Invisible Infrastructure: Reinforcing Postwar Gender Inequality in Tokyo’s Nakagin Capsule Tower

Kelsea Whaley

Abstract: 1970s Japan saw major changes in the way society lived and worked. A changing family structure, one led by the patriarchal “salaryman,” created new demands for housing. The Nakagin Capsule Tower, completed by architect Kisho Kurokawa in 1972, formerly located in the business district of Shimbashi, Tokyo, Japan, was Kurokawa’s utopian model for Japan’s salarymen. This presentation investigates how the Nakagin Capsule Tower inscribed gendered institutional thought in its construction, restricting women’s access to the home and maintaining male power in the public sphere. Moreover, I explore the relationship between the construction of masculinity and urban space in postwar Japan and discuss the ways in which a housewife is unable to fulfill societal expectations within the Nakagin Capsule Tower. While Kurokawa believed the Nakagin Capsule Tower was a utopian architecture that would improve society, it maintained the salaryman/housewife relationship that prevented Japan from socially evolving to include women in their workforce and reinforced the city as a place only for men in service to the economy. This assessment investigates how the built environment has the power to detract from women’s opportunities outside of the home and the ways architecture met the social demands of men in postwar Japan.

Key words: Postwar Japan, Metabolist architecture, salarymen, gender

1970s Japan saw major changes in the way society lived and worked. A changing family structure, one centered around the salaryman, created new demands for urban housing. Prior to the 1970s, the Meiji Restoration of 1853 impacted the production of traditional Japanese architecture and by 1945, when World War II ended, Japan sought an architecture, both residential and public, that better suited their newly defined post-war social roles. From 1950–1953, the Korean War greatly stimulated Japan’s economy, so by the 1970s, Japan developed the world’s second largest economy and were financially stable enough to pursue housing as a national goal.¹ The Japanese salaryman supported and led this economy. His lifestyle and the patriarchal familial structure that defined him initiated the conception of one defining architectural structure that dominated Tokyo’s skyline from 1972 to 2022.

The Nakagin Capsule Tower (NCT), completed by Japanese modernist architect Kisho Kurokawa in 1972, was formerly located in the business district of Shimbashi, Tokyo, until April 202,2 when workers disassembled and demolished the structure, a devastating event for Japan’s modern architectural heritage [Figure 1]. Prior to its demolition, the NCT stood as a reflection of the 1970s Japanese Metabolist Movement that sought to re-think and revolutionize the mass housing units of high density urban environments. Kurokawa built the NCT to house the salaryman, a middle-class working male who developed as the attainable, ideal model in post-war Japan.

¹ Barbara Molony, Janet M. Theiss, and Hyaewool Choi, Gender In Modern East Asia: An Integrated History (Boulder, CO: Westview Press, 2016), 415.
In this paper, I argue that the NCT inscribed gendered institutional thought in its construction which maintained male power in the public sphere. Through this construction, men reached an economic power unattainable to women who remained in the home in a prescribed domestic role. I investigate the relationship between men, women, and urban space in post-war Japan, exploring how a gender-segregated environment developed, and the ways in which the NCT maintained normative gender roles of the period. In order to show how the NCT became an unapologetically male space that relegated women to the home, I explore the relationship between the construction of masculinity and urban space in post-war Japan which did not accommodate women and their domestic labor.

The NCT is composed of 140 interlocking modular capsules which plug-in to two core concrete shafts [Figure 1]. These vertical shafts extend above the capsules in a rusted brown color and create a striking diagonal line that dramatically differs from surrounding buildings. The capsules are asymmetrically stacked on one another with each unit containing only one circular window. While Kurokawa oriented some units towards each side overlooking neighboring buildings, most units face the public street. The NCT adopts modernist aesthetics of the International Style in its use of *pilotis*, clean lines, mass-produced materials, and minimal ornamentation.

