The Asia-Pacific Journal: Japan Focus
In-depth critical analysis of the forces shaping the Asia-Pacific...and the world.

Japan, the Atomic Bomb, and the "Peaceful Uses of Nuclear Power"

Yuki Tanaka and Peter Kuznick

In this two part article Yuki Tanaka and Peter Kuznick explore the relationship between the atomic bombing of Japan and that nation's embrace of nuclear power, a relationship that may be entering a new phase with the 3.11 earthquake, tsunami and nuclear catastrophe at Fukushima.

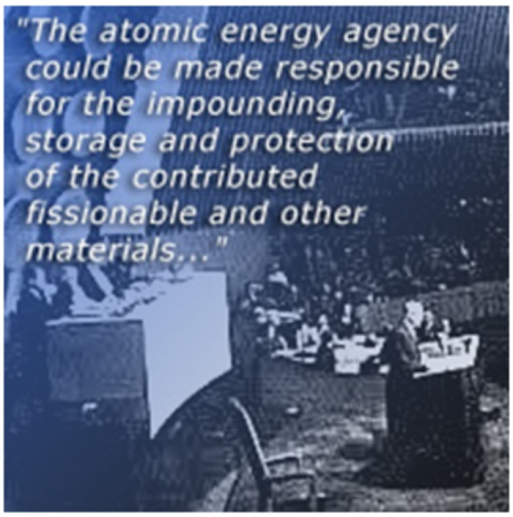
A Japanese translation by Noa Matsushita is available here.

"The Peaceful Use of Nuclear Energy" and Hiroshima

Yuki Tanaka

The ongoing grave situation at the Fukushima No. 1 Nuclear Power Plant, which continues to contaminate vast areas of surrounding land and sea with high levels of radiation, forces us to reconsider the devastating impact of the so-called "peaceful use of nuclear energy" upon all forms of life, including human beings and nature. The scale of damage to human beings and the environment caused by a major accident at a nuclear power plant, where radiation is emitted either from the nuclear vessel or spent fuel rods, may be comparable to that resulting from nuclear weapons. In this sense, a nuclear power accident can be seen as an "act of indiscriminate mass destruction," and thus "an unintentionally committed crime against humanity."

It is well known that the origin of "the peaceful use of nuclear energy" was part of "Atoms for Peace," a policy that U.S. President Dwight D. Eisenhower launched at the U.N. General Assembly in December 1953.



Eisenhower addresses the UN General Assembly, December 13, 1953

As Peter Kuznick concisely explains in the following article, what the U.S. Government aimed at above all through this policy was to contain the power of the Soviet Union, the nation which carried out the world's first hydrogen bomb test in August that year. Atoms for Peace was devised to assure that Western nations accepted plans by the U.S. government and American capital for the provision of nuclear fuel and technology. Japan was among the most important of these targeted nations, as U.S. government officials recognized that it would be symbolically advantageous to promote "the peaceful use of nuclear energy" in the nation that had been the victim of the world's first atomic bombing. Yet, at the very moment that the U.S. was preparing to introduce this program into Japan, a Japanese fishing boat, the Lucky Dragon #5, was showered with radioactive fallout caused by the U.S. hydrogen bomb test at Bikini Atoll in March 1954.

This incident stirred Japanese anti-nuclear sentiment, and a campaign against nuclear tests spread throughout Japan. Among the 32 million signers of the anti-nuclear petition were one million from Hiroshima Prefecture. This movement gave rise to the first World Congress Against Atomic and Hydrogen Bombs held in Hiroshima in August in 1955.

At a time of rapidly rising anti-nuclear sentiment in Japan, ShorikiMatsutaro, president of the Yomiuri Newspaper and Japan TV Corporation, emerged to promote the benefits of "the peaceful use of nuclear energy." Shoriki was elected as a member of the Lower House in the Diet in February 1955, and became the Minister in charge of Nuclear Energy in the Hatoyama cabinet in November. The following year he became the founding Director of the newly established Science and Technology Agency, and vigorously promoted nuclear energy in Japan, collaborating with other pro-nuclear politicians including Nakasone Yasuhiro, then chair of the Nuclear Energy Committee of the Lower House.

Hiroshima was a particular target for promoting nuclear energy, as Peter Kuznick clearly explains. In the eyes of American officials such as AEC Commissioner, Thomas Murray, this could help counter the negative and gloomy images of atomic power. In January

1955, Congressman Sidney Yates proposed building Japan's first nuclear power plant in Hiroshima. Shoriki, with U.S. government support, organized the traveling exhibition on "The Peaceful Use of Nuclear Energy" in Tokyo in November, and Hiroshima was selected as one of several host cities. For three weeks from the end of May 1956, the exhibition in Hiroshima city attracted 110,000 people from Hiroshima and neighboring prefectures, many of them children on school excursions.

