Design: Bratt Snyder

Editorial coordination at Columbia University:
Salomon Frausto
Copyediting at Columbia University: Stephanie Salomon
Editorial production at Columbia University: Chris Barker

Editorial direction at Prestel: Angeli Sachs
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4 Bloomsbury Place · London WC1A 2QA
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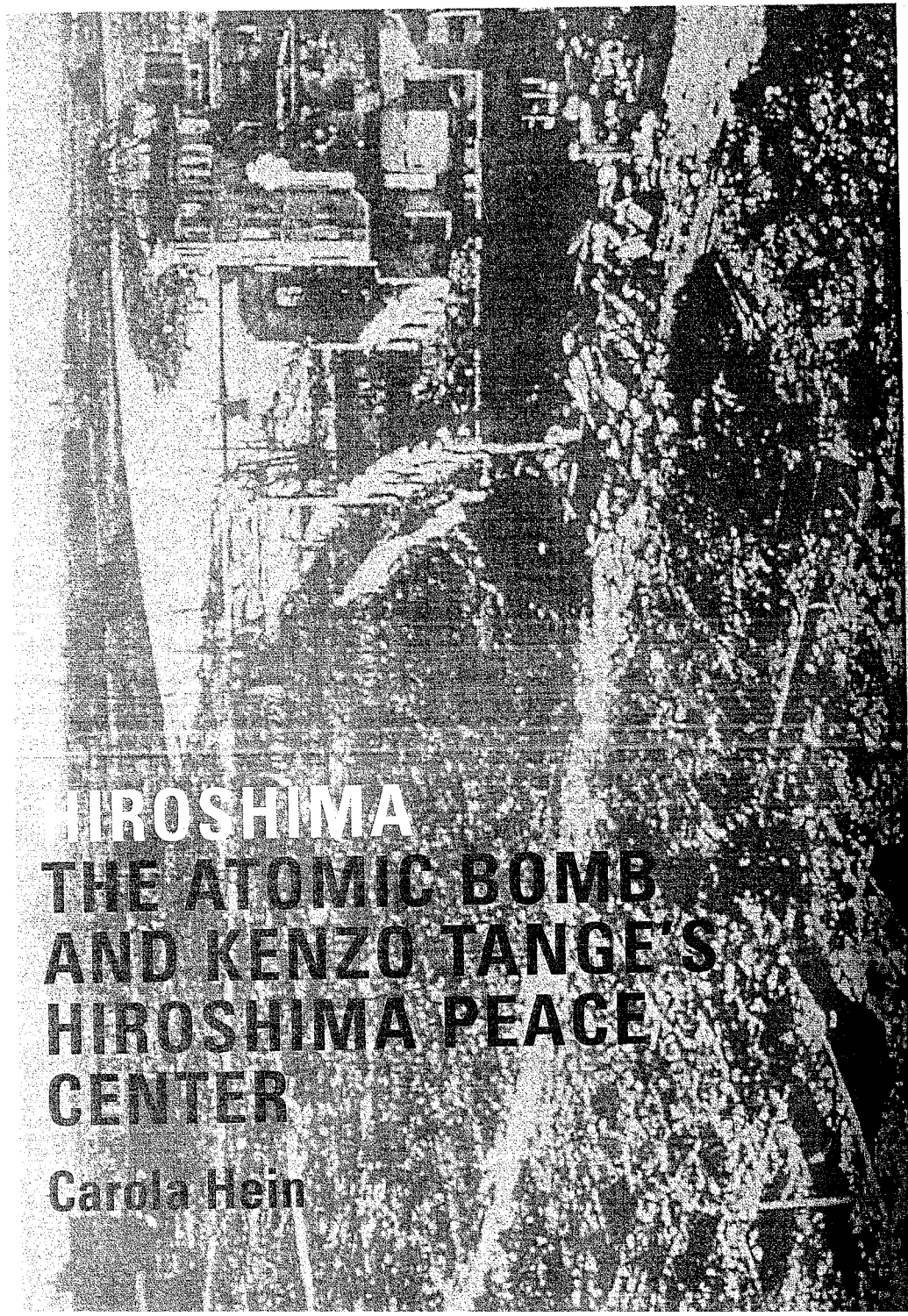
OUT OF GROUND ZERO
CASE STUDIES IN URBAN REINVENTION

Edited by Joan Ockman



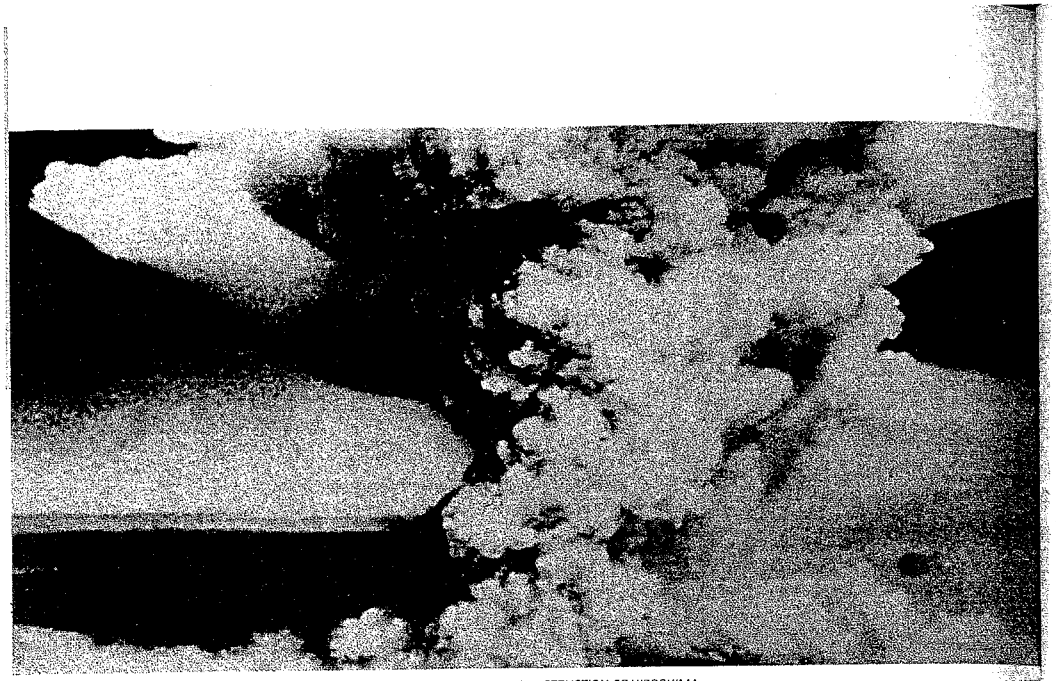
HIROSHIMA
THE ATOMIC BOMB AND KENZO TANGE'S HIROSHIMA PEACE CENTER

Carola Hein

When Japan surrendered on August 15, 1945, effectively ending World War II, 215 Japanese cities had been bombed.[1] Among them were the capital, Tokyo, the metropolitan centers of Yokohama, Nagoya, Osaka, and Kobe, and the cities of Hiroshima and Nagasaki. The last two were the first urban centers to suffer mass destruction as a result of single atomic bombs. Apart from Okinawa, where major ground battles had been fought, the Japanese cities had mainly been destroyed from the air.[2] Incendiary bombs in particular caused extensive damage, transforming the densely populated, primarily wooden Japanese cities into wastelands of ashes, with only smokestacks, garden walls, and some reinforced concrete buildings remaining.

The desolation of the urban landscape immediately after the war was an accurate image of the general state of Japanese society. The country was defeated and occupied and its political future unclear. With its economy shattered, people scrambled for shelter, food, and livelihood. Under such conditions, grand reconstruction plans were not the order of the day.

Instead, most of the Japanese cities that rebuilt after World War II focused their efforts on infrastructural improvements like street widening and straightening, leaving the reconstruction of houses to private landowners. But monumental or comprehensive projects were also not part of Japan's way of thinking. In fact, in spite of the regular occurrence of fires, typhoons, floods, and earthquakes, Japan does not have any real tradition of urban reinvention, relying instead on pragmatic planning tools and especially "land readjustment" (*kukakuseiri*), a technique for creating infrastructures and replotting land that includes regulating the number of individual building sites.



