontal proliferation challenges: the nuclear outliers

Reports/online resources

- For a detailed overview of Pakistani nuclear policy, see Zafar Khan & Rizwana Abassi, “Pakistan in the global nuclear order”: <http://issi.org.pk/wp-content/uploads/2016/02/Nuclear-Paper-Series-No.-1.pdf>
- Israeli Prime Minister Benjamin Netanyahu’s speech at the UN warning about Iranian nuclear intentions can be accessed on YouTube at:
www.youtube.com/watch?v=BB5ZOMs2XQ0
- Analysis of the “Vela Incident”: <http://thebulletin.org/flash-past-why-apparent-israeli-nuclear-test-1979-matters-today8734>
- For up-to-date information and resources on North Korea see www.nknews.org, and for an interactive map of North Korea missile capabilities see <http://edition.cnn.com/interactive/2013/04/world/north-korea-missile-capabilities>

- The details of the 2 April 2015 “interim agreement” with Iran can be found here: <http://www.state.gov/r/pa/prs/ps/2015/04/240170.htm>
- A number of reports produced by the IAEA detailing the Iranian nuclear programme can be found at www.iaea.org/newscenter/focus/iaeairan/index.shtml

Questions for discussion

1. What is the biggest proliferation challenge to global nuclear order: the Middle East, South Asia, or northeast Asia?
2. Does opacity continue to represent the best policy for Israel?
3. How can we best manage the nuclear dangers in South Asia?
4. 'North Korea cannot be trusted with nuclear weapons'. Do you agree?
5. How concerned should we be about the possibility of an Iranian nuclear weapon?
6. Do states have a ‘right’ to nuclear technology that could be used to build weapons?

Managing nuclear proliferation challenges: limiting, preventing and defending

Reports/online resources

- For a comprehensive overview of nuclear arms control treaties and agreements see www.atomicarchive.com/Treaties, and text and details relating to the recent New START Treaty can be found on the US State Department website at www.state.gov/t/avc/newstart
- The full text of the NPT can be found on the UN website at www.un.org/disarmament/WMD/Nuclear/NPT.shtml, and more detail on the IAEA at www.iaea.org. Full details of the 2010 NPT Review Conference can be found at www.un.org/en/conf/npt/2010
- For an overview of the history of Article VI of the NPT see Matthew Harries, *Disarmament as Politics: Lessons From the Negotiation of NPT Article VI*: http://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20150512DisarmamentPoliticsNPTHarries.pdf
- On missile defence, the US Missile Defense Agency provides a good overview of current capabilities (www.mda.mil), and the online Missile Defense Advocacy Alliance has further useful resources (www.missiledefenseadvocacy.org). Ronald Reagan’s famous speech announcing the Strategic Defense Initiative (SDI) can be watched on YouTube at www.youtube.com/watch?v=ApTnYwh5KvE
- There are a number of “nuclear bunkers” intended for civil defence that can be visited. Perhaps the best of these are Kelvedon Hatch (<http://www.secretnuclearbunker.com>) and Hack Green (<http://www.hackgreen.co.uk>) both in the UK.

Questions for discussion

1. Does nuclear arms control help or hinder the nuclear disarmament agenda?
2. Is further nuclear arms control possible or desirable?
3. Has the NPT been a success?
4. Does the NPT still represent the best way to manage the international nuclear order?
5. Are preventive and pre-emptive strikes on suspected nuclear weapons facilities ever justified?
6. Is defence against a nuclear attack a good idea?

Nuclear weapons and new global actors

SAGE journals

- David Albright, Kathryn Buehler & Holly Higgins, 'Bin Laden and the bomb', *Bulletin of the Atomic Scientists*, (Jan/Feb 2002) pp.23-24

Reports/online resources

- The report 'Advancing nuclear security' published by the Harvard Belfer Center gives a solid insight into the problems and developments in nuclear security and can be found at <http://belfercenter.ksg.harvard.edu/files/advancingnuclearsecurity.pdf>
- More information on the Nuclear Suppliers Group can be found on their website at www.nuclearsuppliersgroup.org/en
- For the NTI's online nuclear security tutorial: http://tutorials.nti.org/nuclear-and-radiological-security/security_introduction/
- Bruce Blair, "Could terrorists launch America's nuclear missiles?", *TIME*, (11 November 2010), <http://content.time.com/time/nation/article/0,8599,2030685,00.html>
- More detail on the 2014 Nuclear Security Summit held in the Hague can be found on the NSS 2014 website at www.nss2014.com/en while information on UN Security Council Resolution 1540 can be found on the United Nations website at [www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/1540%20\(2004\)](http://www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/1540%20(2004)). Details of the GICNT are available at www.gicnt.org and on the PSI at www.psi-online.info

Questions for discussion

1. How serious is the threat from nuclear terrorism?
2. Would a state ever provide terrorists with a nuclear weapon?
3. What can be done to prevent terrorists acquiring nuclear material?
4. Why has it proved so difficult to negotiate a fissile material cut-off treaty?
5. Is deliberate nuclear terrorism a bigger threat than a nuclear accident?

