
NUCLEAR SOUTH ASIA

A GUIDE TO INDIA, PAKISTAN, AND THE BOMB

CHAPTER 1 GUIDE
INTRODUCTION TO NUCLEAR SOUTH ASIA

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ABOUT NUCLEAR LEARNING

Nuclear Learning is an online initiative produced by the [Stimson Center's South Asia Program](#) to sharpen strategic analysts' understanding of nuclear programs, doctrines, and postures in South Asia and beyond. *Nuclear Learning* pursues this mission by making diverse viewpoints accessible via open online courses, nurturing vibrant communities of "nuclear learners" on social media, and providing opportunities for students to engage with experts in the field.

The first *Nuclear Learning* course—"Nuclear South Asia: A Guide to India, Pakistan, and the Bomb"—is available for free at www.nuclearlearning.org. "Nuclear South Asia" is the most comprehensive collection of perspectives on India and Pakistan's nuclear trajectories available online. It includes 8.5 hours of video content and features lectures from more than 80 leading scholars and practitioners, including former senior diplomats and military officers. In addition to lectures, the course includes quizzes, recommended readings, and a pass/fail final exam.

Upon completing "Nuclear South Asia," students will be able to:

- Understand the factors motivating India and Pakistan's nuclear programs, doctrines, and postures;
- Assess the impact of emerging policies and capabilities on deterrence stability;
- Describe India and Pakistan's positions vis-à-vis the Nuclear Non-Proliferation Treaty (NPT) and other elements of the global nuclear order;
- Analyze crisis episodes, management challenges, and confidence-building efforts on the Subcontinent; and
- Propose innovative solutions to reduce nuclear competition and dangers in South Asia.

Students have the option of earning a Stimson-issued certificate, an important credential for academic and professional advancement. To earn a certificate, students must watch the video lessons, complete the quizzes and surveys, and pass a final exam.

Due to high demand, a second *Nuclear Learning* course on conventional and nuclear deterrence in Southern Asia is under development for release in 2019.

LEARNING OBJECTIVES

In this chapter, students are introduced to the purpose and structure of the course, along with its main lecturers Michael Krepon and Sameer Lalwani. Students will learn why studying past nuclear history and future nuclear dangers in South Asia is important. They will hear expert opinions regarding why the international community, and the United States more specifically, care about nuclear developments on the Subcontinent. By the end of this chapter, students should be comfortable with the context surrounding "Nuclear South Asia" and understand what the rest of the course will entail.

KEY TERMS

Below is a list of definitions of the key terms from this chapter.

Crisis Management: The attempt to defuse a crisis through communication, confidence-building measures, or other reassuring actions.¹ This may take place on the initiative of the two potential combatants, or a third party may intervene to broker a solution and de-escalate the crisis.

Deterrence: A form of coercion in which an actor seeks to prevent an adversary from taking a particular action through fear of consequences.² In the nuclear context, this mainly refers to dissuading adversaries from attacking one's territory through the threat of nuclear retaliation.

Deterrence Optimism: The belief that nuclear weapons can increase stability and peace between nuclear powers.³

Deterrence Pessimism: The doubt of nuclear weapons' ability to increase stability and peace between nuclear powers.⁴

Deterrence Stability: A stable environment in relations between states where the prospect of mutually assured destruction deters conflict between nuclear-armed adversaries.⁵ The mutual attainment of secure second-strike capabilities between adversaries has arguably had a revolutionary effect on international relations, reducing the likelihood of highly destructive, direct war.⁶

Disarmament: Steps taken by a nuclear-weapons state to reduce or eliminate its nuclear arsenal. The five countries recognized as nuclear-weapons states by the Nuclear Non-Proliferation Treaty made commitments under Article VI to "pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament."⁷

Global Nuclear Order: The "arrangement of states and institutions in the international system based on beliefs about the relationship between nuclear technology and international political power," defining nuclear haves and have-nots.⁸

¹ Polly Nayak and Michael Krepon, "U.S. Crisis Management in South Asia's Twin Peaks Crisis" (Washington, DC: Stimson Center, September 2006), https://www.stimson.org/sites/default/files/file-attachments/Twin_Peaks_Crisis.pdf.

² Thomas C. Schelling, *Arms and Influence: With a New Preface and Afterword* (New Haven: Yale University Press, 2008).

³ Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate* (New York: W.W. Norton & Company, 2013).

⁴ Ibid.