MUSHROOM CLOUD OVER HIROSHIMA. FROM ISHIMARU ET AL., *RECONSTRUCTION OF HIROSHIMA*

This type of reconstruction does not result in particularly compelling architectural and urban visions. As I have also argued elsewhere,[3] the concept of idealistic visions as guidelines for urban transformation is foreign to Japanese thought. This is reflected in the fact that the English word "vision" in its Western sense of future planning does not have an exact equivalent in Japanese. Instead the *katakana* word "bijon," adopted into the Japanese language, tends to be used. During the postwar reconstruction period, Japanese architects thus neither produced competition entries that became icons of architectural history—such as Peter and Alison Smithson's widely published (though never realized) entry in the 1957–58 international urban planning competition for a reunified German capital, which suggested an organic platform system extending over the traditional layout of the city center[4]—nor did they develop coherent large-scale schemes for reconstruction on the model of postwar Rotterdam.[5]

FRONTISPIECE DESTRUCTION CAUSED BY ATOMIC BOMB, INCLUDING (ON RIGHT) THE RUINS THAT WOULD BECOME THE A-BOMB DOME. FROM NORIOKI ISHIMARU ET AL., *RECONSTRUCTION OF HIROSHIMA: PICTORIAL HISTORY OF FORTY YEARS SINCE ATOMIC BOMBING* (1985)

In fact, the only project to come out of this period possessing both symbolic value and iconic character is Kenzo Tange's design for the Peace Center in Hiroshima.[6] Situated in the heart of the city, below the hypocenter of the explosion, the Peace Center was conceived as a public space of assembly and memory, with several urban structures and a cenotaph intended to commemorate the destruction. In order to understand the concept of Tange's Peace Center and its meaning for the city, for Japan, and for the world, it is necessary first to examine the particulars of the city's destruction and then to turn to the specific project of reinventing Hiroshima as "Peace City."

The United States dropped the atomic bomb on Hiroshima on August 6, 1945, at 8:15 in the morning.[7] The beautiful cloudless sky allowed the pilots to hit the target exactly as planned. At the instant the bomb exploded, the pilots observed a mushroom cloud developing in the sky; this came to represent the image most strongly associated with the atomic bomb. For many Americans this image was also the end of the story. The planes veered off, and American observers did not get a closer look at the destruction on the ground until some weeks later. For the inhabitants of Hiroshima, however, the explosion was only the beginning of horrific scenes that would become central to the Japanese experience and representation of the bomb.[8] What people on the ground saw and heard as the bomb exploded was a searing flash of light and a deafening roar. People, animals, and plants closest to the hypocenter of the bomb vanished immediately; only white shadows on the ground testified to their prior existence. The heat set the mostly wooden buildings afire, engulfing people who were trapped.

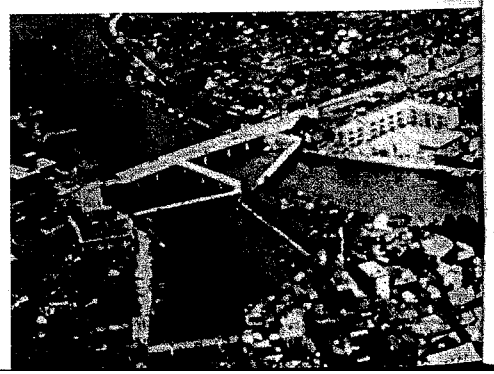
The number of deaths caused by the bomb cannot be determined exactly. It is estimated that 60,000 to 80,000 people were killed instantly, while many more died painfully by the end of 1945 from extensive burns, radiation, or other wounds, totaling in all up to 140,000 casualties,[9] and numerous survivors would suffer the after-effects for years to come. In fact, the large death toll on the day of the explosion was not unique for an air raid; incendiary bombs dropped on Tokyo on the night of March 10, 1945, killed about 85,000 people. They did not, however, spread radioactive fallout and cause long-term fatalities.[10] By August 6, 1993, the registers underneath the cenotaph at the Peace Center listed the names of 181,836 people who had died of exposure to the bomb. More names have been added since.[11] Many foreigners who were present at the time of the explosion also died, including forced workers from Korea and scholarship students from China and southern Asia; American prisoners of war and Japanese-Americans were also among the victims.[12] Others continue to die from various radiation-related illnesses, and their descendants are at risk for genetic defects—these people are referred to as "temporary survivors" in the film *Hiroshima, mon Amour*.[13]

AERIAL PHOTOGRAPH WITH SHADED ZONE INDICATING AREA OF DESTRUCTION BY ATOMIC BOMB. FROM ISHIMARU ET AL., *RECONSTRUCTION OF HIROSHIMA*

Until the atomic bomb was dropped, the enemy planes that were announced in nightly air-raid warnings had spared Hiroshima, bringing destruction only to neighboring cities. The all-clear had sounded on the morning of August 6. The American B-29 *Enola Gay*, carrying the first atomic bomb (dubbed "Little Boy"), entered Japanese airspace unchallenged, accompanied by two other planes. Not until the moment the bomb was dropped was an air-raid warning sounded,[14] leaving the population no time to reach shelters, which might have afforded them some protection.

At the time, people were on their way to work or to school or were participating in building demolition in the city center, which had been ordered for the creation of "firebreaks"—open spaces ordered by the Japanese government after the Doolittle Raid of 1942, when it became evident that Japanese cities could be attacked from the air, and also after the firestorms in Hamburg. Civilians were mobilized to demolish buildings and create safe areas that would prevent fires from spreading, secure evacuation routes, and create vacant spaces near bridges and important buildings. The city government of Hiroshima put this order into effect in 1944, largely following the master plan for street-widening and construction that it had prepared in 1928, which specified where demolition of buildings was to be carried out. When the atomic bomb fell, about 10,000 houses had already been destroyed for purposes of creating firebreaks and further demolition activities were underway. The firebreaks, however, were insufficient to provide protection against the atomic bomb's heat and radiation.

Having been developed for two years under the code name "Manhattan Project" and tested three weeks before its explosion over Hiroshima, the new bomb was slated for several Japanese cities as possible targets. Kyoto, the historical capital of Japan, was initially selected to be the first. Henry Stimson, the U.S. secretary of war, interceded on behalf of that city, however, arguing that with its centuries-old temples and palaces, it was a historic site that should not be destroyed.[15] Four cities—Hiroshima, Kokura, Niigata, and Nagasaki—were finally recommended for the first attack.[16] Hiroshima, the first city on the list, thus became the target of the first atomic bomb. Three days later, on August 9, the second atomic bomb ("Fat Man") was destined for Kokura. On that day, however, the city was hidden by clouds and the target could not be identified. The planes flew on to Nagasaki, which, as the cloud cover ripped open for an instant, became the target of the second atomic bomb.[17]



AERIAL VIEW OF THE T-SHAPED AIOI BRIDGE, 1936.
FROM CHUGOKU SHIMBUN, ED., *THE MEANING OF SURVIVAL: HIROSHIMA'S 36-YEAR COMMITMENT TO PEACE* (1983)

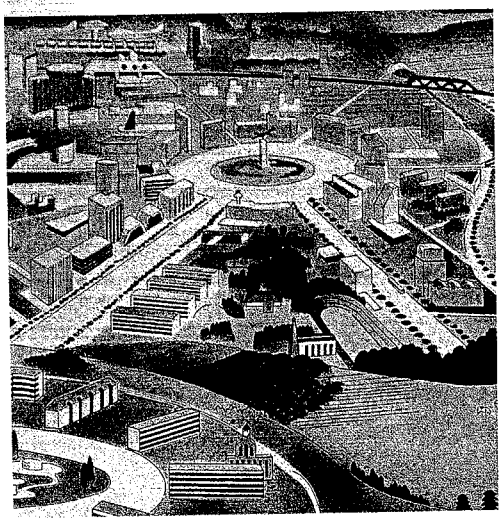
Among the reasons given officially for the choice of Hiroshima was the city's military importance. Surrounded by mountains to its north, it had developed on islands formed out of the delta of the Ota River, whose seven (later six) branches flowed through the heart of the city into the Seto Inland Sea. The construction of a castle on the largest island in the delta in 1589 initiated the development of Hiroshima. Under three successive leaders, settlements on the numerous neighboring islands grew into a city, and landfill in the shallow Hiroshima Bay provided even more space for the rapidly increasing population. At the center of the Chugoku region at the western end of the island of Honshu and equipped with a good harbor, Hiroshima soon developed into a military and economic center. In the Sino-Japanese and Russo-Japanese wars it was an important base for army operations. During World War II, the city continued to be a major military headquarters, with a population of 300,000 and about 40,000 troops, and played a major role in operations.[18]

But while Hiroshima was clearly a military city, the target of the bomb was not the military base on the outskirts of the city nor was it an industrial site.[19] Instead, it was the very heart of the city, with the bombardier's marker set on the T-shaped Aioi Bridge just north of the densely built Nakajima neighborhood. The eventual site of the Peace Memorial Park, the Nakajima area was the commercial center of the city until the 1920s. By the 1930s, the area had become less attractive as citizens preferred the Hachobori district closer to the railway station in the eastern part of the city. About 2,600 people, however, were still living in the area when the bomb fell.