Most prominently, the interior pace emphasized efficiency in its arrangement [Figure 2]. Each capsule, modeled after a storage unit and measuring 108 total sq. ft., contained a corner bathroom, full-sized bed, desk, kitchenette, and built-in storage compartments. At the time, its color television, air conditioning unit, and Sony entertainment center made it a somewhat technologically advanced dwelling. Kurokawa’s design is not at all nostalgic, traditionally Japanese, or completely modernist. Its capsule form is brand new and radical.

Architectural scholars view the NCT as an exemplary structure integrating Metabolist ideas with post-war modernist thought of the 1970s, but little attention has been given to the structure outside of its formal, modular design. While scholarship has not currently responded to its April 2022 destruction, international media outlets have focused on the structure’s status as a cultural heritage object. The Tower has yet to be explored in its relationship to the male/female dynamics that shaped its initial conception. The NCT is an important structure following the Metabolist philosophy laid out in the 1960 manifesto *Metabolism: The Proposals for New Urbanism* produced by the Metabolism Movement to which Kurokawa belonged. Scholarship on the Metabolist Movement is often in conversation with International and Global Modernism and analyzed in comparison to Western architecture rather than as a unique cultural product of Japan’s post-war period. Architects belonging to the Metabolism Movement are not often explored individually and, instead, figures like Kenzo Tange are largely discussed to represent the entire group. This paper challenges these established notions by centering gender in the creation of the NCT and Kurokawa as an architect and arbiter of architectural thought.

The “salaryman” has gained significant scholarly attention since the 1970s as feminist theory has been integrated and popularized in the overall field of art and architectural history. However, architectural analysis incorporating a feminist or gender focus has been largely ignored in scholarship, especially when analyzing Modern Architecture. Feminist urban scholars have largely led the charge in discussing the

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gendered aspects of the built environment and called attention to the ways public and domestic spaces restrict female participation. Early discussions of the salaryman are dependent upon the role of the housewife as she is necessary in shaping this male identity, yet architectural analysis has failed in examining the spatial relationship between the housewife and urban architecture in maintaining the salaryman dynamic.

Japanese Metabolism

In 1960, Japanese architect Kenzo Tange revealed his *Plan for Tokyo, 1960—Toward a Structural Reorganization* at the World Design Congress in Tokyo which sought to regulate urban growth, traffic, and land shortages. Tange’s radical plan featured a linear series of interlocking loops expanding Tokyo across the bay and introduced the Metabolist idea of the “city as process” to the international architectural world [Figure 3]. International architects reacted overwhelmingly positively to Tange’s plan at the World Design Congress, which they saw as a radical architecture that “impose[d] a new physical order” challenging previous spatial models. European and North American modern architects had largely accepted and experimented with the idea of the building as a machine after Le Corbusier’s infamous claim in 1923 that “a house is a machine for living,” which guided modern architectural design for most of the twentieth century. Tange, along with a group of Japanese architects who called themselves the Metabolists, rejected Le Corbusier’s idea of likening a house to a machine and instead, likened the city to an organic process epitomized in their claim of the “city as process.”

Before Tange revealed his 1960 Tokyo Plan, the Metabolists published their design manifesto *Metabolism 1960—the Proposals for New Urbanism*, which laid out the “city as process” philosophy that cities, like biological processes, were unstable and dynamic, and needed to be reflected in the architecture. Although Tange was never named as a member of the group, he served as a mentor to the Metabolists, legitimized the group through his national standing in Japan, and implemented Metabolist philosophy in his *Tokyo Plan*. Japanese architects Kiyonori Kikutake, Masato Otaka, Fumihiko Maki, Noriaki Kurokawa, Kisho Kurokawa, and architectural critic Noboru Kawazor were among those professionals who belonged to the Metabolist movement and promoted Metabolist philosophy and design principles in their architecture and writings.

