

The Reconstruction of Postwar Japan: Architectural Philosophies as Expression of Japanese
Identity through 1970

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Introduction

The morning broke in silence. From above, grids of former streets stood in stark contrast to the darkened soil and ash that surrounded them. The few standing structures appeared alien, looming over an otherwise flattened landscape. The trees were toppled and burned; they had been reduced to lifeless husks, resembling figures bent down to weep. In the days following the atomic bombing of August 6th, 1945, almost nothing remained in the Japanese city of Hiroshima.

The damage brought upon Japanese cities by the end of the war was extensive, far beyond the confines of Hiroshima and Nagasaki, the two victims of atomic bombs. American forces took advantage of the density of Japan's urban areas, which were often comprised of flammable wood and paper, as targets for widespread fire bomb campaigns. The packed buildings, often in impoverished areas with high populations, acted as kindling for fires that raged beyond control and ravaged wide swathes of land.¹ In all, over 30 major cities were more than half destroyed, with the coastal city of Fukuyama losing the highest proportion of its area: 80.9%. Tokyo, Japan's burgeoning metropolis, was 51% destroyed.² This mass destruction left urban Japan in ruins and a large population homeless. The only choice was to rebuild, but the method for how this was to be achieved was still unknown.

After Allied forces left Japan, the newly democratized country was anxious to be accepted by the international community and viewed by its former enemies as an economic and cultural equal. In hopes of assimilating to global standards and burying its stigmatized past,

¹ Frank, Richard B. *Downfall: The End of the Imperial Japanese Empire* (Penguin Books, 2001), p. 6.

² Miles, Malcolm. "Metabolism: A Japanese Modernism." *Cultural Politics*, vol. 9, no. 1, 2013, pp. 70–85., doi:10.1215/17432197-1907181, p. 80.

initial state-sponsored reconstruction projects aimed to display this image through Western-based Modernist architectural and infrastructural projects. But an economic boom in the 1960s provided Japan with newfound wealth and confidence; the Metabolist movement emerged as an expression of Japanese identity and a metaphorical rebirth from the ashes. Comparing the 1964 Tokyo Olympic Games to the 1970 World's Fair, both globally publicized events, elucidates this shift in expression of identity over a short span of time.

Allied Occupation

Allied Occupying forces arrived in 1945 to a vulnerable Japan. The Japanese economy was struggling in the early years after the war, weakened from prolonged bombardments and the destruction of most of its merchant vessels, which greatly constricted imports over the course of the war and thus lowered production. Additionally, wrecked infrastructure, particularly interior rail lines, hampered the transportation of goods.³ This was followed by rationing, price controls, and rampant inflation.

Under Allied occupation, which lasted from 1945-1952, the process of reconstruction can only be described as at-need and sporadic, acting more as a band-aid than a long term solution. Instead of funding widespread reconstruction projects, General MacArthur focused on shaping Japan into a democracy and turning around the economy, instituting tax reforms and measures to control inflation.⁴

³ Frank, *Downfall*, p. 350.

⁴ Steele, James. *Contemporary Japanese Architecture: Tracing the Next Generation* (Routledge, Taylor & Francis Group, 2017), p. 75.

Japan was in a dire situation in the early postwar years, struggling economically, its cities reduced to rubble, and under the thumb of a foreign country. This weakened position left Japan eager to step back onto the global stage and reclaim its status as a major world power.

Modernism and Kenzo Tange: Japan Seeks Acceptance from the International Community

After Occupation ended in 1952, the state took on a role similar to the Meiji Era, fervently engineering modernization and Westernization.⁵ Unsurprisingly, most postwar reconstruction was funded by the federal or prefectural governments. Citing it as a large contributor to building GNP, they placed a particular focus on construction.⁶

