

Introduction to the Foundations of the Nonproliferation Regime

DR ANNE I. HARRINGTON

ASSOCIATE PROFESSOR, CARDIFF UNIVERSITY

11 MARCH 2021



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The World Wars left even the victorious European powers weakened and without the military resources to maintain their empires. Moreover, ideas about race were changing, domestically and internationally. The victors of World War II sought to distance themselves from the expansionist and racially motivated ideologies that had motivated German aggression.

A world map illustrating the division of the world into three major spheres of influence during the Cold War. The map is color-coded as follows:

- United States (Light Blue):** Includes North America (USA and Canada), Greenland, Iceland, and Australia.
- Soviet Union (Red):** Includes the Soviet Union, Eastern Europe (Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Yugoslavia, Albania, Greece, Turkey, and Cyprus), and North Korea.
- Third World (Yellow):** Includes Latin America (Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Ecuador, Peru, Bolivia, Paraguay, Uruguay, Chile, and Argentina), Africa (Algeria, Egypt, Libya, Tunisia, Morocco, Mauritania, Mali, Niger, Chad, Senegal, Gambia, Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana, Nigeria, Cameroon, Gabon, Congo, Angola, Namibia, South Africa, and Botswana), and Asia (Afghanistan, Pakistan, India, Bangladesh, Sri Lanka, Nepal, Bhutan, Cambodia, Laos, Vietnam, North Vietnam, South Vietnam, Philippines, Indonesia, Malaysia, Singapore, Brunei, and Thailand).

■ First World (anti-communist, "free world") ■ Second World (communist) ■ Third World (decolonized)

The Non-Aligned Movement

- ▶ On 18 April 1955, the Indonesian President Sukarno declares the Bandung Conference open. With some 29 African and Asian countries in attendance, the Conference calls upon all the participants to unite in the fight against colonialism.
- ▶ The leaders sought an alternative taking sides between the US and Soviet Union in the Cold War that prioritized just global governance and global justice, greater social and economic development for their people, and political and economic decolonization.
- ▶ The meeting at Bandung, Indonesia was a key turning point in the history of developing countries. It gave rise to the Non-Aligned Movement (NAM) and solidified the concept of the Third World as a political project.



World leaders Shri Jawaharlal Nehru of India, Kwame Nkrumah of Ghana, Gamal Abdel Nasser of Egypt, Sukarno of Indonesia and Josip Broz Tito of Yugoslavia at the Bandung Conference in 1955.

The United Nations, 1945

The founding of the United Nations codified new norms about the use of force. The UN charter:

- ▶ Committed members to the principle of equal rights and self-determination of peoples (Article 1)
- ▶ Outlawed the use of armed force in all but wars of self-defense (Article 51).
- ▶ The US, UK and Soviet Union created UN Atomic Energy Commission to address the threat of atomic weapons. The first resolution passed by the General Assembly endorsed its creation.
- ▶ Considered early disarmament proposals, such as the Baruch Plan in 1946.