Beyond experimenting with form and urban plans, the Metabolists used modern architecture as a tool for nation-building to communicate with local and international audiences that Japan was prosperous, innovative, and modern. In this sense, “modern” can be understood as meaning industrially, technologically, and economically advanced. A desire to rebuild Japan emerged after the war with Europe, North America, and Egypt utilizing variations of modern architecture to achieve modernity status. For instance, Japan experimented with modern architecture as a nation-building tool in Tange’s Hiroshima Peace Memorial built after the war to honor Japanese history, promote nationalism, and serve as a symbol of modernity [Figure 3]. The NCT can be understood within this context—as a nation-building project that sought to celebrate Japan as a center of industry and modernity.

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Very few Metabolist projects were realized, but Kurokawa’s NCT was one of the few that manifested Metabolist ideas in its modular form, materials, and verticality. Kurokawa considered the modular boxes that makeup the living quarters as following the “city as process” philosophy, because he designed them to be replaced every twenty-five years to suit the growing, transformative nature of society and urban space. While modernists like Le Corbusier, Adolf Loos, and Walter Gropius explored the modular form in their architecture, they did not recognize architecture’s capacity to become obsolete due to the changing nature of society like the Metabolists foresaw.

The NCT used materials such as metal and reinforced concrete which were being used by global modernists during the 1970s as efficient, low-cost materials that produced strong buildings. The Metabolists used the same materials as other global modernists but appropriated them differently. Materials became one way to address the impermanence of structures. The Metabolists were extremely interested in the concepts of time and renewal, arguing for the replacement of capsules and their materials every twenty-five years to extend the capsule’s use. Impermanence, renewal, and adaptation are all concepts found in traditional Shinto and Buddhist philosophy widely practiced across Japan. Metabolists recognized the traditional element of time within structures like the NCT, but showcased it through a new, modernist form like the capsule.

Additionally, the verticality of the Tower is also very much in line with modernist skyscrapers appearing throughout the United States in the twentieth century. However, Metabolists saw the vertical structure as a tool primarily for urban growth. While skyscrapers like Daniel Burnham’s Fuller Building (1902) and William van Alen’s Chrysler Building (1931) were more interested in becoming a monument and defying heights through modern materials, the NCT was vertical so it could grow upwards to accommodate future capsules if needed. Together, the NCT’s modular form, materials, and verticality reflected the “city as process” thought and allowed the Metabolists to evolve modernist design principles for a major city like Tokyo. While Tange’s 1960 Plan put the Metabolists on the map with international modernist architects and critics, Kurokawa’s NCT cemented the group’s importance in the field by the mid-1970s.

**Housing the Salaryman and the Housewife**

Nam Utopian architecture developed as a post-war response across the world and sought to accommodate idealistic living conditions that created a sense of social, economic, and political equality. Mostly envisioned through suburban town planning, projects like Sayed Karim’s Nasr City in Cairo, Egypt (1960s) and Le Corbusier’s Unité d’Habitation in Marseilles, France (1952) were among two utopian models designed under a vision of urban renewal that uplifted communities through housing. Major projects took on a socialist tone, but many developed to suit a specific economic class and their material and social needs. While utopian architecture seeks to create nearly perfect conditions for its inhabitants, recent scholarship adopting a Marxist angle has addressed the ways it excludes lower socio-economic classes and promotes racial segregation.

Utopian architecture is characterized by its vision and ability to transgress a society through the building and its amenities, which Kurokawa practiced in his design of the NCT. However, rather than designing a utopian model that accommodated a general urban population in need of post-war housing, Torizō Watanabe, manager

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14 Kurokawa, *Metabolism In Architecture*, 105.
16 Kurokawa, *Metabolism In Architecture*, 105.
of the real estate company Nakagin Mansion Corporation, hired Kurokawa to create residential apartments that appealed to the growing “salaryman” role that, by the 1970s, became an aspirational model for Japanese society. Kurokawa, a master of functional design, used Watanabe’s commission to create a utopian model for Japan’s salarymen which he expected to act as a prototype for future housing developments.