⁵ Michael Krepon and Julia Thompson, eds., *Deterrence Stability and Escalation Control in South Asia* (Washington, DC: Stimson Center, 2013), http://www.stimson.org/images/uploads/research-pdfs/Deterrence_Stability_Dec_2013_web.pdf.

⁶ Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989).

⁷ "Nuclear Disarmament Resource Collection," Nuclear Threat Initiative, April 3, 2017, <http://www.nti.org/analysis/reports/nuclear-disarmament/>.

⁸ Toby Dalton, Togzhan Kassenova, and Lauryn Williams, eds., *Perspectives on the Evolving Nuclear Order* (Washington, DC: Carnegie Endowment for International Peace), accessed May 7, 2018, <https://carnegieendowment.org/2016/06/06/perspectives-on-evolving-nuclear-order-pub-63711>.

Nuclear Proliferation: The spread of nuclear weapons, fissile material, and/or technology to countries besides the five recognized by the Nuclear Non-Proliferation Treaty as nuclear-weapon states, or the increase in an existing nuclear-weapons state's arsenal size or technological standard.⁹

Nuclear Taboo: The non-use of nuclear weapons since World War II due to their normative status as prohibited weapons.¹⁰

Nuclear Terrorism: The acquisition and use of nuclear weapons by violent non-state actors.¹¹

⁹ "Treaty on the Non-Proliferation of Nuclear Weapons (NPT)," Nuclear Threat Initiative, April 15, 2018, <http://www.nti.org/learn/treaties-and-regimes/treaty-on-the-non-proliferation-of-nuclear-weapons/>.

¹⁰ Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons Since 1945* (New York: Cambridge University Press, 2007).

¹¹ "Nuclear & Radiological Terrorism," Federation of American Scientists, accessed May 7, 2018, <https://fas.org/issues/nuclear-and-radiological-terrorism/>.

CONTENT OVERVIEW

In this section, we provide an overview of all the lectures and supplemental materials in Chapter 1 of *Nuclear South Asia* on www.nuclearlearning.org.

1.1: “INTRODUCTION TO NUCLEAR SOUTH ASIA”

Run Time: 4:58

Lecturers: Michael Krepon (Stimson Center) and Sameer Lalwani (Stimson Center)

Key Points:

- Michael Krepon and Sameer Lalwani introduce the Stimson Center’s open online course, *Nuclear South Asia*, its structure, and its objectives (see “About the Course”).
- According to Sameer Lalwani, growing nuclear tensions, failures in diplomacy, and potential crises between India and Pakistan make studying nuclear issues in South Asia one of today’s most important subjects.
- Each chapter of *Nuclear South Asia* addresses a distinct theme about nuclear security in South Asia, including South Asia’s nuclear history, nuclear doctrines and postures, the global nuclear order, nuclear crises, confidence-building measures, and South Asia’s nuclear future.

1.2: “INDIA, PAKISTAN, AND NUCLEAR DETERRENCE”

Run Time: 5:57

Lecturer: Michael Krepon (Stimson Center)

Key Points:

- According to Michael Krepon, nuclear weapons are supposed to deter conflict between adversaries due to the incredibly high cost of their use and the remote prospects of escalation control.
- According to Michael Krepon, nuclear deterrence between India and Pakistan is of interest to South Asia insiders and outsiders because conditions for stable deterrence on the Subcontinent are absent, even with nuclear weapons.
 - Stability between two countries grows when causes for warfare are remote, but these conditions are not in place in South Asia.
- *Nuclear South Asia* is designed to present opinions from dozens of experts and improve students’ analytical power to arrive at their own conclusions about nuclear stability in South Asia.

1.3: “WHY DOES THE INTERNATIONAL COMMUNITY CARE ABOUT ‘NUCLEAR SOUTH ASIA?’”

Run Time: 10:01

Lecturers: James Acton (Carnegie Endowment), Moeed Yusuf (U.S. Institute of Peace), Toby Dalton (Carnegie Endowment), Jack Gill (U.S. Army), Ashley Tellis (Carnegie Endowment), Dan Markey (U.S. Department of State), Robert Einhorn (U.S. Department of State), and Robin Raphel (U.S. Department of State)

Key Points:

- According to James Acton, the international community cares about “nuclear South Asia” because of the high risk of deterrence breakdown.
- Moeed Yusuf argues that containment of a nuclear exchange anywhere in the world is a myth, and the world could not be the same after an Indian-Pakistani nuclear exchange.