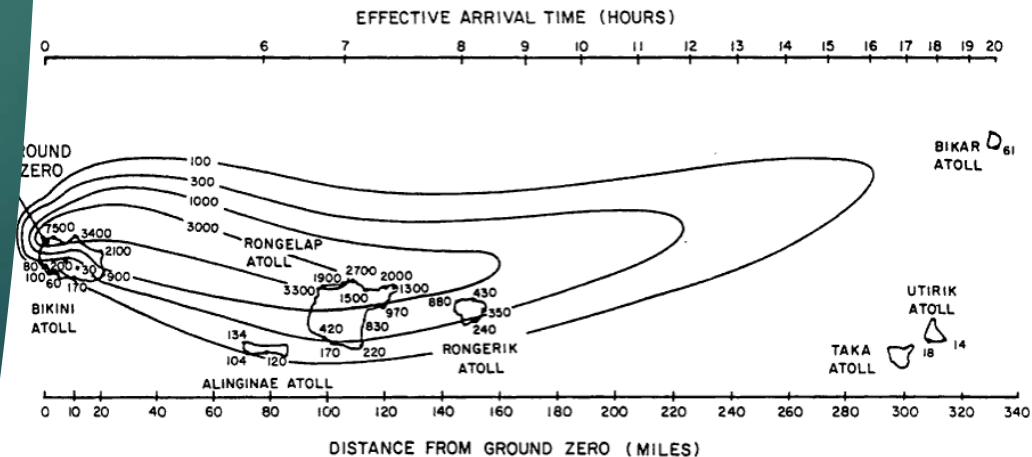


“Atoms for Peace” and the Creation of the International Atomic Energy Agency

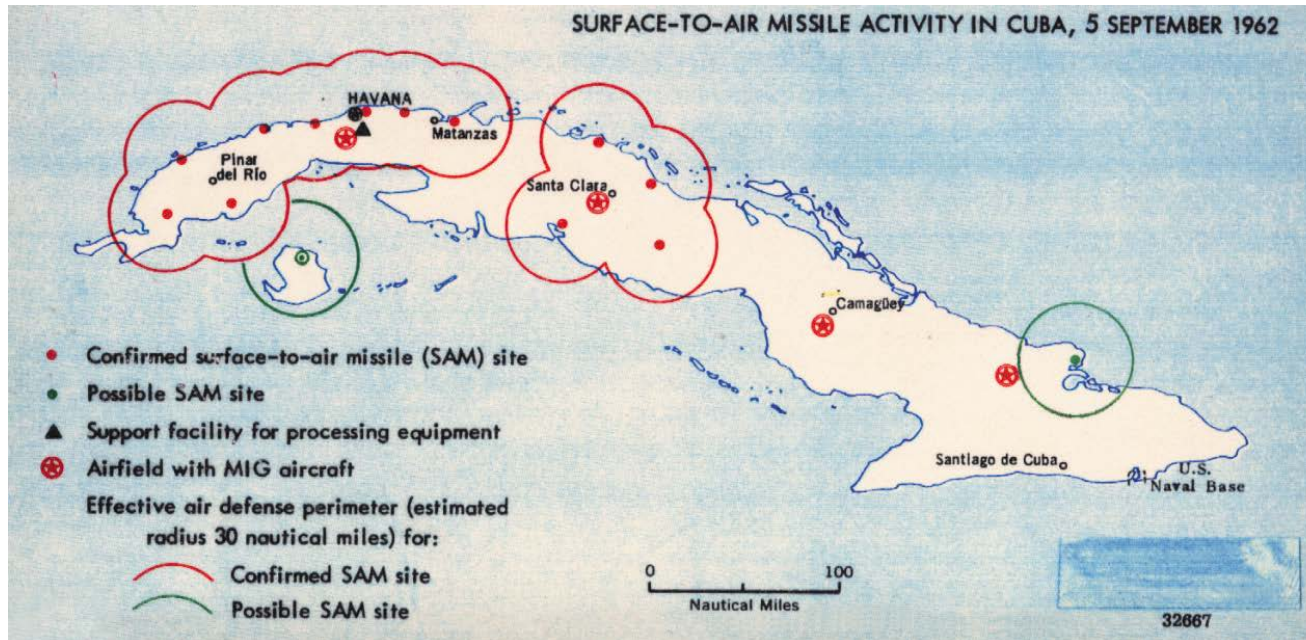
US PRESIDENT EISENHOWER’S SPEECH TO THE UNITED NATIONS, 1953

Castle Bravo Test, 1954 & the Lucky Dragon

- ▶ **Castle Bravo's** yield was 15 megatons of TNT, 2.5 times the predicted 6.0 megatons, due to unforeseen additional reactions involving lithium-7, which led to the unexpected radioactive contamination of areas to the east of Bikini Atoll.
- ▶ Radioactive rain and ash fell on the Lucky Dragon and its 5 tuna fishermen for five hours. By the time it subsided, some of the crew were dizzy, vomiting, or had fevers. By the time they got back to port two weeks later, most of the crew were suffering from headaches, bleeding gums, skin burns, and hair falling out in clumps. All the men were hospitalized. The idea of 'fallout' was born.