Beyond the loss of half of Hiroshima's population and the extent of the destruction, the bomb's unprecedented nature made the reconstruction of the city a unique challenge. Hiroshima quickly came to world attention. Within Japan too, the city took on symbolic meaning as a rallying point for Japanese aspirations to nation-building. In his book *The Victim as Hero*, James Orr discusses the myth of war victimhood that has coalesced in Japan around the notion that it is the only country in the world to have been the object of atomic bombing.[20]

Early reports about Hiroshima gave voice to fears that the city would be barren land for many generations. Many people asked whether it would ever revive. During a round-table discussion organized by the city on February 22, 1946, the feeling that the site of so many deaths was unsuited for reconstruction was expressed by Tomiko Kora, the deputy mayor of the neighboring city of Kure, who suggested that it would be necessary to "search for a new place in the suburbs and construct the new Hiroshima there."[21]

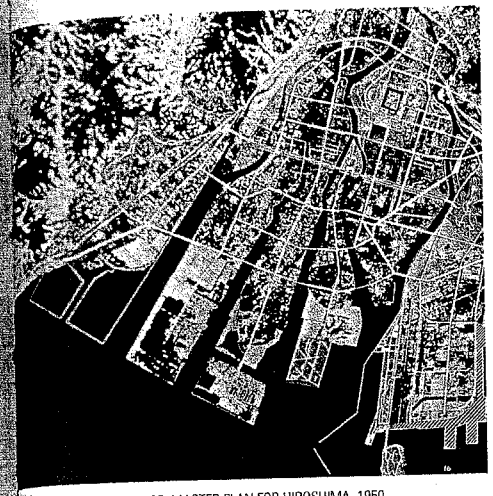
The desire to memorialize the event was shared by both the Japanese and the international community, although their points of view were very different. Many leading Japanese citizens were convinced during the period right after the war that a special type of memorial was necessary for Hiroshima. Several publications advocated preserving the ruins as monuments. Ichio Kuwabara, the former president of Asahi Industries, proposed retaining the destroyed area as a monument to and a symbol of world peace, to be surrounded by cultural and religious institutions. The poet Sankichi Toge, who suffered exposure to the radiation and died in 1953 at age thirty-six of a related ailment, proposed a plan for a green, decentralized city. Ultimately international interest in memorializing the destruction was essential to realizing the Peace Center Project and to freeing special funds and obtaining the necessary permits from the postwar occupation army.



SANKICHI TOGE, PROPOSAL FOR THE RECONSTRUCTION OF HIROSHIMA. FROM ISHIMARU ET AL., *RECONSTRUCTION OF HIROSHIMA*

The manpower needed to organize the reconstruction of Hiroshima was lacking, however, especially as the mayor and half the members of his administration were among those who had died. Thus the prefectural governor took charge, and by November 1945, the city assembly had organized a reconstruction committee composed of neighborhood representatives. In January 1946, the municipal authorities, city assembly, and residents of Hiroshima worked together on a basic plan for restoration. By 1946, the Hiroshima Reconstruction Bureau was established.[22]

The focus of the reconstruction discussions quickly changed from visionary ideas to pragmatic issues related to rebuilding plans largely conceived during the 1920s and 1930s. Again, this approach was typical for Japan, and occurred in many cases of postwar rebuilding. Thus in Hiroshima the planning of symbolic gestures was combined with the reconstruction of roads, infrastructure, and services. Practical considerations included the future size of the city and its population and economic direction. Many planners thought that Hiroshima could not survive economically without a military industry. In contrast to the prewar population of 420,000 (500,000 including military personnel), some therefore predicted that only about 100,000 people would live in the city. The highest estimates were for 700,000 inhabitants. Yet to the surprise of many, people who had been evacuated before the bombing returned to Hiroshima quickly, while others came back after the war. With many jobs left vacant, a large number of returnees from the former Japanese colonies in East Asia also chose to settle in Hiroshima. Today the city has over one million inhabitants.



KENZO TANGE, MASTER PLAN FOR HIROSHIMA, 1950

During the same period the central government issued a number of directives for reconstruction. These were intended to serve as guidelines for local administrations. In addition, as the local governments lacked planners, in 1946 the reconstruction office dispatched urban planning experts and architects to several cities, including Hiroshima. These advisers promoted land-use plans rather than the street-use plans that had been the focus of Hiroshima's earlier administration. As part of this program, the national government sent a group of young architect-planners to Hiroshima to give an opinion on the reconstruction. Among them was Kenzo Tange.

Tange predicted a population of 300,000 to 350,000 inhabitants for Hiroshima. In 1947 he prepared a land-use plan. Its main elements were subsequently integrated into the official plan of 1949. The plan included some of the more radical elements that had been proposed for the reconstruction soon after the war, particularly the idea for a Peace Boulevard and Peace Memorial Park.

As mentioned above, firebreaks had already been built throughout the city. One of them, running in an east-west direction, had initially been projected as a 45-foot-wide street, but even before the bomb was dropped, the width of the zone of demolished houses was close to 325 feet. It was this winding space, a firebreak and green strip, that was straightened out and converted into the present-day Peace Boulevard and the symbolic entrance to the Peace Memorial Park. In other words, the physical existence of the firebreak, a military project, ironically served as the background for the realization of Peace Boulevard. But the realization of a street of this width as a mixture of street space and greenery, one of only three such thoroughfares completed in Japan during the postwar period (the other two are in Nagoya), was really possible only because of the city's symbolic value. Hiroshima's reconstruction thus combined the pragmatic need for urban improvement with the symbolic wish to memorialize the destruction.

The search for a new image of the city and the desire to turn the military city into a symbol of peace led in 1949 to the proclamation of the Hiroshima Peace Memorial City Construction Law (Peace City Law). Enacted by the National Diet on August 6, 1949, and requiring the approval of the U.S. occupation forces, it increased funds for rebuilding and enabled the construction of a Peace Center. As summarized by the city's mayor, Shinzo Hamai,

> The reconstructed city aspires to become a center of creative peace movements by providing well-equipped facilities for international peace functions and, at the same time, to become an embodiment of peace such as would befit the world wherein complete victory of human wisdom will have ousted war and destruction from humanity to give place to well-being, good will and cultural refinement.[23]

The mayor also noted that a Peace Festival would be held in Hiroshima every year.

Hiroshima was thus exceptional not only as the first city to be destroyed by an atomic bomb, but also in terms of its attempted reinvention. It was the only city in Japan to be reconstructed after World War II in which the local government, with international authorization and support, held a competition for and realized a comprehensive urban project, involving the clearance and rebuilding of a large urban area on expensive real estate in the center of the city for the purpose of a memorial program. Furthermore, the project's urban and architectural design by Tange, the architect selected, was exceptional.

Kenzo Tange is an unusual figure in twentieth-century Japanese architecture. Born in 1913, he studied architecture at Tokyo University, where he became a professor in 1946. Decisively influenced by Le Corbusier, whose project for the Palace of the Soviets he had seen in a foreign art journal while he was still attending Hiroshima High School,[24] as well as by the teachings of his elder colleague Kunio Maekawa, who had worked for two years in Le Corbusier's office, Tange would become identified with public architecture in Japan beginning in the early postwar period.[25] His work was an attempt to synthesize the Japanese spirit with modern architectural influences emanating from the international community. Hiroshima Peace Center was his first major work and brought him international fame when he was only in his thirties.

