

A man in a light blue suit jacket and white shirt is pointing with his right hand towards a large architectural blueprint or map. The blueprint is spread out on a table and shows various lines, shapes, and text, including the word 'MAGAZIN' in the upper right corner. The background is slightly blurred, showing what appears to be a window or a wall. The overall scene suggests a professional or technical setting.

Israel's Nuclear Program

What do we know about it and why it matters for peace and stability in the region.

ANNA ILLING



A mysterious & hidden history

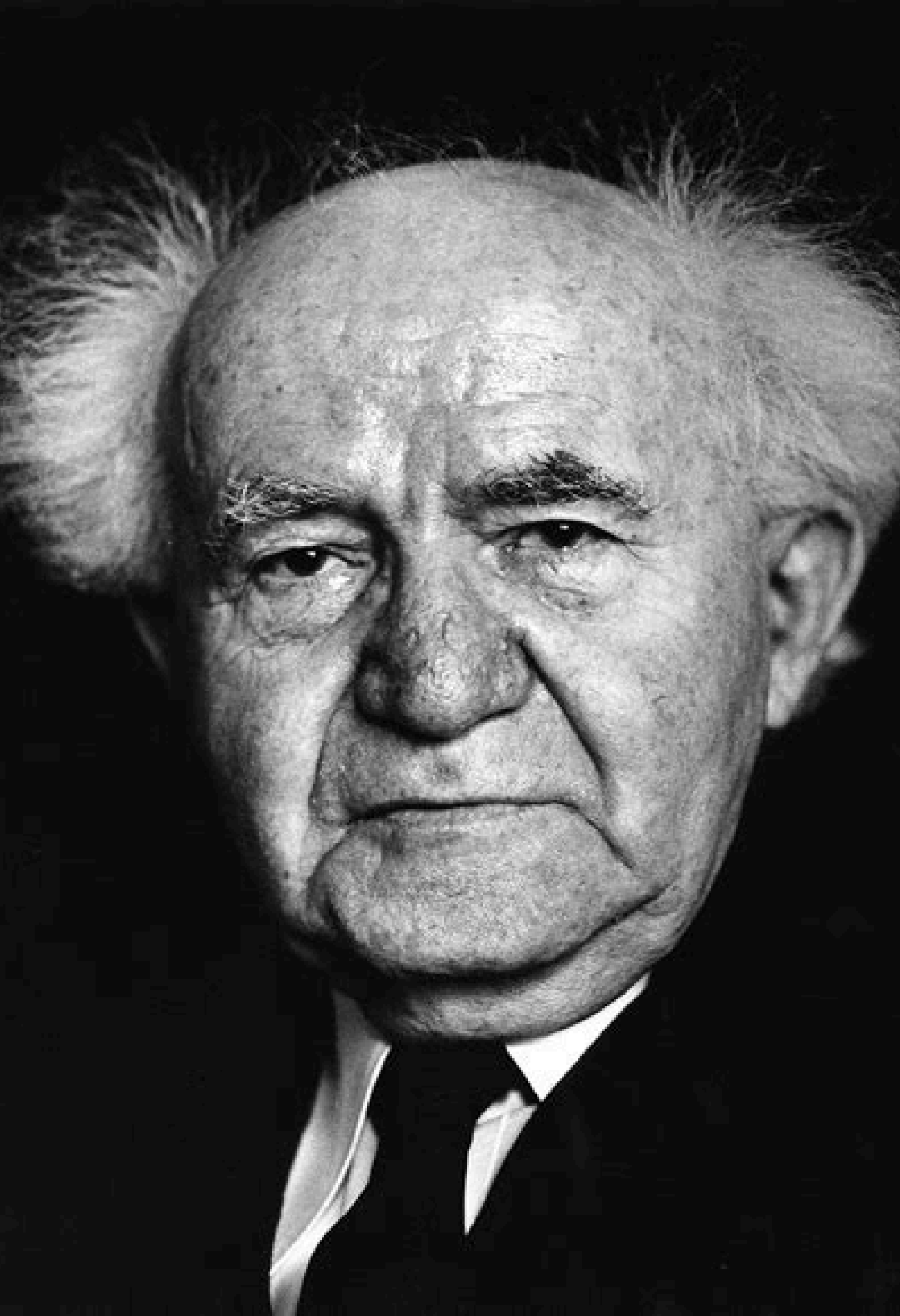
Israel's history with nuclear weapons unfolded between secrecy, public tacit knowledge, and support, both materially and diplomatically, from the West, creating a playbook of strategic ambiguity around it still in place today.