Cuban Missile Crisis, 1962



Aug. 5, 1963

PARTIAL TEST BAN TREATY - The United States, the Soviet Union and Britain agree to ban nuclear tests above ground, underwater and in the space. It permits underground nuclear tests that limit radioactive fallout.

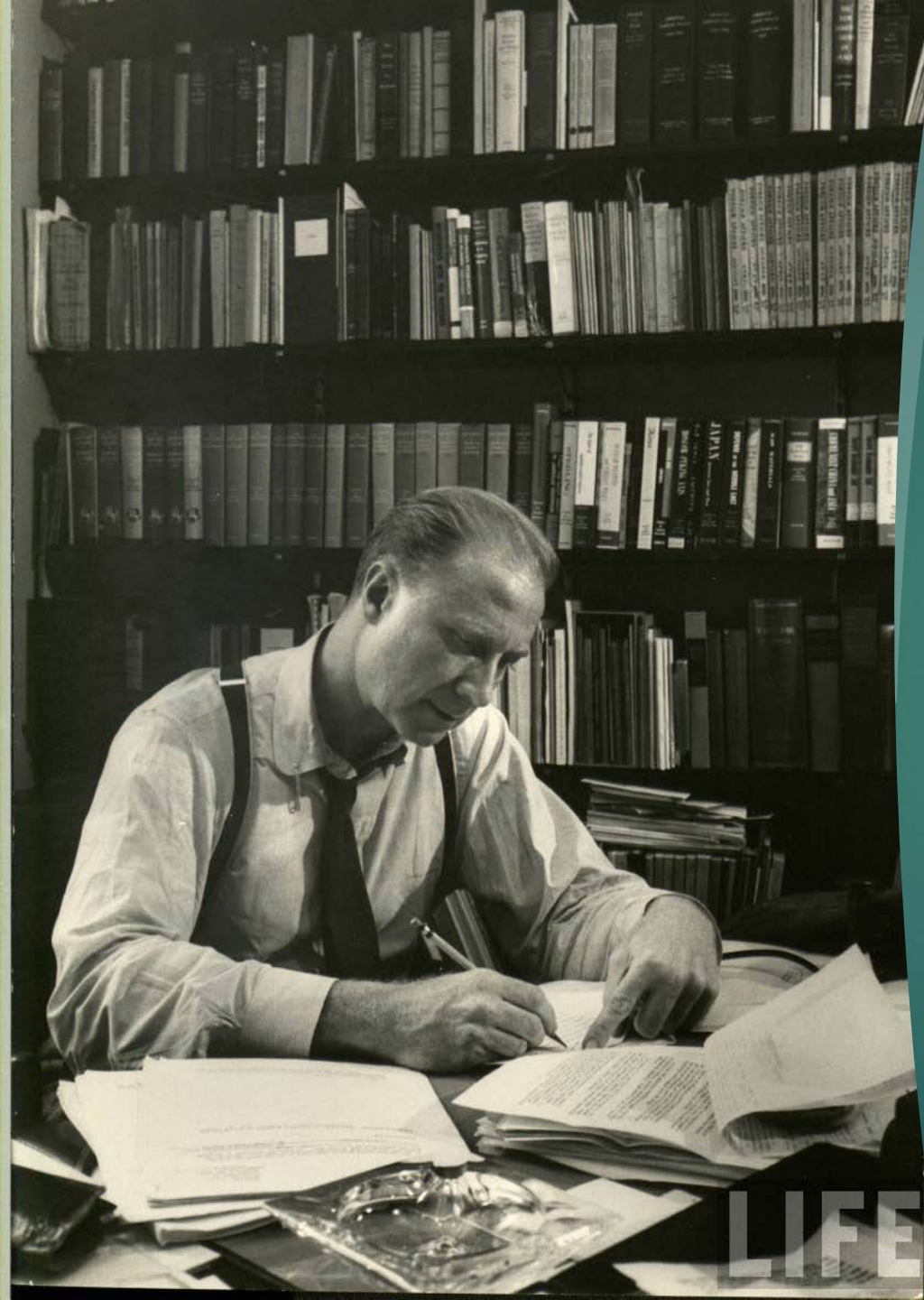
The Partial or Limited Test Ban Treaty allowed for underground tests:

- Slow down horizontal proliferation while improving arsenal (vertical proliferation)
- Separate nonproliferation from disarmament
- Temporarily resolved “the German question”

The N+1 Problem

► The United States and the Soviet Union thought of the trouble as the third-power problem, Great Britain thought of it as the fourth-power problem, France as the fifth-power problem, and so on. Each new or prospective nuclear power thinks of the problem as that of stopping the next country after itself....

Albert Wohlstetter, Political Scientist



Nuclear Weapons “Spread”

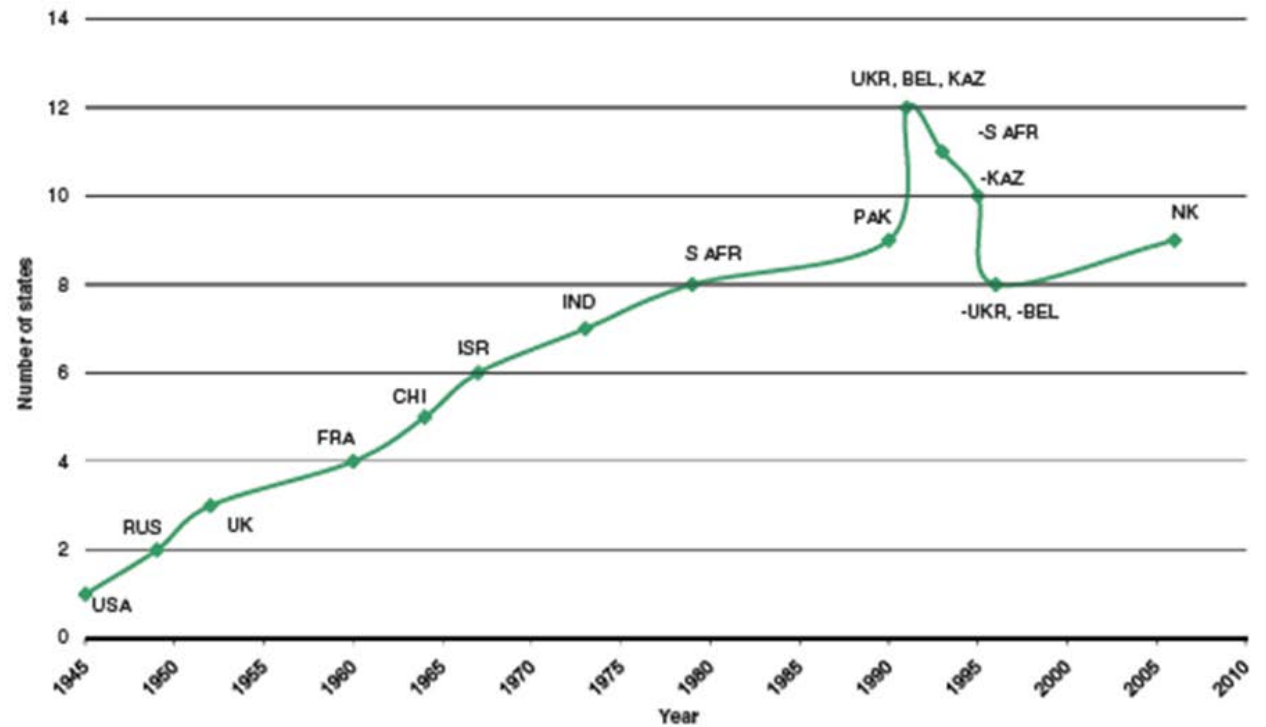


Figure 1

Nuclear weapons proliferation (Sagan 2010). Figure © Scott D. Sagan based on data from Singh & Way

Is the 'N+1 Problem' a problem?