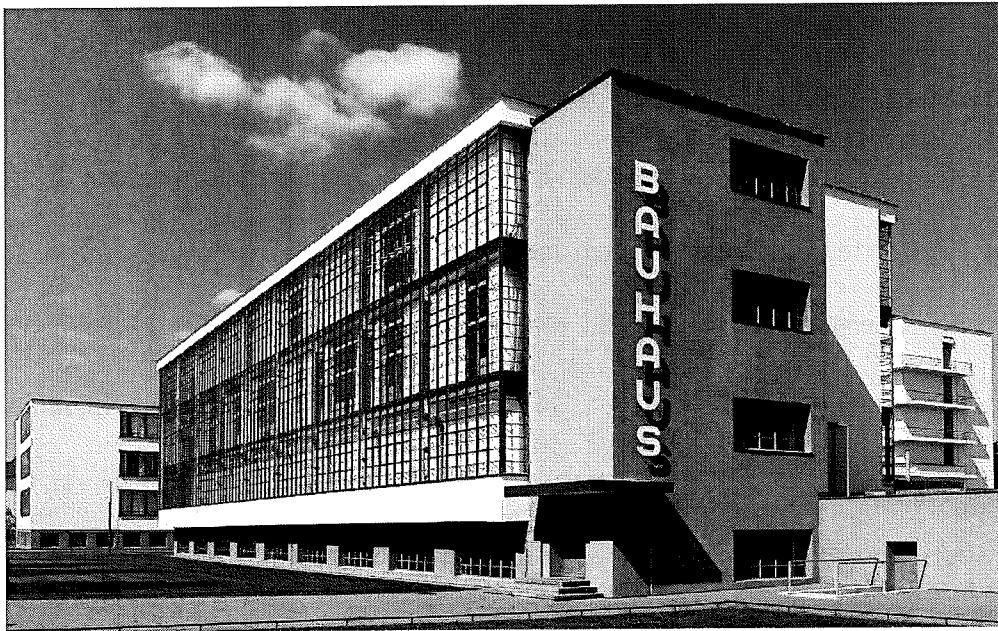
However, the Japanese government pursued reconstruction with specific goals in mind. Besides reimplementing vital infrastructure and providing much-needed housing and public services, it is important to examine the specific methods used to achieve postwar reconstruction. *How* Japan decided to rebuild is telling of public conscience at the time, a physical manifestation of how the country wanted to be perceived by the rest of the world. When reconstructing its skylines and transportation routes, the Japanese government mandated that Modernism, a Western style of design, be used for both its infrastructure and architecture, a sharp change from its position only a few years earlier. While it may be argued that this was simply implemented by Allied occupying forces, this trend persisted in the decades following Occupation.

Before discussing Japan's reasons for implementing Modernism, it is necessary to provide context for what the movement is and its cultural significance. Dubbed the "International Style," Modernism was a dominant approach to architecture in Europe and North America for

⁵ Coaldrake, William H. *Architecture and Authority in Japan* (Routledge, 2002), p. 251.

⁶ *ibid.*

several decades, taking root in the 1920s and sustaining mass popularity through the 1960s.⁷ Its philosophies were espoused by the “Bauhaus,” a German art school that stood at the epicenter of Modernist design.⁸ Coincidentally, the Bauhaus School building itself is a landmark example of the Modernist style in Europe, which is characterized by simple geometries, basic colors, and a focus on “rationality” and functionality. To achieve this effect, the most common building materials were exposed concrete, steel, and glass.



The Bauhaus School, *Bauhaus-Dessau* (Coaldrake)

France was especially influential in this artistic movement; French-Swiss architect “Le Corbusier” was a pioneer of Modernism and one of its most renowned practitioners. His “Villa Savoye” and “Sainte Marie de la Tourette,” a dominican monastery in Lyon, France, are some of the most recognizable examples of Modernist architecture. Additionally, Paris was home to the

⁷ Miles, “Metabolism: A Japanese Modernism,” p. 70.

⁸ Gapp, Paul. “Circle of Influence.” *Chicago Tribune* (7 Dec. 1986), www.chicagotribune.com/news/ct-xpm-1986-12-07-8604010577-story.html, Introduction.

“Congrès International d’Architecture Moderne” (CIAM), founded in 1928 as a way for the world’s prominent architects to meet, discuss, and propagate Modernist theory.⁹

While Modernism was briefly practiced in Japan during the 1920s, conservative militarists in power during the 1930s viewed it as a symbol of left-wing conspiracy and the movement largely disappeared from the Japanese sphere.¹⁰ The predominant architectural style of the twentieth century through the 1930s was instead the “Imperial Crown Style,” a symbol of nationalism that emphasized heavily incorporating elements of ancient Japanese style, referencing shrines, temples, tea houses, and castles.¹¹

It wasn’t until the late 1940s that Modernism made a sudden reappearance. In 1946, the War Damage Rehabilitation Board selected Japanese architect Kenzo Tange as the principal planner for cities devastated by the war.¹² Unlike most Japanese architects of the time, Tange was heavily influenced by Western design. He was a member of the previously mentioned CIAM working group. An assistant professor, he also opened the “Tange Laboratory” at the University of Tokyo, working mainly on Modernist projects and teaching them to students.