Declassified KH-4 CORONA Novemb

Dimona

1950 - In the Negev desert, 152 kilometers from Tel Aviv and 90 kilometers from Jerusalem, the Shimon Peres Negev Nuclear Research Center, was built. Seventy years later, the facility is considered the most important pillar of Israel's nuclear program.



From the '50s to 1986

CAPABILITIES

- underground separation plant by 1965
- weapons-grade plutonium production by 1966
- nuclear weapon assemblance before the 1967 six-days war

VELA INCIDENT - 1979

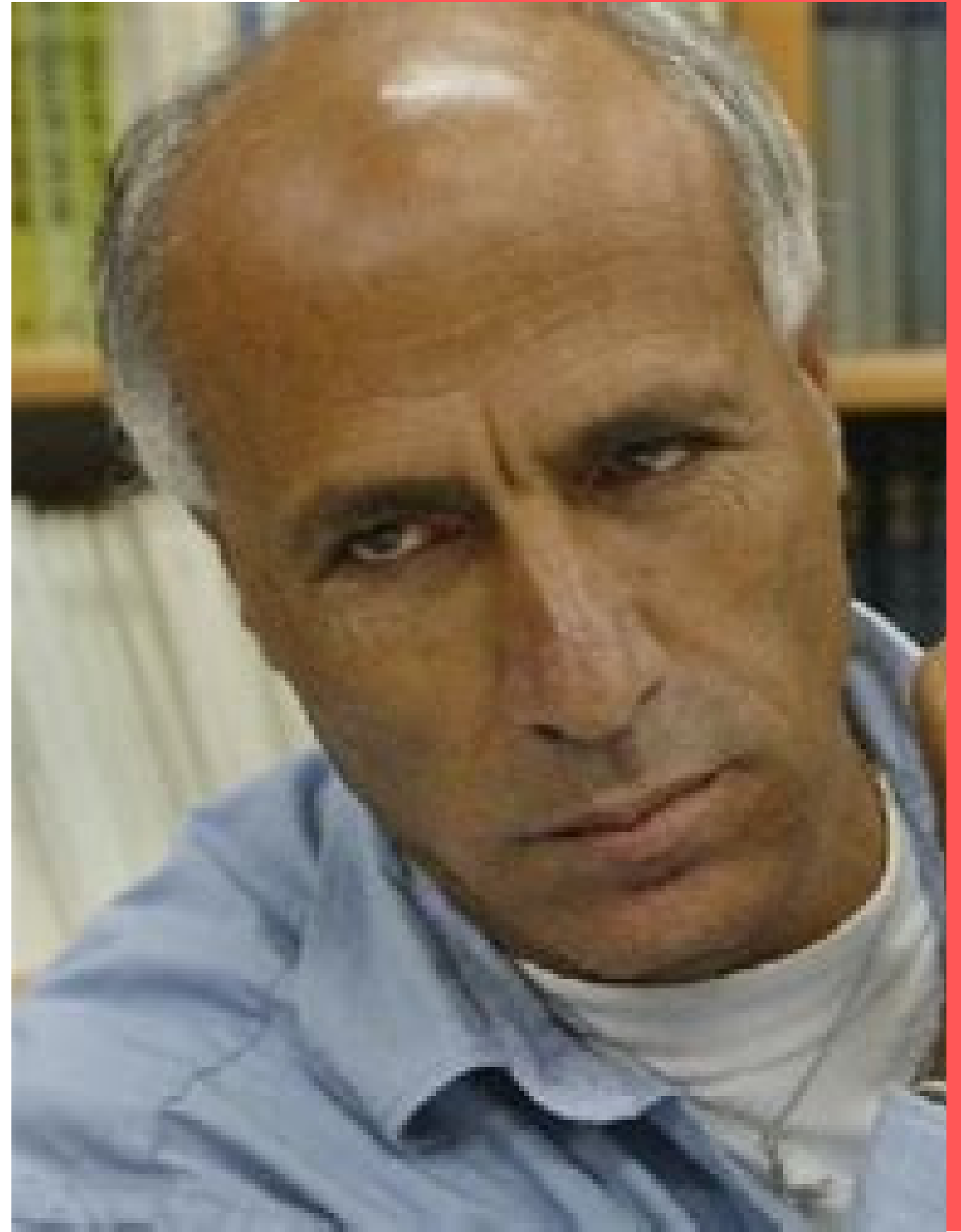
Joint nuclear test with apartheid era' South Africa - the US VELA 6911 satellite detected a common sign of nuclear blast: an unexplained double flash of light.