Hiroshima's Peace Memorial Museum under construction in 1955

Although in other cities the exhibition was sponsored exclusively by the Yomiuri with the assistance of the U.S. Information Service, in Hiroshima co-sponsors also included the Hiroshima City Council, Hiroshima Prefectural Government, Hiroshima University, and the Chugoku Newspaper. Twenty local influential persons, including the Mayor of Hiroshima City, the Governor of Hiroshima Prefecture, the President of Hiroshima University and the President of the Chugoku Newspaper, were on the preparatory committee. All praised the promotion and application of this new powerful energy. By contrast, many A-bomb survivors were skeptical and cautious about this non-military application of nuclear power, claiming that there was still no solution to the problem of managing radioactive materials produced by operating nuclear power reactors.

Yet, by the time the 2nd World Congress Against A & H Bombs was held in Nagasaki in August in 1956, just two months after the exhibition ended, the A-bomb survivors, too, had been heavily influenced by this nation-wide barrage of "Atoms for Peace." Even intellectual leaders of the A-bomb victims, such as Moritaki Ichiro, a well-know philosopher and ardent campaigner for the total abolition of nuclear weapons, became supporters of nuclear energy. In his speech at the inaugural meeting of Nippon Hidankyo (the Japan A-bomb Victims Association) during the above-mentioned 2nd World Congress Against A & H Bombs in Nagasaki, Moritaki stated 'it is our sole wish to direct the use of nuclear energy – an energy source that could bring destruction and annihilation - for the purpose of happiness and prosperity of human beings.'

Two years later, the same exhibition was again presented in Hiroshima by the city council, as part of the Grand Exhibition of the Reconstruction of Hiroshima to celebrate the rebirth of this city that had been totally destroyed by the atomic bombing thirteen years before. This exhibition, which lasted 50 days from April 1, 1958, comprised 31 pavilions including those for Electric Science and Space Exploration. This time, the A-bomb Museum building, completed in August 1955, was used as the pavilion for the Peaceful Use of Nuclear Energy. Thus, in the same building, exhibits related to the devastation caused by the atomic bombing were displayed together with various dream-like applications of nuclear energy. Such things as nuclear powered planes, ships and trains, as well as medical, agricultural and industrial uses of radioactive materials were displayed. In the Electric Science pavilion, the benefits and advantages of electricity generated by nuclear reactors was also propagated. In all, 917,000 people visited the exhibition, and the pavilion of the Peaceful Use of Nuclear Energy was the second most popular after that ofSpace Exploration.

It appears that most people in Hiroshima, including many A-bomb survivors, now held two implicitly contradictory views: that the campaign against the use of nuclear weapons must continue; but nuclear energy for non-military purposes should be welcomed and promoted. Likewise, at least until recently, many anti-nuclear weapon campaigners in other parts of Japan have shared these views. This explains why A-bomb victim organizations, such as Nippon Hidankyo, still maintain silence concerning the fatal accident at the Fukushima No.1 Nuclear Power Plant, and why none of the post-war mayors of Hiroshima has ever publicly criticized nuclear power. Indeed, some former mayors are widely known as strong supporters of Chugoku Electric Power Company's plan to build a nuclear power plant at Kaminoseki, about 80 kilometers from Hiroshima City.

It is now time to critically and honestly review the history of the anti-nuclear movement in Hiroshima and to explore ways to unite hitherto divided anti-nuclear and anti-nuclear weapons and energy campaigns.

Japan's nuclear history in perspective: Eisenhower and atoms for war and peace

PETER KUZNICK

It is tragic that Japan, the most fiercely antinuclear country on the planet, with its Peace Constitution, three non-nuclear principles, and commitment to nuclear disarmament, is being hit with the most dangerous and prolonged nuclear crisis in the past quarter-century -- one whose damage might still exceed that of Chernobyl 25 years ago. But Japan's antinuclearism has always rested upon a Faustian bargain, marked by dependence on the United States, which has been the most unabashedly pro-nuclear country on the planet for the past 66 years. It is in the strange relationship between these two oddly matched allies that the roots and meaning of the Fukushima crisis lay buried.