Tange's design for the Peace Center integrates a park, along with its buildings and memorials, into the city. Besides the Peace Memorial Complex and the cenotaph, the Peace Center consists of a square used for annual peace celebrations and the "A-Bomb Dome," which incorporates the remains of a bombed structure. The whole project is located north of Peace Boulevard. The Memorial Complex comprises three buildings. In the middle is a museum, in which an exhibit about the atomic bomb and its destruction of Hiroshima is on permanent display. Flanking the museum are Peace Hall to the west and the City Auditorium to the east. The simple, reduced forms of the building complex, particularly the museum with its raised floor, flat roof, and concrete construction, reflect the ideas of European and American modernists, but they also are closely tied to traditional Japanese architecture.

KENZO TANGE, GREATER EAST ASIA MONUMENT, TOKYO. COMPETITION DRAWING, 1942

The architect's knowledge of traditional Japanese spaces and Western urban concepts, as well as his ability to combine the disciplines of urban planning, landscaping, and architecture, allowed him to respond convincingly to the program's requirements. The design was celebrated by Western critics as a masterpiece of modernist architecture and an exemplary creation of an urban core. In 1951, Tange would be invited to the eighth meeting of CIAM (the International Congresses of Modern Architecture, and the leading organization of modern architects in the West), held in Hoddesdon outside London, to present the project. The theme of the meeting was "The Heart of the City,"[26] and the exposure of the Hiroshima scheme would propel Tange onto the international stage.

Japan's decision to hold a competition for the design of the Peace Center was an important result of the Peace City Law and another unusual aspect of the project for Hiroshima. Unlike the European countries, especially Germany after World War II, which relied heavily on architectural and planning competitions to effect its rebuilding, Japan had no tradition of competitions (and still does not to this day).[27] Except for some small city-planning competitions, mostly in Tokyo, that did not lead to realization, the Hiroshima competition represents the only such contest of the reconstruction period.

Even before the Peace City Law, though, in 1948, the city of Hiroshima took the unusual step of holding an architectural competition related to the city's projected function as a peace city. The city had been home to thirteen churches before the bombing. As a result of the competition, one of them, in the vicinity of the Hiroshima train station, was rebuilt as the World Peace Memorial Church, with financial support from many countries. A first prize was not awarded in the competition, and the design went to one of the jurors, Togo Murano, whose scheme combined traditional and modern elements.[28] Significantly, however, Tange was one of the participants in this competition.

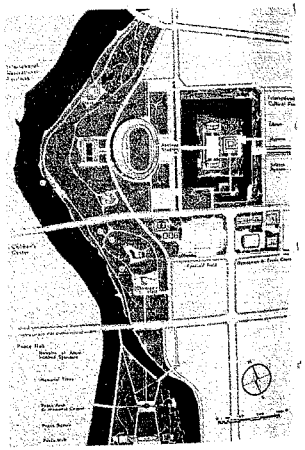
Despite the relative paucity of competitions in Japan, Tange also participated in several other competitions prior to Hiroshima, and two of his wartime competition entries, in particular, can be seen as forerunners of the design for the Hiroshima Peace Center. In 1942, Tange entered a competition for the design of a monument to "Greater East Asia"—of which Japan was to be the leader and which was an attempt to create a sense of solidarity among the nations of Southeast Asia.[29] Tange's design for this commemorative construction, which he located in the greater Tokyo area, is characteristic of his approach to architecture and urban form. Instead of proposing a high-rise building, which he believed typified Western more than Japanese monumental structures, he drew on the Japanese traditions of natural objects and horizontal development. As a backdrop for the Greater East Asia project, he chose a natural landmark, Mount Fuji.

Tange's ability to shift back forth and back between different styles and between Eastern and Western influences is also demonstrated in a second major wartime competition entry that may be related to the Hiroshima project. This was a traditionalist design for the Japanese Cultural Center in Bangkok (1942). In Germany during and after World War II, where styles tended to be associated with political opinions, such versatility would most likely have been impossible. In Japan, however, it did not provoke debate. One explanation for this cultural difference is that since European architectural styles were imported to Japan only in the mid-nineteenth century, the modern movement in Japan did not develop as a reaction against earlier styles.

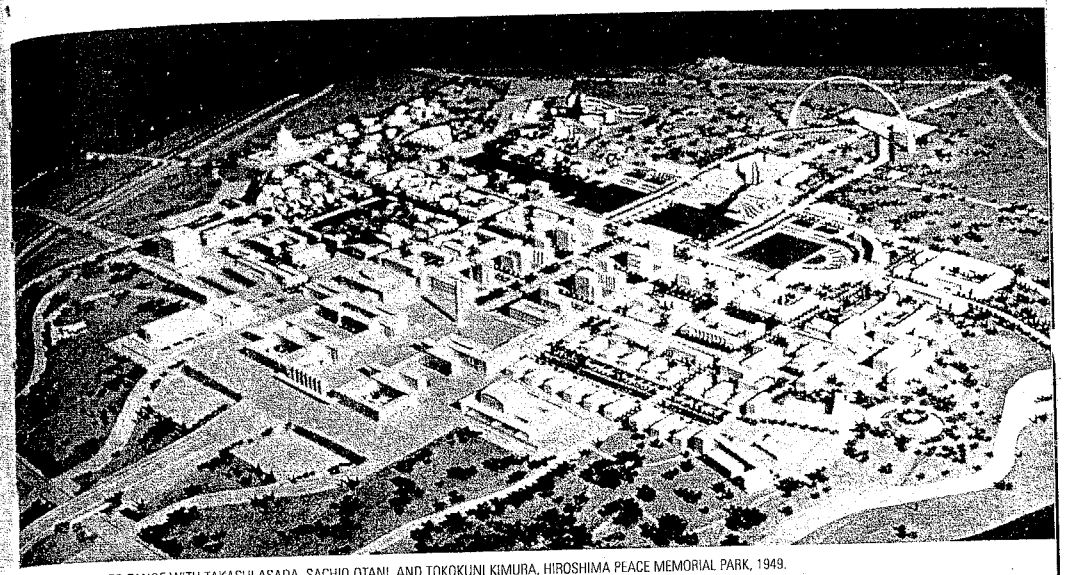
Tange submitted his design for the Peace Memorial Complex, one of 145 entries, to the Hiroshima City Reconstruction Bureau in August 1948. According to the competition brief, the project had to be located southwest of the Hiroshima castle on the site of the former Nakajima neighborhood, the entire area of which was to become "a symbol of lasting peace and a place suitable for recreation and relaxation for all people." The brief stipulated that the complex was to be "simple, bringing out the beauty of the environment, and unique, good, contemporary taste."[30] Specified in the program were a Peace Memorial Tower, a Science Memorial Hall, and a cenotaph. The majority of the participants, including the second-place winner, Toshiro Yamashita, and the third-place winner, Ryozo Arai, limited their proposals to Nakajima, framed by the projected 325-foot-wide (or in a symbolically intended metric measurement, 100-meter-wide) Peace Boulevard and by two rivers. Their buildings, although related to one another, did not take into consideration the larger urban context.

In contrast, Tange's prize-winning project, on which he worked in association with Takashi Asada, Sachio Otani, and Tokokuni Kimura,[31] established connections with the immediate surroundings and even projected a network of related facilities for other areas of the city. Reaching beyond the Nakajima neighborhood, it integrated urban design, architecture, and landscaping. Having previously worked on the land-use plan for Hiroshima, Tange was both familiar with the city and its reconstruction needs and cognizant of the larger aim of transforming Hiroshima into a peace city. The visionary scheme exemplifies Tange's approach to monumentality and memorializing, and it serves as a springboard for examining the impact of modern design as well as traditional Japanese form on his work.[32]

To Tange, the Peace City brief was a mandate to reinvent Hiroshima totally, with facilities that "would be of a real service to mankind in its pursuit of peace and happiness."[33] Going far beyond the Nakajima district, the scheme included facilities spread throughout the city, from tourist accommodations like international hotels and dormitories, an aquarium, a seaside park at Ujina, and a hippodrome, to a project for improving the Ota River. At the core of the scheme, he envisioned a park extending north of Peace Boulevard beyond the A-Bomb Dome to encompass the castle and the area west of it, including the riverfront. This vast area was to be divided into the Peace Hall area around the memorial facilities, and what Tange called the Peace Park, to include recreational facilities (such as a swimming pool and a wrestling area) as well as cultural facilities (among them, a library, an art museum, an open-air theater, and a children's center). Also proposed were infrastructure and institutions intended to improve the quality of life of the local population—fireproof housing, public health institutions, schools, and waterworks, and parks and greenery along the rivers.[34] Tange did not want to privilege either housing or memorializing, and argued that housing for