IN DECEMBER 1960 BEN GURION REPORTED TO THE ISRAELI KNESSET THAT THE DIMONA REACTOR WAS "A RESEARCH REACTOR" WHICH WOULD SERVE "INDUSTRY, AGRICULTURE, HEALTH AND SCIENCE".

Mordechai Vanunu

- Former Israeli nuclear technician
- had been an employee at Dimona for eight years
- disclosed to the Sunday Times details and photographs of the nuclear research center
- it was discovered that Israel ranked as the world's sixth nuclear power and possessed as many as 200 atomic warheads

For his act of whistle-blowing, Mordechai Vanunu was imprisoned for 18 years, 11 of which he spent in solitary confinement. He was released in 2004, but he is still banned from travelling or speaking to foreign journalists.





Who knew already

NIXON

In 1969, the then U.S. president, Richard Nixon, and Israeli prime minister, Golda Meir, reached a “nuclear understanding”: questions would not be asked if Israel maintained silence and vagueness around its capabilities and avoided testing its nuclear weapons.

THE UK

In 2005, a BBC investigation revealed that Britain had secretly supplied 20 tons of heavy water to Israel almost half a century before. Heavy water is so called because it goes through a laborious electrolysis process, which results in the water containing extra neutrons.

Today's estimates

90

Estimated nuclear warheads

750–1110
kg

Approximate plutonium stockpile, potentially enough for 187-277 nuclear weapons

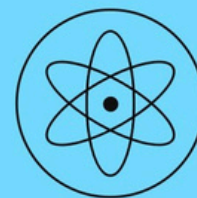
6

Dolphin-I and Dolphin II-class submarines operated, believed capable of launching nuclear-armed cruise missiles

4,800 –
6,500 km

Potential range of the Jericho III intermediate-range ballistic missile

Nuclear



- ▶ Believed to possess enough plutonium and highly enriched uranium to produce up to 300 nuclear weapons
- ▶ No declared nuclear weapons tests, but believed to have conducted atmospheric test in cooperation with South Africa in 1979
- ▶ Opposes diplomatic efforts to establish a WMD Free Zone in the Middle East
- ▶ Suspected of expanding its facility at Dimona to increase its nuclear capabilities

Biological



- ▶ Non-membership in BTWC and lack of public commentary has led to speculation of offensive weapons capabilities
- ▶ Operates sophisticated biodefense program
- ▶ Adopted export controls on biological materials in line with Australia Group standards

INTERNATIONAL OVERSIGHT

Israel is the only Middle Eastern country and one of the three countries in the world that have never signed the Treaty on the Non-Proliferation of Nuclear Weapons, together with India and Pakistan

Of the world's nine nuclear powers Israel is the only one that does not officially admit having nuclear weapons.

The rethoric

NEITHER CONFIRMING NOR DENYING

- *Israel will not be the first country to introduce nuclear weapons into the Middle East*
- “the Samson Option” = Israel would resort to nuclear retaliation in defence from an existential threat

HISTORIC EVENTS

- 1973 war - against Egypt and Syria
- 2016 - Netanyahu deterrs enemies
- 2023 - Israeli Heritage Minister Amichai Eliyahu said in a radio interview that dropping a nuclear bomb on the Gaza Strip was “an option”.



The consequences

CENTER FOR ARMS CONTROL AND NON-PROLIFERATION

The lack of clarity surrounding an Israeli nuclear weapons program is a key obstacle to establishing a weapons of mass destruction free zone in the Middle East

DONALD TRUMP - FEB, 28TH

“Just imagine how emboldened this regime would be if they ever had, and actually were armed with nuclear weapons as a means to deliver their message”.



A man with short grey hair, wearing a light blue button-down shirt, is shown from the chest up. He is gesturing with his right hand, palm facing up, as if speaking or presenting. The background is a blurred office setting with a wooden desk and a chair. The image has a dark, semi-transparent overlay on the right side where the text is located.

**Thank you
for your
attention**