The salaryman is a male Japanese white-collar worker; this figure developed in the mid-twentieth century, and the “salaryman” acted as the main financial support for his family. The post-war idea that a citizen should be useful to one’s economic society in service to the country manifested itself in the role of the salaryman, which allowed men to feel they were serving both their family and Japan. Kurokawa envisioned the NCT as a utopian space that accommodated the salaryman lifestyle. Corporations expected the salaryman to work long days to advance Japan’s economy—one considered to be thriving—and extend that motivation to the evening by meeting with coworkers and potential businessmen. These expectations resulted in the demand for structures like the NCT that sought to be a second home to the salaryman. Rather than commuting back into the suburbs after a long working day, he could instead own a convenient second home in the city, only a few blocks away from his office. The small, single living space of the NCT was convenient to the salaryman, providing an accessible place for him within the business district—where salarymen were overwhelmingly concentrated—to sleep and recharge for another day of supporting both Japan’s economy and his family.

The salaryman was strictly relegated to both urban space and a male body. Scholars have historically characterized the urban environment as “masculine” due to the concentration of men in power in its space. Shimbashi, the center of industry in the 1970s, fell into this masculine categorization. According to Tomoko Hidaka, the salaryman became the dominant paradigm of masculinity from the late 1960s until the bursting of the economic bubble in the 1990s, which shifted Japan’s societal constructs. Although women in various social classes—especially those occupying lower classes—worked throughout and after the war, stepping into roles previously occupied by men, women were ultimately dismissed as participants in Japan’s corporate work force in favor of relegating them to the home.

The “suburban housewife” developed in conjunction with the salaryman identity and served as the harmonious companion to the husband. In fact, Sociologist Daphne Spain argues that the housewife made the salaryman/breadwinner imagery possible, because it rendered women invisible in the home and made women reliant on men for economic stability. The salaryman was dependent on his wife for domestic responsibilities such as cleaning, childcare, cooking, and general home maintenance which prevented her from working outside of the home. Responsibilities in the home were not only restricted to housework but expanded into keeping the family’s budget and maintaining an understanding of general pricing to distribute income appropriately.

Marxist feminist scholars point out that the division of household labor by which men produce and women reproduce is at the center of the patriarchal capitalist city. While men’s labor is public, visible, and paid, women’s labor is private, invisible, and unpaid.

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21. The Nakagin Mansion Corporation is now known as the Nakagin Integration Co. and continues to operate as a real estate company based in Japan.
23. Molony, Theiss, and Choi, Gender in Modern East Asia, 421.
28. Molony, Theiss, & Choi, Gender in Modern East Asia, 422.
women’s household labor is private, invisible, and unpaid which reinforces gender inequalities in and out of home. Keeping the housewife restricted to the home through the salaryman/housewife relationship was socially and economically necessary to maintain men in power. By chasing a vision of utopian society that served men and capitalism, Kurokawa participated in the erasure of women from the urban space and reinforced the city as a place only for men in service to the economy.

The salaryman identity was also tied to the “nuclear family” model that developed as a hegemonic post-war response to familial structure across the world. The nuclear family framed the male as the “breadwinner” and dominant patriarch who had a wife and several children. In this way, men controlled both public (corporate work life) and private (domestic) spheres. Film, literature, television, and newspapers advertised the nuclear family model to lower and middle-classes as an aspirational family structure that mitigated post-war social and financial anxieties.\(^{30}\) Men and women turned to marriage and the ideal of the nuclear family for stability which society saw as moral and in line with contemporary societal norms.