Japan embarked on its nuclear energy program during the presidency of Dwight Eisenhower, a man now best remembered, ironically, for warning about the rise of the very military-industrial complex he did so much to create. Eisenhower is also the only US president to have criticized the atomic bombing of Hiroshima and Nagasaki. Fearing the bombings would destroy the prospects for friendly post-war relations with Russia, at one point he advocated international control of atomic energy and turning the existing US stockpile over to the United Nations for destruction.

Yet by the time he took office in 1953, Eisenhower's views on nuclear weapons had changed. Not wanting to see the United States "choke itself to death piling up military expenditures" and assuming that any war with the Soviet Union would quickly turn nuclear, he shifted emphasis from costly conventional military capabilities to massive nuclear retaliation by a fortified Strategic Air Command. Whereas President Harry Truman had considered nuclear arms to be weapons of last resort, Eisenhower's "New Look" made them the foundation of US defense strategy.

Just like a bullet? On occasion, Eisenhower spoke almost cavalierly about using nuclear weapons. In 1955, he told a reporter: "Yes of course they would be used. In any combat where these things can be used on strictly military targets and for strictly military purposes, I see no reason why they shouldn't be used just exactly as you would use a bullet or anything else." When Eisenhower

suggested to Winston Churchill's emissary Jock Colville that "there was no distinction between 'conventional' weapons and atomic weapons: all weapons in due course become conventional," Colville recalled, horrified, "I could hardly believe my ears."

Eisenhower began transferring control of the atomic stockpile from the Atomic Energy Commission (AEC) to the military. Europeans were terrified that the United States would start a nuclear war, which Eisenhower threatened to do over Korea, over the Suez Canal, and twice over the Taiwan Strait islands of Quemoy and Matsu. European allies begged Eisenhower to show restraint.

Public revulsion at the normalization of nuclear war threatened to derail the Eisenhower administration's plans. The minutes of a March 1953 meeting of the National Security Council (NSC) stated: "the President and Secretary [John Foster] Dulles were in complete agreement that somehow or other the tabu [sic] which surrounds the use of atomic weapons would have to be destroyed. While Secretary Dulles admitted that in the present state of world opinion we could not use an A-bomb, we should make every effort now to dissipate this feeling."

Atoms for Peace buried in radioactive ash. Eisenhower decided that the best way to destroy that taboo was to shift the focus from military uses of nuclear energy to socially beneficial applications. Stefan Possony, Defense Department consultant to the Psychological Strategy Board, had argued: "the atomic bomb will be accepted far more readily if at the same time atomic energy is being used for constructive ends" (p. 156). On December 8, 1953, Eisenhower delivered his "Atoms for Peace" speech at the United Nations. He promised that the United States would devote "its entire heart and mind to find the way by which the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life." He pledged to spread the benefits of peaceful atomic power at home and abroad.

But the subsequent March 1954 Bravo test almost derailed those plans. Fallout from the US hydrogen-bomb test contaminated 236 Marshall Islanders and 23 Japanese fisherman aboard the *DaigoFukuryuMaru* ("Lucky Dragon no. 5"), which was 85 miles away from the detonation and outside the designated danger zone. A panic ensued when irradiated tuna was sold in Japanese cities and eaten by scores of people.

Bravo test at Bikini

The international community was appalled by the bomb test. Belgian diplomat Paul-Henri Spaak warned, "If something is not done to revive the idea of the President's speech -- the idea that America wants to use atomic energy for peaceful purposes -- America is going to be synonymous in Europe with barbarism and horror." Indian Prime Minister Jawaharlal Nehru declared that US leaders were "dangerous self-centered lunatics" who would "blow up any people or country who came in the way of their policy."

Eisenhower told the NSC in May 1954, "Everybody seems to think that we are skunks, saber-rattlers, and warmongers." Dulles complained, "Comparisons are now being made between ours and Hitler's military machine."

Criticism was fiercest in Japan. In Tokyo's Suginami ward, housewives began circulating petitions to ban hydrogen bombs. The movement caught on across the country. By the next year, an astounding 32 million people, or one-third of Japan's population, had signed petitions against hydrogen bombs.

Long-suppressed rage over the 1945 atomic bombings, squelched by US occupation authorities' total ban on discussion of the bombings, had finally erupted. The Operations Coordinating Board of the NSC recommended that the United States contain the damage by waging a "vigorous offensive on the non-war uses of atomic energy" and even offer to build Japan an experimental nuclear reactor. AEC Commissioner Thomas Murray concurred, proclaiming, "Now, while the memory of Hiroshima and Nagasaki remain so vivid, construction of such a power plant in a country like Japan would be a dramatic and Christian gesture which could lift all of us far above the recollection of the carnage of those cities."