It may seem counterintuitive that Tange, a practitioner of a Western rather than Japanese method of design, would be chosen to remake the image of Japan. But the choice was deliberate. Adopting Western style was a way to seem more similar to the West, and thus be seen as an equal in the future. Since Japanese nationalists had resisted Modernism before and during the war, it was a chance to contrast a new, democratic Japan with the negative connotations of its

⁹ Steele, *Contemporary Japanese Architecture*, p. 76.

¹⁰ Gapp, “Circle of Influence,” Introduction.

¹¹ Stewart, David B. *The Making of a Modern Japanese Architecture: 1868 to the Present* (Kodansha International, 1988), p. 111-12.

¹² Steele, *Contemporary Japanese Architecture*, p. 76.

time in the Axis alliance.¹³ Japan was attempting to cover up its stigmatized past by rebranding, assimilating to foreign cultural forms as a way of seeking approval and forgiveness on the international stage.

Sponsored by the Hiroshima authorities, Tange won an international design competition for the Hiroshima Peace Memorial Museum in 1949.¹⁴ Completed in 1955, Tange's design for the museum wrapped Japanese remembrance of the Hiroshima atomic bombing in Western casing; he employed staple Modernist materials like concrete, glass, and steel to form the rectilinear structure.¹⁵ The Hiroshima authorities' choice of this Modernist design again signifies a desire to portray an evolving image to the West; the museum is meant to be the lasting memory of a tragedy in Japanese history and a memorial to those who died, yet the building distances itself from Japanese culture in appearing like a building one might find in Paris or Berlin.



The Hiroshima Peace Memorial Museum (Steele)

¹³ *ibid.*

¹⁴ *ibid.*

¹⁵ Coaldrake, *Architecture and Authority in Japan*, p. 258.

Also among Tange's prolific portfolio was the first Tokyo Metropolitan Government Headquarters, built in 1959. Framed in steel, this complex of buildings was elevated on "pilotis," or columns that act as stilts, a trademark of Modernist architecture.¹⁶ Like in Tokyo, many government offices and facilities throughout the country were rebuilt in the Modernist style. Using it to house the Japanese government signifies the extent to which Japan wished to display a Western image to foreign as well as domestic audiences. Government buildings are regarded as symbols of authority and legitimacy, and by molding them to foreign standards, the Japanese state undercut its own identity.

In the aftermath of the war, Japan's stylistic choices for reconstruction were based on assimilation, not Japanese identity. Even after the Occupation ended, the government continued to make the country appear Western; expression of Japanese identity was one of total conformity until the 1960s.

New Confidence: The Economic Miracle

In 1950, Communist North Korean troops crossed the 38th parallel into Democratic South Korea, prompting a retaliation from the United Nations that sparked the Korean War. With its close proximity to the conflict, which lasted until July 1953, Japan acted as the main arms producer for UN forces, boosting production and beginning the process of reviving the economy.

¹⁷ This was a small precursor to Japan's "Economic Miracle"; the economy made a drastic recovery that blossomed into unfettered growth in the 1960s and beyond.

¹⁶ *ibid.*

¹⁷ Steele, *Contemporary Japanese Architecture*, p. 76.

Interestingly, much of Japan's boom was owed in some part to the United States. Fearful of an expansion of Communism throughout Asia during the Cold War, which already included the Soviet Union and North Korea, the US viewed Japan as a potential stronghold for democracy that needed to be supported. The opening of markets between the two countries created a huge surge in exports for Japan that fostered economic acceleration.¹⁸ Other contributing factors included cooperation between the government and private industry, a lack of a defense budget, and technology-sharing from the US that boosted productivity.¹⁹

By the 1960s, this "Economic Miracle" was in full effect. Between the years of 1955 and 1964, Tokyo's population jumped from 13.28 to 18.86 million, representative of the population flocking to urban areas.²⁰ Influenced by increased contact with Americans, the typical family dreamed of home ownership.²¹ As markets improved throughout the 1950s, coupled with an end to Allied occupation in 1952, Japan internalized its economic success and independence as a reflection of a thriving Japan.