- ▶ Not all nuclear proliferation was viewed as against US interests. The US was, according to Wohstetter, “for sharing nuclear weapons with some of our allies and just against spreading them to enemies or neutral powers or certain of our allies.”
- ▶ Yet, sharing weapons with some allies and not others could create unintended dynamics: “the acquisition of nuclear military power by some of our allies can impel its acquisition by enemies and that it is particularly hard and divisive to select among our allies. The spread occurs in chain.”

United States Policy Options in the 1960's

As outlined in the Gilpatric Report, 1965:

1. Permissive or selective proliferation
2. The prudent course (Creation of a European Multilateral Force)
3. Nonproliferation
4. Rolling back proliferation

Option 1: Selective proliferation

- ▶ Assumed that proliferation was inevitable and that in some cases the United States might benefit by facilitating the process, eg if India and Japan were determined to develop nuclear weapons in response to the Chinese test, might it be in the US interest to help them?
- ▶ This could lead to US and Soviet retrenchment as new nuclear powers pushed forward with their programs.
- ▶ Realpolitik in its purest form.

Option 2: The prudent course

- ▶ Slow steps to prevent proliferation, but only if they didn't conflict with other US interests. Including, for instance, the creation of a European Multilateral Force (MLF) of US weapons manned by NATO crews.

Option 3: Nonproliferation

- ▶ A willingness to accept substantial costs and risks to halt proliferation. Including:
 - Increased guarantees to Japan and India in order to counter the threat from a nuclear China (security assurance, nuclear umbrella)
 - Abandoning the MLF in Europe
 - Increased cooperation with the Soviet Union over mutual interests containing the proliferation of 'lesser powers.'

Option 4: Rolling back proliferation

- ▶ An all-out commitment to nonproliferation, making it the primary goal of the United States. Methods might include:
 - Stationing US nuclear weapons abroad
 - Economic incentives
 - Economic and military abandonment
 - Nuclear rollback through military force

Three Pillars of a Grand Bargain

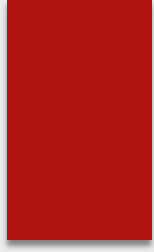
- ▶ (1) non-proliferation,
- ▶ (2) disarmament, and
- ▶ (3) peaceful use of nuclear energy.



July 1, 1968

NUCLEAR NON-PROLIFERATION TREATY - The United States, the Soviet Union and Britain agree not to give nuclear weapons to other nations. But they also agree to the right of non-nuclear-weapon nations to use nuclear energy for peaceful purposes.

A large, solid blue circle that occupies most of the frame. It is a uniform color with no text or other markings inside it.



Nuclear Weapons Worldwide

Five nuclear weapons states from the NPT

- ▶ United States, (1945)
- ▶ Russia, (former Soviet Union) (1949)
- ▶ United Kingdom, (1952)
- ▶ France (1960)
- ▶ China (1964)