KENZO TANGE, NORTHERN SECTOR OF MASTER PLAN FOR HIROSHIMA PEACE MEMORIAL PARK INCLUDING RIVERFRONT AND CULTURAL FACILITIES, 1950



KENZO TANGE WITH TAKASHI ASADA, SACHIO OTANI, AND TOKOKUNI KIMURA, HIROSHIMA PEACE MEMORIAL PARK, 1949. MODEL OF PRIZE-WINNING SCHEME

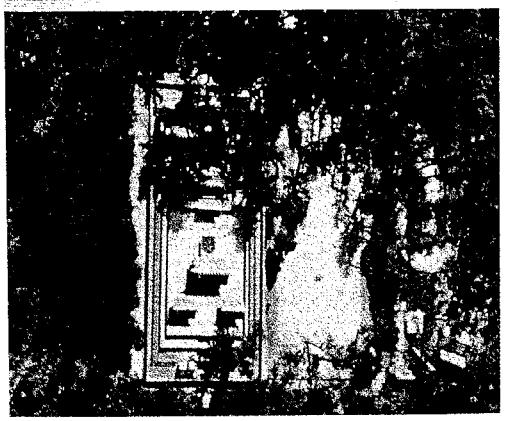
citizens and the creation of an international memorial complex had to go hand in hand. A multifaceted urban improvement scheme was thus to be an extension to the memorial park in the former Nakajima neighborhood. This grand project was not realized and instead the city government put up public housing on the Peace Park site. However, the heart of Tange's proposal, for the Peace Center located in the former Nakajima neighborhood, was built.

Drawing on the architectural language of Le Corbusier, the realized project presents three buildings on *pilotis* connected by aerial passageways parallel to the Peace Boulevard.[35] Beyond the Peace Memorial Hall a square provides space for the yearly peace ceremonies. In the center of the area a huge arc frames the view toward the symbolic A-Bomb Dome, located beyond the Motoyasu River. The Dome is the surviving remnant of the former Hiroshima Industry Promotion Hall, a brick-and-steel building located close to the center of the explosion.

Perhaps the most surprising part of Tange's Peace Memorial Park design was his proposal for an arch. This element was subsequently modified in form. As one of the judges, Hideto Kishida, a strong defender of Tange's work, pointed out, the arch appeared to be a direct reference to Eero Saarinen's design for the Saint Louis Gateway Arch (1947–66).[36] It also resembled the projected arch for the failed EUR (Esposizione Universale di Roma) in Rome. Kishida questioned in 1949 why a project that contained so many original ideas had to fall into this kind of quotation. Tange responded to the criticism,[37] stating that he saw three options regarding the memorial tower specified in the competition brief: proposing a tower, proposing an arch, or ignoring the request. Considering the first option, Tange recalled that a British architect had suggested that a pagoda be constructed to commemorate Hiroshima's atomic destruction.[38] Tange, however, felt that a different form was necessary in this context, especially as a pagoda in reinforced concrete had already been built by the architect Chuta Ito to memorialize the Great Kanto Earthquake of 1923.[39]

Thus having decided against a vertical structure, which he considered to exemplify Western monumentality, Tange saw the arch as emerging naturally from the project. But after lengthy discussions, and allegedly the rejection of a proposal by the Japanese-American sculptor Isamu Noguchi, Tange ultimately decided on a saddle-vault cenotaph as the centerpiece of his project. His rejection of the pagoda form was not a rejection of religious models per se, though; indeed, the design of the Peace Center appears to be strongly inspired by Japanese Shinto architecture.

Central to Japanese Shinto belief are the shrines at Ise. A major pilgrimage site in Japan, the Ise shrines are famous for being ritually reconstructed every twenty years. Tange made his earliest official visits to Ise in 1953, and he would publish a book about the shrines in 1965, calling them the prototype of Japanese architecture. While Hiroshima's Peace Park was conceived prior to these visits, it appears that their architecture and spirit influenced his concept of architectural and urban space early on.



ISE SHRINE, NAIKU, JAPAN. AERIAL VIEW LOOKING DOWN ON INNER PRECINCT AND SITE OF FUTURE REBUILDING. FROM KENZO TANGE AND NOBORU KAWAZOE, *ISE: PROTOTYPE OF JAPANESE ARCHITECTURE* (1965)

This influence at Hiroshima is evident first in Tange's composition of the site. As Kishida points out in his comments on the competition, Peace Park is organized along an axis perpendicular to Peace Boulevard.[40] Rather than employ a monumental Western axis *à la* Versailles or a traditional Chinese axis, though, Tange's design appears to have been inspired directly by the design of the Shinto shrines. At Ise, bridges—which are among the structures that are ritually rebuilt—lead to the shrine precinct. At Hiroshima, bridges are likewise a central element. Tange, for whom Peace Boulevard signified the "Road to Peace," saw them as symbolizing the link between one culture and another. The architect paid particular attention to the details of their design, including commissioning handrails by Noguchi.

In Shinto shrines, visitors enter through the Torii gate, symbolizing the transition from the physical to the spiritual world, before proceeding to a second gate, which is for prayers. The view beyond this gate is obscured and the visitor is not allowed to proceed to the inner precinct. Tange uses this same organizational principle in his design for Peace Park. The Peace Memorial Museum serves as the gateway to the inner precinct, while the cenotaph functions as the place for prayers. Beyond, shaded by the trees of Peace Park and separated by the river, is the sacred space, the A-Bomb Dome.

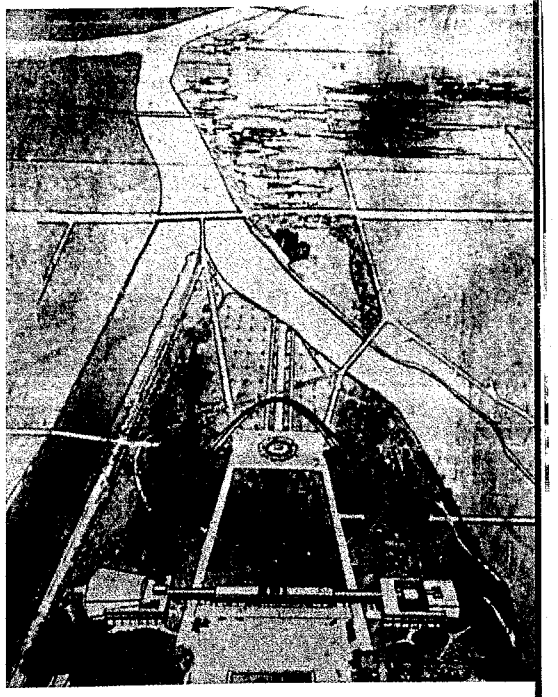
The similarity to the Ise shrines goes further. The *pilotis*—the piers that carry the central building and are often interpreted as an allusion to those of Le Corbusier—can be seen as deriving from traditional Japanese granaries with raised floors. Differences between Tange's design and Le Corbusier's concept become more evident if one looks at the recent restoration of the Peace Memorial Complex and the rebuilding of the City Auditorium.

In the 1950s, when Tange was unable to meet the deadline for finishing the auditorium building, the project was given to another architect. In the 1980s, though, he was given the opportunity to rebuild the auditorium as an international conference center, and was finally able to complete a design closer to his original plan. This permitted him to connect the three buildings by aerial passageways as he had initially projected. Instead of three independent buildings, Peace Hall is now part of a system, linked with the other buildings through elevated corridors in a form characteristic of traditional Japanese architecture. In this way the group of three buildings has gained an even stronger "Japanese" character.