The 1964 Tokyo Olympics: An Intersection of Japanese Assimilation and Emerging Identity

The 1964 Tokyo Olympics were a momentous occasion. Not only were they the first Olympic games held in Japan, but the first to be held in the entirety of Asia.²² Japan was to be in

¹⁸ Forsberg, Aaron. *America and the Japanese Miracle: The Cold War Context of Japan's Postwar Economic Revival, 1950-1960* (Univ. of North Carolina Press, 2000), p. 199.

¹⁹ Steele, *Contemporary Japanese Architecture*, p. 76.

²⁰ Schalk, Meike. "The Architecture of Metabolism. Inventing a Culture of Resilience." *Arts*, vol. 3, no. 2 (2014), p. 3.

²¹ Coaldrake, *Architecture and Authority in Japan*, p. 251.

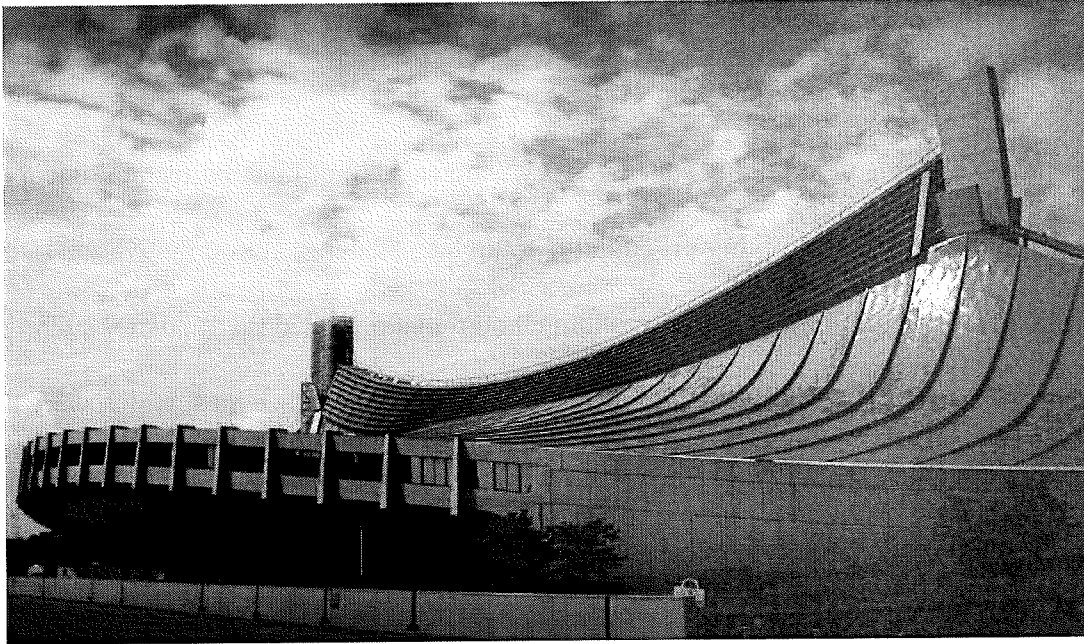
²² Tagsold, Christian. *Surveilling and Securing the Olympics: From Toyko 1964 to London 2012 and Beyond*. Edited by Vida Bajc (PALGRAVE MACMILLAN, 2016), p. 95.

the international spotlight for the first time since World War II and was under immense pressure to represent its people. Hosting an event of such a large scale, to be broadcast on television across the globe, was the perfect opportunity to solidify a favorable persona to the rest of the world. Yasukawa Daigoro, president of the Olympics Organising Committee, stressed this when he announced that the Tokyo Olympics would “highlight the continuing efforts of the Japanese people as a worthy member of the world family of nations”.²³ Clearly, this was a defining moment in Japan’s quest for acceptance on the global stage.

Naturally, Kenzo Tange was the architect chosen to design the facilities. He again designed in the Modernist style, with the Tokyo Olympics Gymnasium being the focal point of the project. The gymnasium is especially noteworthy for its assimilation of European suspension-roof structuring, being the first monument of many to embrace this new and innovative technique.²⁴ Incorporating this cutting edge Western design into a sweeping landmark can be seen as a way to impress foreign audiences and show that Japan can implement new technologies just as effectively as the world’s most powerful nations.

²³ Coaldrake, *Architecture and Authority in Japan*, p. 256-257.