Selling the peaceful atom in Japan. The *Washington Post* applauded Murray's idea as a way to "divert the mind of man from his present obsession with the armaments race." "Many Americans are now aware … that the dropping of the atomic bombs on Japan was not necessary. … How better to make a contribution to amends than by offering Japan the means for the peaceful utilization of atomic energy. How better, indeed, to dispel the impression in Asia that the United States regards Orientals merely as nuclear cannon fodder!"

Murray and Rep. Sidney Yates (Democrat of Illinois) suggested locating the first electricity-producing nuclear power plant in Hiroshima. In early 1955, Yates introduced legislation to build a 60,000-kilowatt generating plant there that would "make the atom an instrument for kilowatts rather than killing." By June, the United States and Japan had signed an agreement to work together on research and development of atomic energy.

But selling this idea to the Japanese people would not be so easy. When the US Embassy, US Information Service (USIS), and CIA launched their vigorous campaign to promote nuclear energy in Japan, they turned to ShorikiMatsutaro, the father of Japanese baseball, who ran the *Yomiuri Shimbun* newspaper and the Nippon Television Network. After two years' imprisonment as a Class-A war criminal, Shoriki had been released without trial; his virulent anti-communism helped redeem him in American eyes (see Tetsuo Arima, "Shoriki's Campaign to Promote Nuclear Power in Japan and CIA Psychological Warfare," unpublished paper presented at Tokyo University of Economics, November 25, 2006). Shoriki's newspaper agreed to co-sponsor the much-hyped US exhibit welcoming the atom back to Japan on November 1, 1955 with a Shinto purification ceremony in Tokyo. The US ambassador read a message from Eisenhower declaring the exhibit "a symbol of our countries' mutual determination that the great power of the atom shall henceforward be dedicated to the arts of peace."

After six weeks in Tokyo, the exhibit traveled to Hiroshima and six other cities. It highlighted the peaceful applications of nuclear energy for generating electricity, treating cancer, preserving food, controlling insects, and advancing scientific research. Military applications were scrupulously avoided. The nuclear future looked safe, abundant, exciting, and peaceful. The turnout exceeded expectations. In Kyoto, the USIS reported, 155,000 people braved snow and rain to attend (p. 176).

The steady spate of films, lectures, and articles proved enormously successful. Officials reported, "The change in opinion on atomic energy from 1954 to 1955 was spectacular … atom hysteria was almost eliminated and by the beginning of 1956, Japanese opinion was brought to popular acceptance of the peaceful uses of atomic energy" (p. 179).

Such exultation proved premature. Antinuclear organizing by left-wing political parties and trade unions resonated with the public. An April 1956 USIS survey found that 60 percent of Japanese believed nuclear energy would prove "more of a curse than a boon to mankind" and only 25 percent thought the United States was "making sincere efforts" at nuclear disarmament. The *Mainichi* newspaper blasted the campaign: "First, baptism with radioactive rain, then a surge of shrewd commercialism in the guise of 'atoms for peace' from abroad." The newspaper called on the Japanese people to "calmly scrutinize what is behind the atomic energy race now being staged by the 'white hands' in Japan."

But intensified USIS activities over the coming years began to bear fruit. A classified report on the US propaganda campaign showed that in 1956, 70 percent of Japanese equated "atom" with "harmful," but by 1958, the number had dropped to 30 percent. Wanting their country to be a modern scientific-industrial power and knowing Japan lacked energy resources, the public allowed itself to be convinced that nuclear power was safe and clean. It had forgotten the lessons of Hiroshima and Nagasaki.

In 1954, the Japanese government began funding a nuclear research program. In December 1955, it passed the Atomic Energy Basic Law, establishing the Japan Atomic Energy Commission (JAEC). Shoriki became minister of state for atomic energy and first chair of the JAEC. Japan purchased its first commercial reactor from Britain but quickly switched to US-designed light water reactors. By mid-1957, the government had contracted to buy 20 additional reactors.

In the United States, the AEC aggressively marketed nuclear power as a magic elixir that would power vehicles, feed the hungry, light the cities, heal the sick, and excavate the planet. Eisenhower unveiled plans for an atomic-powered merchant ship and an atomic airplane. In July 1955, the United States generated its first commercial nuclear power. In October 1956, Eisenhower informed the United Nations that the United States had agreements with 37 nations to build atomic reactors and was negotiating with 14 more.