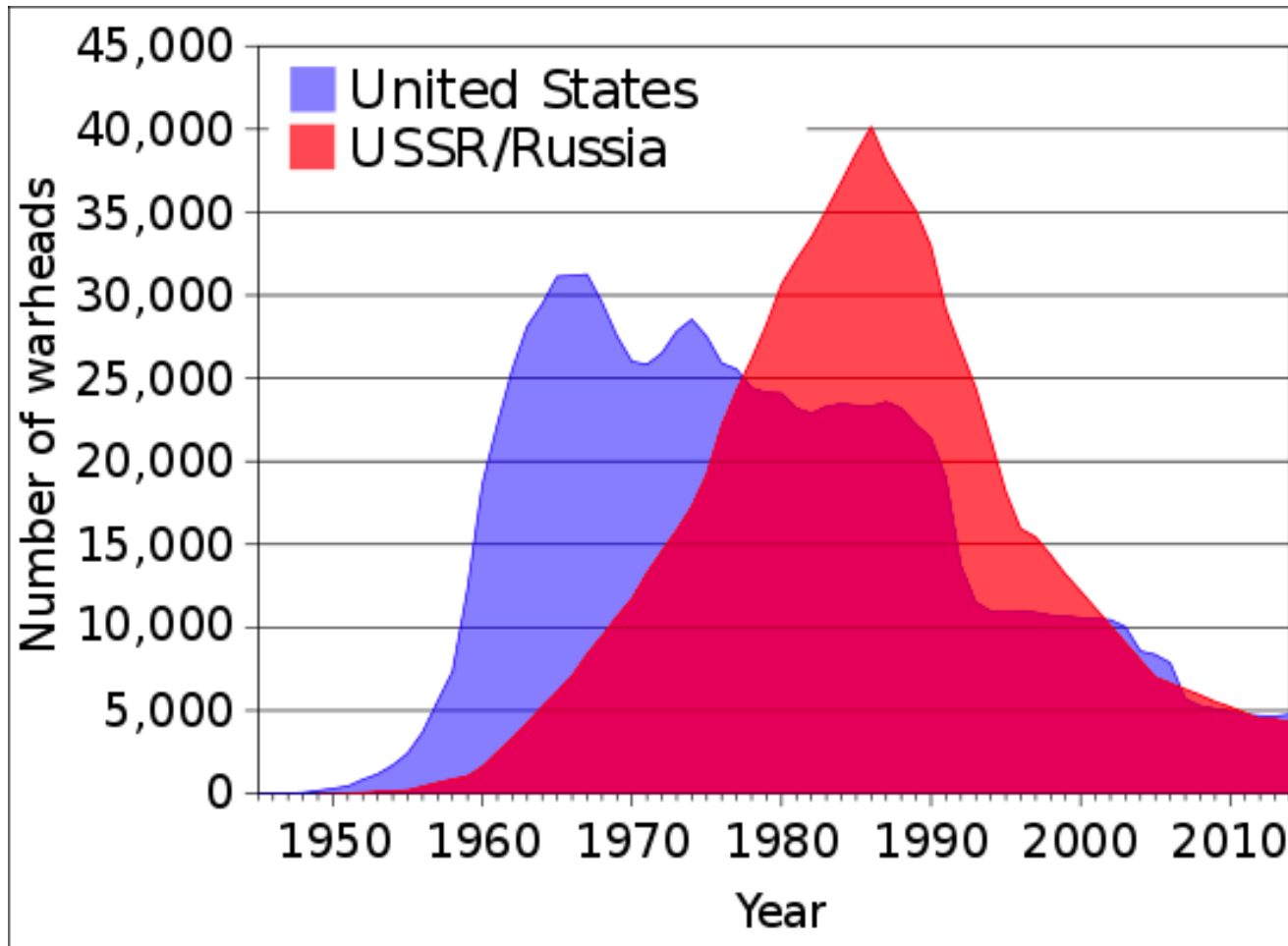
Non-NPT nuclear powers

- ▶ India (1974)
- ▶ Pakistan (1998)
- ▶ North Korea (2006)

States accused of having nuclear weapons

- ▶ Israel (unknown or 1979)

* Country, operational nuclear warheads/total inventory (year of first test)



Horizontal
versus
Vertical
Proliferation



Tom
Lehrer,
“Who’s
Next?”