²⁴ *ibid.*



The Olympics Gymnasium (Steele)

Preparation for the event was extensive, and it was focused largely on creating a meticulous display of a reformed Japan. Despite progress in reconstruction over the last two decades, Tokyo still lacked the infrastructure to make it capable of representing Japan in the way the government wanted. Special projects were enacted to Westernize and elevate Tokyo to a level worth showing off, a testimony to the lengths Japan would go for international status. An entire new system of inner-city highways was built just for the Games, paid for by the metropolitan and state governments.²⁵ Additionally, Japan unveiled its new Bullet Train, the *Shinkansen*, and Tokyo's new monorail system, wowing visitors who rode in and interacted with these new infrastructural fixtures.²⁶

While the 1964 Olympics were at the apex of Japanese efforts to Westernize and suppress individual culture and identity, they also represent a positive shift in Japanese confidence as a

²⁵ Tagsold, *Surveilling and Securing the Olympics*, p. 99.

²⁶ Coaldrake, *Architecture and Authority in Japan*, p. 257.

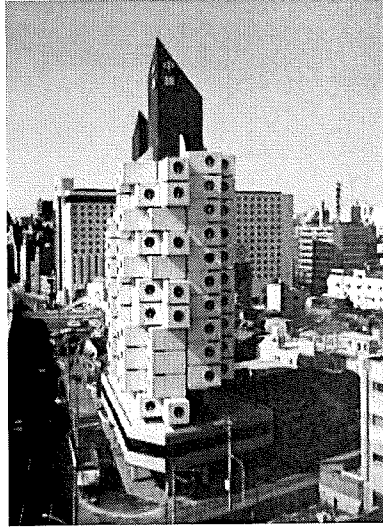
result of the Economic Miracle. The new Bullet Train and monorails, made possible by the application of technology imported from American trade, made Japan appear sleek and futuristic. The Japanese were able to indirectly state that they were capable of pushing technological and infrastructural boundaries, implying the country would be a leader of future innovation rather than a follower. Furthermore, it was the economic boom that provided the funds for such ambitious projects to be built. The accomplishments achieved for the Games, which were then publicized to the entire world, were a major success for Japan and provided a well-deserved ego boost to the recovering nation.

Metabolism: Japanese Resilience and Newfound Identity

At the 1960 World Design Conference, a group of young Japanese architects published a manifesto: *Metabolism: The Proposals for a New Urbanism*, with contributing authors Noboru Kawazoe, Kiyonori Kikutake, Kisho Kurokawa, Fumihiko Maki, Masato Otake, and Kiyoshi Awazu.²⁷ This manifesto founded the Metabolist movement in Japan, an eccentric form of design that stood in opposition to Modernist principles. The staples of Metabolist architecture were adaptable, temporary dwellings or customizable cells, which could shrink or expand according to need.²⁸ These small compartments would often come together to form huge “megastructures”. The Nagakin Capsule Tower in Tokyo is among the most iconic buildings built in this style, completed in 1970.

²⁷ Kurokawa, Kisho. *Kisho Kurokawa: Metabolism in Architecture* (Westview Press, 1977), p. 41.

²⁸ Schalk, “The Architecture of Metabolism,” p. 3.

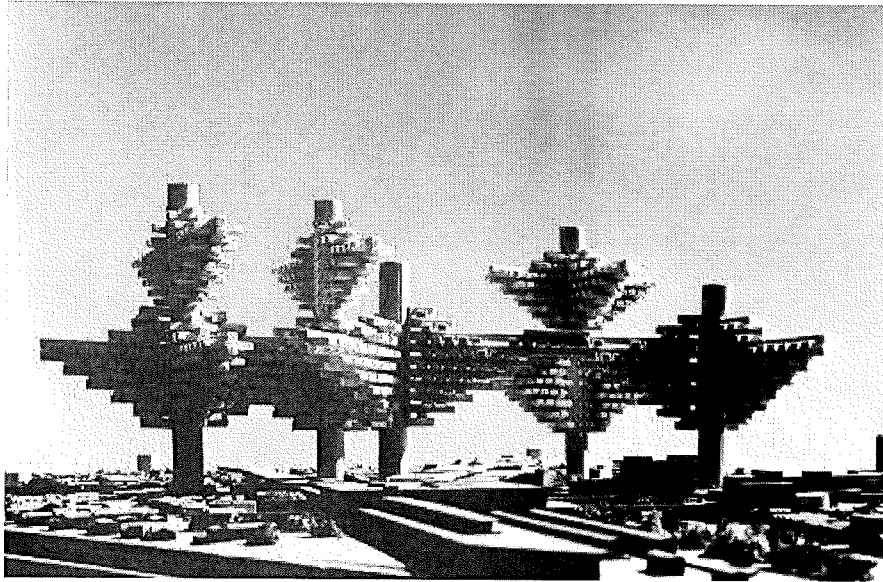


Nagakin Capsule Tower by Kisho Kurokawa (Kurokawa)