Nuclear disarmament

SAGE journals

- David Albright & Corey Hinderstein, 'Algeria: a big deal in the desert?', *Bulletin of the Atomic Scientists*, 57:3 (2001) pp.45–52
- Robert Norris, William Arkin & William Burr, 'Where they were', *Bulletin of the Atomic Scientists*, 55:6 (1999) pp.26-35

Reports/online resources

- The famous speech given by President John F Kennedy warning about the nuclear arms race can be found at the JFK presidential library website at www.jfklibrary.org/Asset-Viewer/DOPIN64xJUGRKGdHJ9NfgQ.aspx
- The Doomsday Clock development by the Bulletin of the Atomic Scientists is a novel way of tracing nuclear danger since 1945 and is found at <http://thebulletin.org/timeline>
- The 1996 International Court of Justice advising ruling on nuclear weapons can be found here: <http://www.icj-cij.org/docket/files/95/7495.pdf>
- A review by Greenpeace of the legal issues involving the possession and possible use of nuclear weapons is available here:
<http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/8072.pdf>
- Most organisations involved in the current disarmament push have useful websites and these include Global Zero at www.globalzero.org, IPPNW at www.ippnw.org, www.cnduk.org, CND at www.cnduk.org and ICAN at www.icanw.org. The documentary *Countdown to Zero* (<http://countdowntozerofilm.com>) may also be of interest.
- A video and transcript of President Obama's Prague speech can be found at www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered

Questions for discussion

1. Would a world without nuclear weapons be a safer place?
2. Is a world without nuclear weapons achievable?
3. How can we convince more states to 'give up the bomb'?
4. What have we learnt from states that have given up the bomb?
5. Has the nuclear disarmament movement been a success or a failure?

Enduring nuclear challenges

SAGE journals

- Joseph Nye, 'From bombs to bytes: can our nuclear history inform our cyber future?', *Bulletin of the Atomic Scientists*, 69:8 (2013) pp.8–14
- Eric Schlosser, "Today's nuclear dilemma", *Bulletin of the Atomic Scientists*, November/December 71 (2015) pp.11-17

Reports/online resources

- For more information and up-to-date statistics and developments in civilian nuclear power see www.world-nuclear.org
- For a detailed assessment of the challenges to nuclear command and control, and the importance of de-alerting nuclear forces see, The Global Zero Commission on Nuclear Risk Reduction, "De-alerting and stabilizing the world's nuclear force postures": http://www.globalzero.org/files/global_zero_commission_on_nuclear_risk_reduction_report_0.pdf
- See also Lesley Stahl's report and short video looking at US nuclear command and control: "Who's minding the nukes?" for CBS News: <http://www.cbsnews.com/news/whos-minding-the-nuclear-weapons/>
- For more on command and control problems see, Peter Hayes, "Nuclear command-and-control in the Millenials era", NAPSNet Special Reports, (17 February 2015), <http://nautilus.org/napsnet/napsnet-special-reports/nuclear-command-and-control-in-the-millennials-era/>
- For an examination of how cyber might impact US-Russia strategic stability see http://deepcuts.org/files/pdf/Deep_Cuts_Issue_Brief6_War_Games_Redux.pdf
- The Chatham House report 'Too close for comfort' is an excellent resource on nuclear near misses: it can be found at www.chathamhouse.org/sites/files/chathamhouse/home/chatham/public_html/sites/default/files/20140428TooCloseforComfortNuclearUseLewisWilliamsPelopidasAghlani.pdf
- The film *Crimson Tide* gives a good idea of the problems inherent in nuclear command and control.

Questions for discussion

1. Should every nation have the right to civilian nuclear power and the ability to produce their own fissile material?
2. Are nuclear accidents inevitable?
3. 'The usability of nuclear weapons is more important than safety'. Do you agree?
4. What is the effect of cyber weapons on nuclear strategy?
5. Can the nuclear taboo last?