By 1958, the United States was becoming almost giddy with the prospect of planetary excavation under the AEC's Project Plowshare, which proposed to use peaceful nuclear blasts to build harbors, free inaccessible oil deposits, create huge underground reservoirs, and construct a bigger and better Panama Canal. Some wanted to alter weather patterns by exploding a 20-megaton bomb alongside the eye of a hurricane. One Weather Bureau scientist proposed a plan to accelerate melting of the polar icecaps by detonating 10-megaton bombs. Only Eisenhower's reluctance to unilaterally break a Soviet-initiated nuclear test moratorium halted this sheer folly.

Still, Project Plowshare achieved its goals. Lewis Strauss, chairman of the AEC, admitted that Plowshare was intended to "highlight the peaceful applications of nuclear explosive devices and thereby create a climate of world opinion that is more favorable to weapons development and tests."

Atoms for Peace masks nuclear weapons buildup. Under the cover of the peaceful atom, Eisenhower pursued the most rapid and reckless nuclear escalation in history. The US arsenal went from a little more than 1,000 nuclear weapons when he took office to approximately 22,000 when he left. But even that figure is misleading. Procurements authorized by Eisenhower continued into the 1960s, making him responsible for the levels reached during the Kennedy administration -- more than 30,000 nuclear weapons. In terms of pure megatonnage, the United States amassed the equivalent of 1,360,000 Hiroshima bombs in 1961.

Few know that Eisenhower had delegated to theater commanders and other specified commanders the authority to launch a nuclear attack if they believed it mandated by circumstances and were out of communication with the president or if the president had been incapacitated. With Eisenhower's approval, some of these theater commanders had in turn delegated similar authority to lower commanders (I am grateful to Dan Ellsberg for this information). And given the fact that there were then no locks on nuclear weapons, many more people had the actual power, if not the authority, to launch a nuclear attack, including pilots, squadron leaders, base commanders, and carrier commanders.

In 1960, Eisenhower approved the first Single Integrated Operational Plan, which stipulated deploying US strategic nuclear forces in a simultaneous strike against the Sino-Soviet bloc within the first 24 hours of a war. The Joint Chiefs were subsequently asked to estimate the death toll from such an attack. The numbers were shocking: 325 million dead in the Soviet Union and China, another 100 million in Eastern Europe, 100 million from fallout in Western Europe, and up to another 100 million from fallout in countries bordering the Soviet Union -- more than 600 million in total.

The price of denial. While Americans were preparing for nuclear annihilation, the Japanese were living in their own form of denial. From its shaky beginnings in the 1950s, the Japanese nuclear power industry flourished in the 1960s and 1970s and continued to grow thereafter. Prior to the tsunami-precipitated Fukushima accident last month, Japan had 54 functioning nuclear power reactors that generated 30 percent of its electricity; some projected it would not be long before Japan reached 50 percent. But the terrible nuclear catastrophe in Fukushima has forced the Japanese to deal for a third time with the nightmarish side of the nuclear age and the fact that their nuclear program was born not only in the fantasy of clean, safe power, but also in the willful forgetting of Hiroshima and Nagasaki and the buildup of the US nuclear arsenal.

A reckoning with Japan's nuclear legacy is now taking place. Hopefully, the Japanese will move forward from this tragedy to set a path toward both green energy and repudiation of deterrence under the US nuclear umbrella, much as they blazed a path with their Peace Constitution and antinuclearism following the horrors of World War II.

Peter Kuznick wrote this article for The Bulletin of Atomic Scientists, April 13, 2011.

Peter Kuznick is associate professor of history at American University and director of the Nuclear Studies Institute. Kuznick founded the Committee for a National Discussion of Nuclear History and Current Policy and co-founded the Nuclear Education Project. He is the author of Beyond the Laboratory: Scientists as Political Activists in 1930s America*, co-editor of* Rethinking Cold War Culture*, and co-author of* Rethinking the Atomic Bombings of Hiroshima and Nagasaki: Japanese and American Perspectives *(in Japanese, 2010). Currently, he is co-authoring a 12-part documentary film series and book with Oliver Stone titled* The Forgotten History of the United States*, which is scheduled to air on Showtime in November.*

Yuki Tanaka is Research Professor, Hiroshima Peace Institute, and a coordinator of The Asia-Pacific Journal. He is the author most recently of Yuki Tanaka and Marilyn Young, eds., Bombing Civilians: A Twentieth Century History *as well as of* Japan's Comfort Women *and* Hidden Horrors: Japanese War Crimes in World War II.

Recommended citation: Yuki Tanaka and Peter Kuznick, Japan, the Atomic Bomb, and the "Peaceful Uses of Nuclear Power," The Asia-Pacific Journal Vol 9, Issue 18 No 1, May 2, 2011.

Created by Datamomentum