For the first time since the war, Japanese architects sought to confront their identity and forge an individualized style for Japan. The proposals set out by the Metabolists were virtually utopian in nature; artificial land, marine civilization, and the concept of a metabolic cycle were prevalent in their work, embodying an ideal of vast social change.²⁹ Among these were Kikutake's "Marine City" and Isozaki's "City in the Air".³⁰

²⁹ Lin, Zhongjie. *Kenzo Tange and the Metabolist Movement: Urban Utopias of Modern Japan* (Routledge, 2010), p. 1.

³⁰ Kurokawa, Kisho Kurokawa: *Metabolism in Architecture*, p. 42.



Isozaki's 1961 City in the Air Proposal (Kurokawa)

None of these ethereal proposals for new cities were ever constructed, but the psychology behind their occurrence mirrors Japanese sentiment of the time. When describing their motivation and inspiration for Metabolism, the architects wrote:

We regard human society as a vital process, a continuous development from atom to nebula. The reason why we use the biological word metabolism is that we believe design and technology should denote human vitality. We do not believe that metabolism indicates only acceptance of a natural, historical process, but we are trying to encourage the active metabolic development of our society through our proposals.³¹

Much of what is buried in this short explanation can be traced back to the preceding decades of Japanese history. Firstly, there is the concept of Metabolism being related to “metabolic development” and the transience of “human vitality”. In other words, designs were meant to be adaptable and temporary to reflect an acceptance of the cycle of life, starting anew with each death. What could they be referencing? This generation spent their youth during World War II, witnessing the atomic bombs and fire raids. When they reference a “natural, historical process,”

³¹ *Metabolism: The Proposals for a New Urbanism* (Bitjutu Syuppan Sha, 1960), Introduction.

of death and rebirth they are referencing both the environmental catastrophe of the atomic bombings and Japan's constant destruction from natural disasters.³² The influence of the atomic bombs is lent further credence by the overt assertion that technology is intertwined with "human vitality"; they believe technology has an immense impact on human life. This idea, combined with specific references to the word "atom" throughout the pamphlet, further suggest a lasting imprint of the bombs on the Japanese psyche. The theory of Metabolism drew heavily from a Japanese-specific experience.

Metabolism was also heavily influenced by the Economic Miracle. As mentioned earlier, the wealth and growing middle class pushed people into the cities. However, cities struggled to accommodate this influx, especially because large portions of them, including vital infrastructure, were destroyed during the war. The high land prices and the diffuse housing shortage forced architects and urban planners to embrace megastructural principles because it allowed them to concentrate many people into small areas.³³ Furthermore, the Metabolist focus on technology goes beyond the lingering trauma of atomic weapons. As Japan depended on new technology to boost production and reconstruct itself throughout the Economic Miracle, the Japanese also felt inspired by the power of technology and believed they could accomplish incredible things with it. That is why many of their designs were so utopian in nature; the success of implementing technology during the "Miracle" made the Japanese believe that anything is possible.

³² Schalk, "The Architecture of Metabolism," p. 3.

³³ Pernice, Raffaele. "Images of the Future from the Past: The Metabolists and the Utopian Planning of the 1960s." *Journal of Civil Engineering and Architecture*, vol. 8, no. 6 (2014), p. 764

Ultimately, Metabolist theory was based on Japan's identity of resilience; facing constant disaster, Japan could continue to flourish as it worked hard and employed technology to its advantage. Most importantly, Metabolism provided Japan with a medium to build in its own distinct style. It was a way to differentiate itself from the Modernist trend and characterize the growing Japan with a unique look which reflected the Japanese perspective. The bold steps Japan took in constructing Metabolist buildings, starting in the late 1960s, suggests a shift in growing confidence as Japan had less fear in standing out among the international landscape.