Anti-Matter Bomb

Energy: 215 Megaton TNT

Tsar Bomba

Energy: 50 Mt TNT

Hydrogen Bomb Test

Energy: 30 Mt TNT

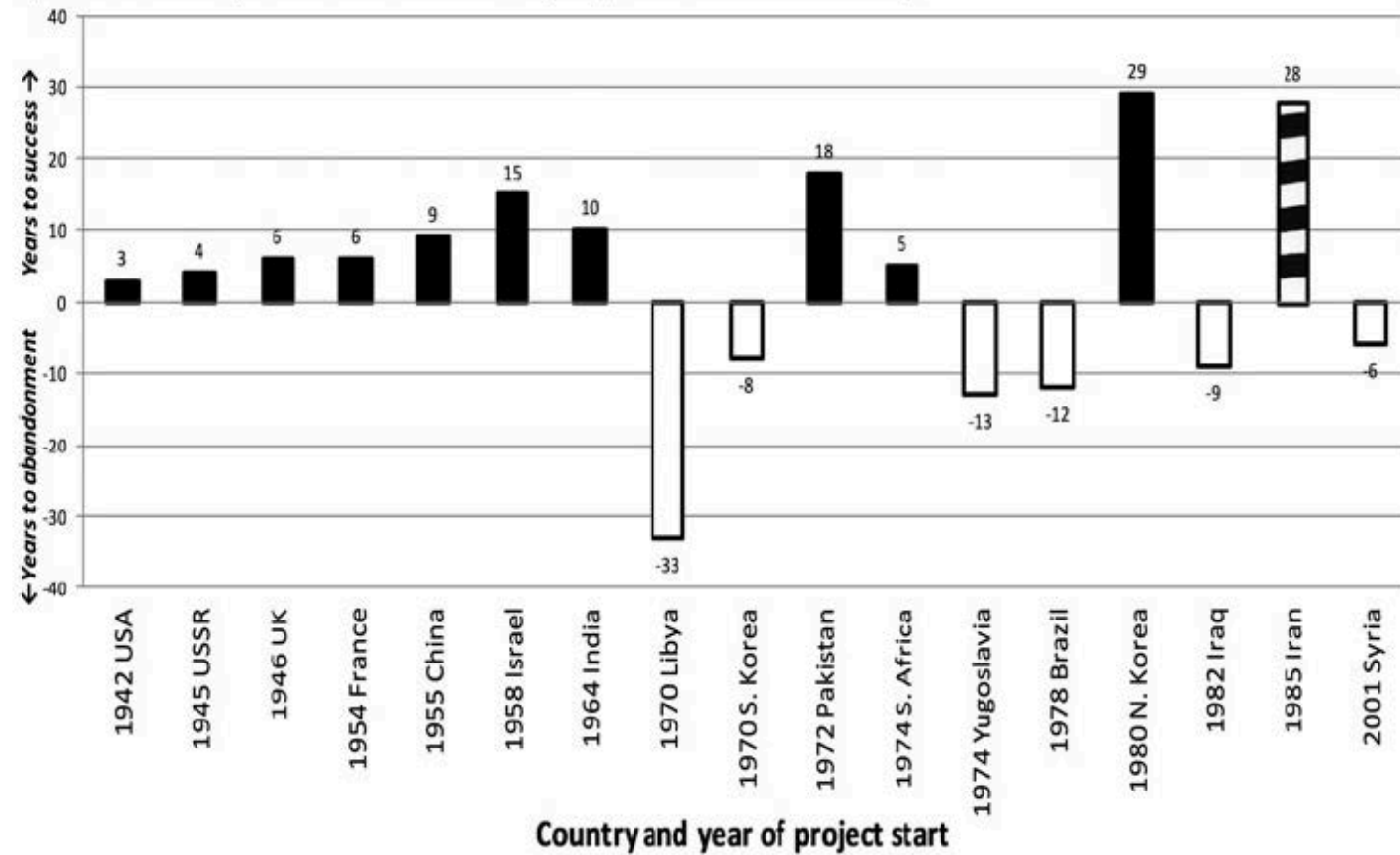
Atomic Bomb Test

Energy: 15 kt TNT



Nuclear weapons projects: duration and outcome

(Black bars: success; White bars: abandonment; Striped bar: outcome uncertain)



Source: Updated from Hymans, *Achieving Nuclear Ambitions*, p. 3.