- According to Toby Dalton, there is a high potential for misperception regarding nuclear weapons between India and Pakistan.
 - There is also a difference in perception between the strategic community in D.C., which leans towards “deterrence pessimism,” and that in South Asia, which hues more towards “deterrence optimism.”
- According to Jack Gill, the U.S. government cares about stability in South Asia because of the potential for vast harm and the general problem of an unstable region.
- According to Ashley Tellis, India, Pakistan, and China are new nuclear powers with a higher change of mishaps in weapons management. This, combined with fraught relations between the three countries, should raise concern for policymakers and analysts.
- According to Dan Markey, risks in nuclear South Asia include the potentials for onward proliferation, nuclear terrorism, and humanitarian crises.
- Robert Einhorn adds that the United States cares about nuclear developments in South Asia because these developments could set precedents elsewhere.
- According to Robin Raphel, the United States was initially concerned with Indian and Pakistani proliferation due to the risks of nuclear terrorism and proliferation, as well as the lack of economic development in both countries to be able to afford nuclear programs.

RECOMMENDED READINGS

For greater depth, we encourage students to peruse these recommended readings:

- Itty Abraham, *South Asian Cultures of the Bomb: Atomic Publics and the State in India and Pakistan* (Bloomington: Indiana University Press, 2009).
https://books.google.com/books?id=f_wErmDeVusC.
- Bernard Brodie, *The Absolute Weapon: Atomic Power and World Order* (New Haven: Yale Institute of International Studies, 1946). <https://books.google.com/books?id=DV7PAAAAMAAJ>.
- Stephen P. Cohen, *India: Emerging Power* (Washington: Brookings Institution, 2001).
<https://books.google.com/books?id=SV9JDcz3hegC>.
- Stephen P. Cohen, *Shooting for a Century: The India-Pakistan Conundrum* (Washington: Brookings, 2013). <https://books.google.com/books?id=r9u4somAYxIC>.
- Stephen P. Cohen, *The Idea of Pakistan* (Washington: Brookings Institution, 2004).
<https://books.google.com/books?id=-78yjVybQfkC>.
- Sumit Ganguly and S. Paul Kapur, *India, Pakistan, and the Bomb: Debating Nuclear Stability in South Asia* (New York: Columbia University Press, 2010).
<https://books.google.com/books?id=5vZKO2XtiFMC>.
- Husain Haqqani, *Pakistan: Between Mosque and Military* (Washington: Carnegie Endowment for International Peace, 2005). https://books.google.com/books?id=nYppZ_dEjdIC.
- Robert Jervis, "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly* 94, no. 4 (Winter 1979-1980): 617-633. <http://www.psqonline.org/article.cfm?IDArticle=10629>.
- Michael Krepon, *Better Safe Than Sorry: The Ironies of Living with the Bomb* (Stanford: Stanford University Press, 2009). <https://books.google.com/books?id=OVWqqWP15-YC>.
- Sameer Lalwani and Michael Krepon, "Learning About the Bomb is the Best Way to Reduce Nuclear Dangers," *The Wire*, July 21, 2016.
<https://thewire.in/52927/learning-about-the-bomb-is-the-best-way-to-ensure-it-is-never-used/>.
- Scott Sagan, *Inside Nuclear South Asia* (Stanford: Stanford University Press, 2009).
<https://books.google.com/books?id=bkKVW1pISOUc>.
- Scott Sagan and Kenneth Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (New York: W. W. Norton & Company, 2002). <https://books.google.com/books/?id=DIRbLwEACAAJ>.
- Thomas C. Schelling, *Arms and Influence*, revised edition (New Haven: Yale University Press, 2008).
<https://books.google.com/books?id=V25WWXMgte8C>.
- Stephen I. Wilkinson, *Army and Nation: The Military and Indian Democracy Since Independence* (Cambridge: Harvard University Press, 2015). <https://books.google.com/books?id=B-qaBQAAQBAJ>.

DISCUSSION QUESTIONS

Below is a sample list of discussion questions to get students thinking and talking about the issues from this chapter in class.

1. What are the conditions that make South Asia dangerous in terms of the potential for nuclear escalation and crises?
2. What are some factors that lead to a build-up of deterrence, and what are factors that could lead to a breakdown in deterrence?
3. Why does the international community care about nuclear developments in South Asia? Are the reasons above purely specific to South Asia, or are they comparable to other regions?
4. What are reasons why the United States specifically cares about nuclear developments in South Asia?
5. Where and why is the threat of nuclear terrorism especially prominent?
6. What is the “nuclear taboo” and why does it matter?
7. How do perceptions of nuclear weapons differ in South Asia and the United States?