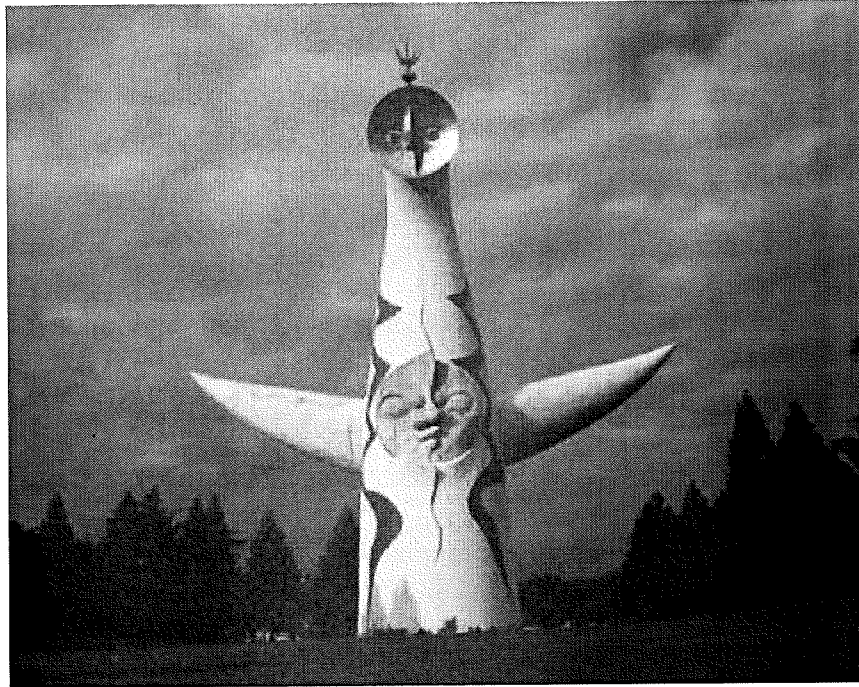
Expo '70: The Japanese Government Incorporates Metabolism and Recognizes Japanese Identity

Japan hosted the 1970 World's Fair, nicknamed "Expo '70," only six years after holding the Olympics. Once again Japan would be in the global spotlight, and similarly to the Olympics, this was the First World's Fair held in Asia. Despite the several commonalities between the two events, however, the contrast between them is what is most revealing. Unlike the Modernist-designed Olympic Games, the Expo was designed entirely in the Metabolist style and almost exclusively by Metabolist architects; the Japanese government sponsored a uniquely Japanese form of design.

The "Tower of the Sun" is widely regarded as the symbol of the Exposition. Designed by Tarō Okamoto, the tower symbolized ancient Japanese mysticism.³⁴ It rose up through a circular opening in a membrane roof of a latticed Metabolist structure, which recalled a "Shinto himorogi," or divine fence. A sakaki tree in the center represented a "yorishiro," an object used

³⁴ Steele, *Contemporary Japanese Architecture*, p. 118.

to attract spirits and deities whose sanctity is described in the Chronicles of Japan, one of the oldest texts of Japanese history and mythology.³⁵



The Tower of the Sun by Tarō Okamoto, Present Day (Steele)

It is clear that the Japanese were no longer attempting to appease foreign audiences because, to a foreigner, the tower would just look bizarre. They instead shamelessly presented a monument without care as to how it would be outwardly perceived. In this way, Japan had completely shifted its sense of expression. While only a few years prior it embraced Modernism and conformity, by 1970 it had the confidence to display a Japan-centric image.

Conclusion

Following World War II, the battered Japan realized it had fallen from being an emerging world power to a struggling, occupied state. To compensate for this fall, along with the stigma

³⁵ *ibid.*

Japan carried for being part of the Axis Alliance, reconstruction was modeled after Western powers in hopes of creating a new reputation as a modernized equal. The pinnacle of this effort was reached in 1964, when Japan hosted the Olympics and successfully displayed a reformed, Modernist Tokyo. However, the event also marked a slight shift by boosting Japanese pride and showing the country's technological prowess made possible by an "Economic Miracle" that took off in the 1960s. The Games represented the growing prosperity of Japan, which was now able to effectively invest money into such projects and incorporate technology into their designs.

By the mid-1960s, the Modernism movement was largely replaced with Metabolism, a style developed by and for Japan. Metabolism reflected Japan's lasting trauma from World War II and its economic boom, and the movement provided a way for Japan to reaffirm its individual identity. This was evident by 1970, when Japan held the World's Fair and decided to boast a Metabolist style rather than a Modernist one, suggesting an underlying newfound confidence.