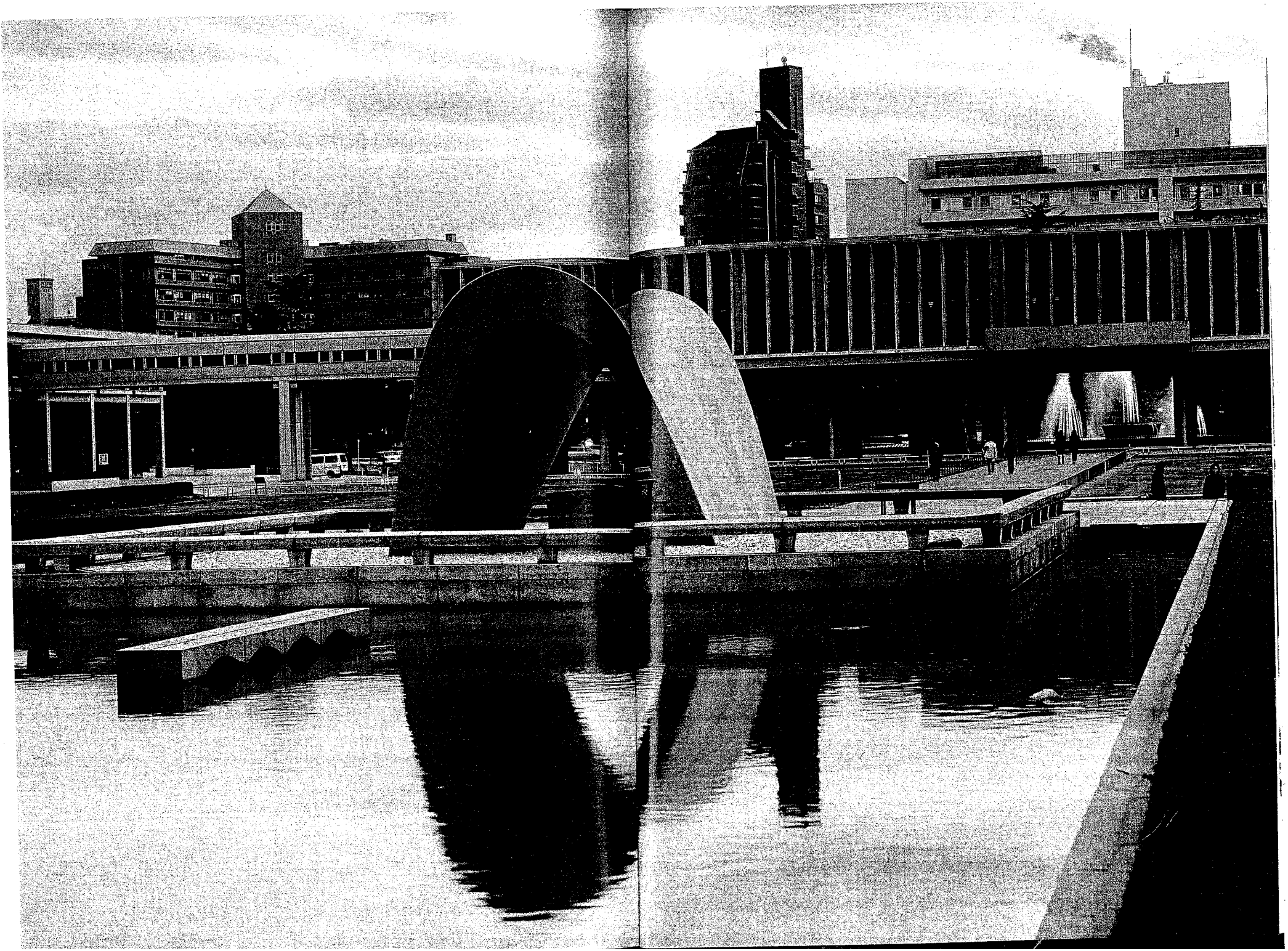
Tange's project thus responded ingeniously to the different concepts of memorializing existing in the West and in Japan. While building educational and memorial structures for foreign visitors, the architect simultaneously established the site as a sacred space. Whereas foreign tourists are invited to understand the effects of the destruction through the exhibits in the galleries of Peace Hall where objects related to the bombing are displayed, this is something many Japanese prefer to ignore. In her novel *The Flowers of Hiroshima*, Edita Morris describes the resistance of the main character, who is Japanese, to visiting the Peace Memorial Museum, which her American guest is eager to see.[41]

It is the cenotaph and the other memorials that seem to speak more to Japanese culture. Consonant with Japanese spiritual tradition, Tange explicitly sought to incorporate the scorched earth at Hiroshima into his peace memorial. The Shinto religion is intimately bound up with natural objects and with the earth or soil. Spirits are believed to be living in stones, rivers, and mountains, and it is thought that when people die they become spirits. The area under the hypocenter of the explosion, then, is understood by the Japanese visitor as filled with spirits, making the entirety of Peace Memorial Park sacred ground.[42]

Further, natural stones bearing inscriptions are more in keeping with Japanese tradition than are figural memorials. Even Japanese inscriptions reflect cultural differences. The inscription on the cenotaph at Hiroshima reads, in one possible translation, "Rest in peace—the mistake will never be repeated."[43] As the sentence does not contain a pronoun—typical for the Japanese language—it is vague or tacit enough to leave room for interpretation (and therefore also for argument). If it said, "We will never repeat...," debate would arise as to who "we" are, demonstrating that there is no universal point of view, no international "we."



HIROSHIMA PEACE MEMORIAL PARK, EARLY SCHEME WITH ARCH



Another difference specific to the Japanese culture of memorializing is represented by the symbolic meaning accorded to temporary events, such as the custom of floating white flowers down a stream, or the annual lantern festivals. In an earlier passage from Morris's novel, the American guest in Hiroshima wants to break off a flower in a bouquet the main character's sister is holding, not realizing she is planning to float the flowers on the river in memory of those who died during the bombing.[44] These floating memories, typical for a culture that celebrates "Hanami," or cherry-blossom viewing, in honor of the short-lasting blossoms, are extremely meaningful for the Japanese, if not necessarily for the visitor, and they are accommodated in the more ritualistic aspects of Tange's project.

Tange's architectural and urban solution thus fulfills the requirements of a memorial in the first city ever destroyed by an atomic bomb in a variety of ways, responding to the expectations and needs of different groups of people. As such, as he hoped, it is a monument that is not easily forgotten.[45] It offers a site for both information and memorializing. It embraces the past and the future. A spiritual symbol, it nonetheless conveys the message that peace is not bestowed by the gods, but needs to be worked for. Tange himself described the project as both a "symbolic image" and a "factory for peace." The latter characterization is reminiscent of that used for the United Nations headquarters in New York, which was referred to as a workshop for peace.[46] In its idealism, the Peace Center project also falls into the lineage of other projects advocating world peace, such as the proposal by the French Ernest Hébrard and the Norwegian Hendrick Christian Andersen for a World City in 1913, or Le Corbusier's vision for the League of Nations in Geneva in 1928.[47]

Despite the fact that of Tange's sweeping concept for Hiroshima only Peace Memorial Park in the Nakajima district was realized, this in itself was a major victory, given the economic difficulties and general conditions of the period from 1949 to 1955, when it was completed, as well as the challenges of land readjustment and the importance of private land ownership in Japan. Indeed, approximately 30 acres had to be cleared for its construction, including 400 temporary dwellings that had sprung up on the site shortly after the war ended.