Architecture and infrastructure are more than plans drawn up by a solitary architect or engineer. From the ancient past to the current day, the structures we have built around ourselves reflect our societies' ongoing legacies, living memories of the past and growing ambitions for what is to come. Each piece of construction simultaneously reflects the values of its society while shaping what it will be in the future. Japan finally found its footing and continues to push the boundaries of technology and design, creating an identity for itself, not adopting anyone else's.

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Bibliographic Essay

It is difficult to find books in English that place 20th century Japanese architecture in a historical context. That is why I found two sources, Steele's *Contemporary Japanese Architecture: Tracing the Next Generation* and Coaldrake's *Architecture and Authority in Japan*, incredibly useful. Both synthesized the history of Japan with the emerging styles of architecture. They also both covered a wide breadth of topics, including information about the Olympics, the Economic Miracle, and other subjects which were rarely linked to architecture in other sources. The negative aspect of both of these books is that not every topic is examined to great depth. For instance, Coaldrake only lends a few sentences to the Economic Miracle.

Two additional sources provided me primary knowledge of the thoughts of Metabolist architects, making them crucial in developing my thesis. Kurokawa's *Kisho Kurokawa: Metabolism in Architecture* is about his own experiences developing Metabolism and the projects he built up until it was published in 1977. As one of the founding members of Metabolism, it was his book that provided a comprehensive collection of Metabolist plans and architectural drawings. It was here that I was able to gain a true picture of Metabolist philosophy and find trends in its construction. Additionally, I had access to the Metabolist pamphlet, titled *Metabolism: The Proposals for a New Urbanism*. While this document was short and lacked much detail, it provided a summary of the reasoning behind Metabolist design that was crucial to understand why the movement existed to begin with.

When it came to context and background information regarding the economy, Frank's *Downfall: The End of the Imperial Japanese Empire* was the only book I utilized that focused on military history. This book was extremely comprehensive, and while only a small amount of it

was relevant to my topic, it sufficed to provide context to the struggle Japan was facing by the end of World War II. Forsberg's *America and the Japanese Miracle: The Cold War Context of Japan's Postwar Economic Revival* focused on the Economic Miracle in Japan. It was the only source that painted a clear picture of why the United States opened its markets to Japan, but a lot of the information was irrelevant to my topic of study and thus had little use.

In terms of architectural history, Gapp's "Circle of Influence," which appeared in the *Chicago Tribune*, was one of several sources I used to explore the history of Modernism in Europe. This article was brief and lacked analysis; I was only able to use a select few pieces of information, some of which coexisted in other sources I was using. Miles' "Metabolism: A Japanese Modernism" provided much more insight into the significance of Modernism, discussing specific architects and buildings that I could use to build my background. The only issue with this publication was its brevity. Stewart's *The Making of a Modern Japanese Architecture: 1868 to the Present* was a book that I found only a couple days before finishing my essay. I wish I had more time to spend with this book; it encompassed the entire time span I was examining and looked at the relationship between technology and architecture, something I discussed in my essay. It also included helpful information about what types of architecture were implemented in Japan before Modernism was adopted.

Tagsold's *Surveilling and Securing the Olympics: From Toyko 1964 to London 2012 and Beyond* belongs to a category of its own. Focusing on the Olympic Games throughout history, only one chapter from the entire book was at all related to my study. While its focus was on how governments attempted to provide security at the event, I was able to use this information to talk

about how Japan prepared for the Olympics. This includes the infrastructural projects like the highways and Bullet Train.

My remaining sources were all on the topic of Metabolism, a complicated movement which needed several resources to explain. Lin's *Kenzo Tange and the Metabolist Movement: Urban Utopias of Modern Japan* provided context for how Metabolism was formed and provided an introduction to its major goals. Unfortunately, I was only able to access the first chapter of the book, so it is difficult to say how helpful the remaining content would have been. Pernice's "Images of the Future from the Past: The Metabolists and the Utopian Planning of the 1960s" provided a helpful link between Economic Miracle and Metabolism, outlining how Metabolists sought to fix cities' struggle to accommodate the bursting population. However, only a few sections of this article were unique pieces of information. Lastly, Schalk's "The Architecture of Metabolism. Inventing a Culture of Resilience" proved to be extremely well-written and specific. It was here that I was able to find information about the psychology of Metabolism. Schalk examined the effects of technology and the atomic bomb on Metabolist philosophy, which aided me in developing my thesis.

Because my topic covers a few separate historical events and different movements, it was necessary to have research that focused on different aspects of my argument. I benefited from having a couple sources that provided general overviews of most of the information, then using other sources to inspect specific events in more detail.