LEFT A-BOMB DOME SEEN AT NIGHT WITH LANTERNS FLOATING IN THE WATER IN FOREGROUND. FROM MATSUHIGE YOSHITO, ED., *ATOMIC BOMB PHOTO TESTAMENT: A COLLECTION OF PHOTOGRAPHS BY THE PHOTOGRAPHERS WHO SURVIVED THE BOMBING IN HIROSHIMA* (1996)

PREVIOUS HIROSHIMA PEACE MEMORIAL PARK, WITH CENOTAPH IN FOREGROUND, 2001. PHOTO BY ANDREAS PAULY

Peace Park came into existence during the short period of time when the ordinary framework of Japanese urban planning had dissolved, leaving room for new solutions. It stands as a reminder that city planning can include identifiable landmarks and local particularities. Tange stated:

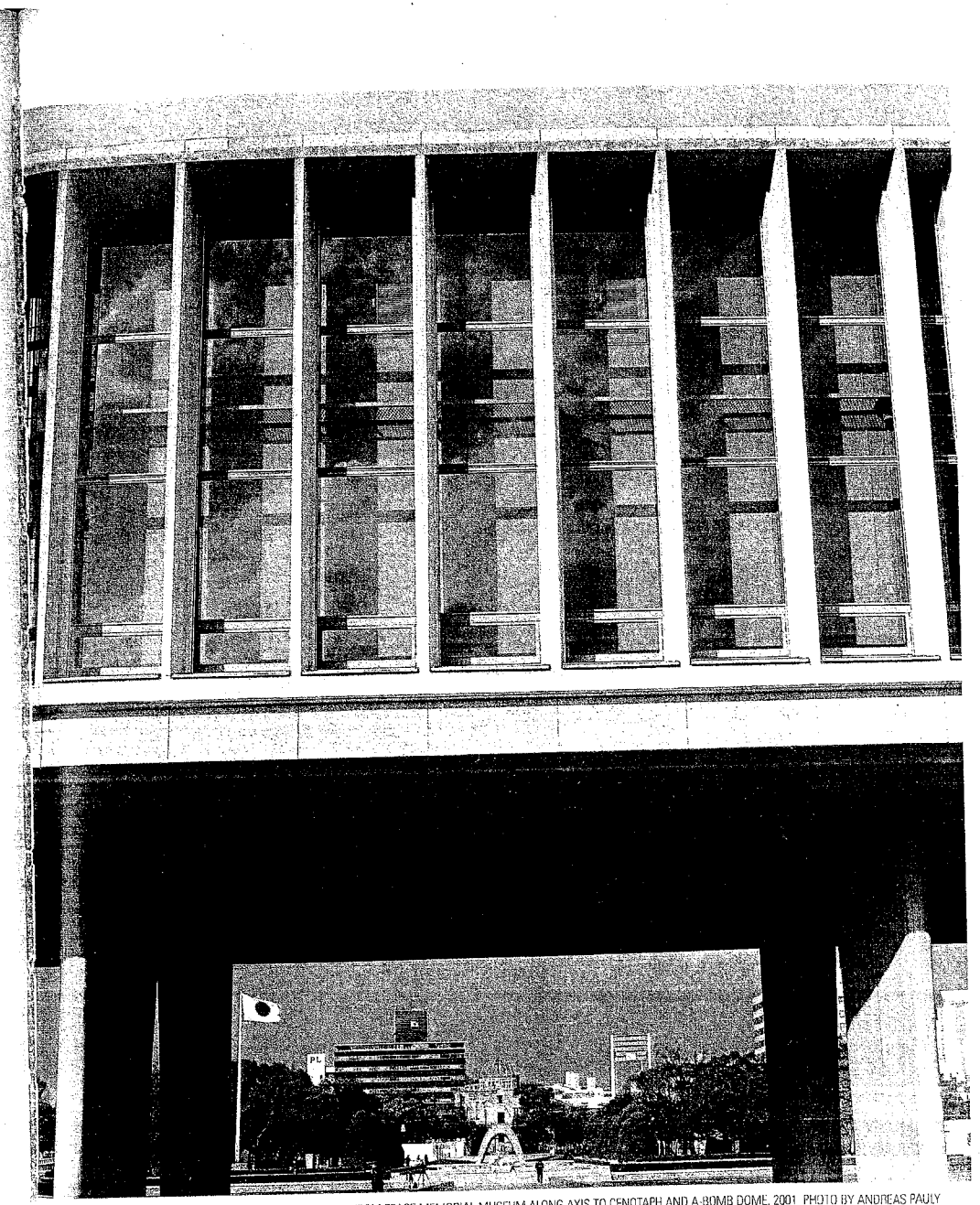
> [P]eace park is not that heart of an ideal city to which we have been mentally so attached. It represents an unusual and fortunate opportunity in Japan. For it has been possible to gain the co-operation of various administrative and governing interests and get them to agree to act together as a single body so that the realization of this project may be possible.[48]

Regrettably, this window of opportunity closed again once the local and national administrations were reconstituted in the 1950s.

Another, more ironic factor affecting the re-creation of Hiroshima as a city devoted to peace was the advent of the Korean War in 1950. The same year in which construction on the Peace Memorial Hall began, the American army was placing orders in Japan for matériel like jeeps, trucks, and machine-gun parts. Military equipment was manufactured in Hiroshima's factories. The city's economic revival, which was also aided by the construction of the Peace Center, was thus intimately related to war. Just as Peace Boulevard started out as a firebreak created for military reasons, peace and war continued to be intertwined in the city.

Apart from Peace Memorial Park, as noted, few of Tange's ideas came to fruition. Elsewhere in the city, desperate for housing, Hiroshima's residents quickly constructed flimsy buildings wherever they could, and land that was intended to be reserved for riverside parks and other public amenities was built on privately. It was only in 1966, after a sufficient number of public housing projects were constructed, that the so-called "A-bomb slums" were demolished to make way for parks along the river, thus realizing part of Tange's original scheme.

The Hiroshima of today does not exhibit the beauty, harmony, and elevated quality of life to which those in charge aspired. The peace park, museum, and boulevard exist, but they have been absorbed into an ordinary Japanese city without an overall vision on the scale imagined by Tange, and with few other outstanding architectural landmarks or any general urban response to the city's unique history.[49] All Japanese cities, the ones that were bombed and those like Kyoto that were spared, now resemble one another. The economic forces of the postwar period destroyed as much of the built environment as did the air raids. In fact, many buildings in Hiroshima that the atomic bomb did not obliterate were torn down later. The Peace Center, situated in the center of Hiroshima, thus remains an isolated structure by comparison to ruins of churches and other buildings preserved in German cities, for example, Hamburg's Saint Jacobi or Berlin's Kaiser-Wilhelm-Gedächtniskirche.



HIROSHIMA PEACE MEMORIAL PARK, VIEW NORTH FROM PEACE MEMORIAL MUSEUM ALONG AXIS TO CENOTAPH AND A-BOMB DOME, 2001 PHOTO BY ANDREAS PAULY

A more comprehensive analysis of urban reconstruction and memorializing in the context of the period after World War II would have to take into account whether cities were on the side of the war's winners or losers. Warsaw, a city destroyed by the German aggressors, tried to recuperate its townscape; Rotterdam, on the other hand, while likewise destroyed by the Germans, tried to modernize its urban form. German cities, particularly Berlin, made strong statements about their newly won democracy and their rejection of Nazi politics and the architecture and planning that were associated with it.

The symbolism of Hiroshima and the discussion surrounding the atomic bomb are still very much alive today for local residents who lost loved ones and for those who are still dying, for the Japanese population as a whole, and, finally, for the international community. The United States in particular has struggled—and is still struggling—with its role in Hiroshima, as demonstrated by its efforts to prevent the United Nations from declaring the A-Bomb Dome a World International Heritage Site (the dome was finally added to the register in 1996) and the debate in 1995 over the Smithsonian's exhibition at the National Air and Space Museum featuring the *Enola Gay*, with its subsequent cancellation. The attempts to shut out nuclear memories have thus come back to haunt us.[50]

Yet if most Japanese cities have been rebuilt without obvious traces of the destruction that occurred only fifty years ago and few memorials recall it, Hiroshima remains one of the few cities literally to have undergone a complete change of heart. Tange's Peace Park stands in its midst as a reminder of the horrors of warfare, and particularly of the atomic bomb, but also of the possibilities of urban reinvention.

NOTES

1. This number does not include cities and settlements on the islands of Ryukyu, where battles on the ground and subsequent requisitions by the U.S. Army caused large-scale destruction.

2. One hundred fifteen cities that suffered extended damage were included in the policy statement "War Damage Restoration Planning" (*Sensai Fukko Toshikeikaku*). For the rebuilding of Japanese cities after World War II, see Carola Hein, Jeffry Diefendorf, and Yorifusa Ishida, eds., *Rebuilding Urban Japan after 1945* (London: Macmillan, forthcoming 2003).

3. Carola Hein, "Visionary Plans and Planners," in Nicolas Fiévé and Paul Waley, eds., *Japanese Capitals in Historical Perspective: Place, Power and Memory in Kyoto, Edo and Tokyo* (Richmond, Surrey, U.K.: Curzon, forthcoming 2002).

4. See Carola Hein et al., *Hauptstadt Berlin* (Berlin: Gebr. Mann Verlag, 1991).

5. For the reconstruction of Rotterdam, among many other articles, see Cor Wagenaar, "Rotterdam and the Model of the Welfare City," special issue on reconstruction in Europe after World War II, *Rassegna* 54, no. 2 (June 1993), pp. 42–49; and the essay by Han Meyer in the present volume.

6. English-language publications use the name Hiroshima Peace Center. This name reflects Tange's larger aim to transform the entire city of Hiroshima, with Peace Memorial Park and its buildings and memorials as its core. See Udo Kultermann, ed., *Kenzo Tange, 1946–1969: Architecture and Urban Design* (New York: Praeger, 1970); and Kenzo Tange, *40 ans d'urbanisme et d'architecture* (Tokyo: Process Architecture Publishing, 1987).

7. The reasons the bomb was dropped have been the subject of debate and controversy for many years. One official argument has been that the bomb was necessary to end the war as soon as possible and to avoid massive American casualties. See J. Samuel Walker, *Prompt and Utter Destruction: Truman and the Use of Atomic Bombs against Japan* (Chapel Hill: University of North Carolina Press, 1997).

8. As Laura Hein and Mark Selden point out, "Beginning in 1945, United States officials prevented wide distribution of most images of the bomb's destruction, particularly of the human havoc it wrought, and suppressed information about radiation, its most terrifying effect." Laura Hein and Mark Selden, "Commemoration and Silence: Fifty Years of Remembering the Bomb in America and Japan," in Hein and Selden, eds., *Living with the Bomb. American and Japanese Cultural Conflicts in the Nuclear Age* (Armonk, N.Y.; and London: M. E. Sharpe, 1997), p. 4. For the construction of official narratives by both the Americans and the Japanese, see ibid., p. 5.

9. See Norioki Ishimaru, "Reconstructing Hiroshima and Preserving the Reconstructed City," in Hein, Diefendorf, and Ishida, eds., *Rebuilding Urban Japan*. Also see Walker, *Prompt and Utter Destruction*, p. 77.

10. For the destruction and reconstruction of Tokyo, see Hiro Ichikawa, "Reconstructing Tokyo: The Attempt to Transform a Metropolis," in Hein, Diefendorf, and Ishida, eds., *Rebuilding Urban Japan*; and Walker, *Prompt and Utter Destruction*, p. 28. The destruction of Hiroshima was exceptional in many regards, as a single bomb caused the obliteration of an entire city as well as long-term health problems related to radiation. Another difference between the atomic and conventional bombs was the form and extent of the impact. While conventional bombing left irregular patterns of destruction in other cities, in the case of Hiroshima the destruction was almost circular around the hypocenter.

11. *Hiroshima Peace Reader*, 10th ed. (Hiroshima: Hiroshima Peace Culture Foundation, 1994), p. 47.

12. For a discussion of the fate of American-born children of Japanese immigrants who were in Hiroshima at the time of the atomic bombing see Rinjiro Sodei, "Were We the Enemy? American *Hibakusha*," in Hein and Selden, eds., *Living with the Bomb*, pp. 232–59.

13. The film *Hiroshima, mon Amour* was directed by Alain Resnais from a screenplay by Marguerite Duras, and opened in 1959.

14. *Hiroshima Peace Reader*, p. 30.

15. For the choice of cities as possible targets of the atomic bomb, see Walker, *Prompt and Utter Destruction*, p. 61; and Gar Alperovitz, *The Decision to Use the Atomic Bomb* (New York: Vintage Books, 1995), pp. 515–34.

16. Alperovitz, *The Decision to Use the Atomic Bomb*, p. 526.

17. Ibid., p. 533.

18. According to the *Hiroshima Peace Reader* (p. 30), Hiroshima was the site of the Second General Headquarters, while the First General Headquarters was in Tokyo.

19. Hein and Selden, "Commemoration and Silence," p. 4.

20. Seiji Imahori stated in 1985, "In Japan, every one from successive prime ministers to the Communist Party has repeatedly declared [us] 'the only nation ever to have been atom-bombed' [*yuiitsu no hibakukoku*]," quoted in James J. Orr, *The Victim as Hero: Ideologies of Peace and National Identity in Postwar Japan* (Honolulu: University of Hawaii Press, 2001), p. 1.

21. *Hiroshima Peace Reader*, p. 19.

22. Ibid., p. 44.

23. Quoted in *Peace City Hiroshima* (Tokyo: Dai Nippon Printing Co., n.d.).

24. For Tange's early career and his first encounter with Le Corbusier's architecture, see David B. Stewart, *The Making of a Modern Japanese Architecture, 1868 to the Present* (Tokyo and New York: Kodansha International, 1987), p. 170.

25. See chap. 10, "Tange Kenzo's Tokyo Monuments, New Authority and Old Architectural Ambitions," in William H. Coaldrake, *Architecture and Authority in Japan* (London and New York: Routledge, 1996), pp. 251–77.

26. For a discussion of the 1951 CIAM meeting, see J. Tyrrwhitt, J. L. Sert, and E. N. Rogers, *The Heart of the City* (London: Lund, Humphries, 1952).

27. Carola Hein, "La Culture des concours en Allemagne et au Japon," *A+* 167 (Brussels, 2001), pp. 96–102.

28. See Botond Bognar and Togo Murano, *Togo Murano: Master Architect of Japan* (New York: Rizzoli International Publications, 1996).

29. The competition for the monument to Greater East Asia and its meaning in the creation of Japanese modernism are discussed in Shoichi Inoue, "Fascism and Architecture in Japan," photocopy of lecture presented at the symposium "Architecture and Modern Japan," October 21, 2000, Columbia University; and Shoichi Inoue, *Ato, kicchu, japanesuku: daitoa no pousto modan* (Tokyo: Seidoshi, 1987).

30. *Hiroshima Peace Reader*, p. 45.

31. "Shinsahyo," *Kenchikuzasshi* 10–11 (Tokyo: Architectural Institute of Japan, 1949), pp. 37–39.

32. For a further examination of Tange's attitude toward traditional Japanese architecture, see Cherie Wendelken, "Aesthetics and Reconstruction: Japanese Architectural Culture in the 1950s," in Hein, Diefendorf, and Ishida, eds., *Rebuilding Urban Japan*.

33. *Peace City Hiroshima*, p. 2.

34. Ibid.

35. The buildings were originally planned to consist of a conference hall capable of holding 2,500 people, discussion rooms, offices, a library, and a banquet hall, as well as exhibition galleries for atomic bomb relics and other objects. Ibid., p. 3.

36. Masaki Naka, *Kindaikenchikuka Tange Kenzo ron* (Tokyo: Kindaikenchikusha, 1983), p. 175.

37. Ibid., p. 179.

38. The name of the British architect is given in *katakana* as "Jappe." Ibid., p. 165.

39. Ibid., p. 165.

40. "Shinsahyo," pp. 37–39; and Naka, *Kindaikenchikuka Tange Kenzo ron*, p. 172.

41. Edita Morris, *The Flowers of Hiroshima* (New York: Viking Press, 1959), pp. 40–42.

42. It is worth noting that the occupation army apparently did not object to Tange's design, nor, in general, did it intervene much in religious affairs in Japan during the postwar period. While the emperor was forced to relinquish his deitylike status, places of religious significance related to the Imperial House were maintained.

43. The Japanese inscription reads, "Yasuraka ni nemutte kudasai, ayamachi ha kurikaishimasenkara."

44. Morris, *The Flowers of Hiroshima*, pp. 19–21.

45. Naka, *Kindaikenchikuka Tange Kenzo ron*, p. 165.

46. I would like to thank Joan Ockman for drawing this point to my attention. See Naka, *Kindaikenchikuka Tange Kenzo ron*, pp. 167–68.

47. See Giuliano Gresleri and Dario Matteoni, *La città mondiale: Andersen, Hébrard, Otlet, Le Corbusier* (Venice: Polis/Marsilio Editore, 1982).

48. Paolo Riani, *Kenzo Tange* (London and New York: Hamlyn, 1970), pp. 8–10.

49. N. Ishimaru et al., eds., *Architectural Witnesses to the Atomic Bombing: A Record for the Future* (Hiroshima: Hiroshima Peace Memorial Museum, 1996).

50. Michael Perlman, *Hiroshima Forever: The Ecology of Mourning* (Barrytown, N.Y., and St. Paul, Minn.: Barrytown Ltd. for Station Hill Arts, 1995), p. 79.