Architects inscribed these gendered expectations associated with the salaryman and housewife on the urban and suburban landscape. With the salaryman in the urban environment and the housewife contained within the domestic environment, a gender-segregated society solidified. Molony, Theiss, and Choi argue that this gender-segregated environment that resulted from the separation of men in the public sphere from women relegated to the domestic sphere, transmitted the idea that “men were more productive than women in the workplace and that it was wasteful to squander men’s time in the home.”\(^{31}\) Such ideas did not emerge in the 1970s, but had their roots in Japanese history.

With the salaryman in the urban public sphere and the wife in the suburban domestic sphere, a gender-segregated society solidified that mirrored earlier societal structures of Japan’s Edo (1603–1867) and Meiji Periods (1868–1912). The two periods placed men in urban environments as leaders of the economy while women remained at home, framed as subordinate, supportive, and distant. Thus, the male/female dynamics in the salaryman/housewife relationship did not move away from former societal structures in a dramatic way and, instead, patriarchal relations in the private realm of the family remained a barrier to women’s public participation.

In the Edo Period (1615–1868), the city of Edo housed imperial men and their male entourage, while the Shogun displaced his wife and their children as a mode of control and a way to maintain servitude and obedience [Figure 5].\(^{32}\) Through this familial separation, Edo became a “city of men” which very much echoes 1970s Tokyo and its abundance of salarymen. The Edo Period also saw the introduction of Confucian social order which favored ideals of women in service to their husband, created a social hierarchy, and—above all—fostered loyalty and obedience to Japan.

A similar relationship of women in service to men continued to solidify during the Meiji Period (1868–1912) when the monarchy rebranded the female empress and the male emperor as the dominant example of a male/female relationship.\(^{33}\) Displayed on the national scale, this relationship sought to frame the wife as subordinate, supportive, distant, and as the ultimate counterpart to the husband. Inspired by the model of the imperial household, Japan embraced this idealized vision of a male/female relationship which was later solidified in the 1970s salaryman/housewife relationship and spatialized in modernist structures like the NCT.

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30 Brinton, Women and the Economic Miracle, 107.

31 Molony, Theiss, & Choi, Gender in Modern East Asia, 418.


Rejecting Women in the Nakagin Capsule Tower

Societal norms, as previously discussed, dictated that wives of salarymen were to be in the home and responsible for domestic labor. Middle-class women, especially the wives of salarymen, were not expected to work. Transferring the role of the housewife to a capsule within the NCT, the wife was unable to fulfill societal expectations. While early and contemporary feminist scholars continue to agree that gender is socially constructed, feminist urban scholars and sociologists also agree that space is socially constructed. According to Henri Lefebvre, spaces reflect social norms and embody gender relations.

The NCT's compact design did not functionally accommodate the housewife's childcare expectations. Middle-class societal norms dictated that salarymen's wives perform daily childcare in the home. Children who were not at school age were also confined to the household with the mother during the day, and their activities were dependent on what she had access to. Utopian housing models throughout the twentieth century considered this arrangement, adding various facilities to housing models that allowed women to both stimulate their children through physical activity and remain close to home. For instance, Le Corbusier's Unité d'Habitation in Marseilles, France (1952), was an early example of a utopian living model that suited middle-class families and prioritized an in-house childcare facility, playground, swimming pool, and roof terrace.

The NCT contained no social spaces or childcare facilities, suggesting that the space only wished to accommodate men. Earlier utopian housing models considered the need for childcare facilities. In-house childcare, playgrounds, swimming pools, communal spaces, and roof terraces allowed women to provide childcare outside of the home while remaining nearby. Because no such facilities existed in the NCT, the housewife may be tempted to seek childcare or social facilities within the city. However, the NCT's location in the business district limited access to public parks, museums, and social spaces. While the housewife may be tempted to seek childcare or social facilities within the city, the location of the NCT in the business district limits access to public parks, museums, and social spaces. The NCT failed to provide facilities and women who sought equivalent accommodations were often held back by the threats of urban life.

Sociologist Anne Imamura discusses the challenges and anxieties middle-class housewives faced while living in Tokyo's urban apartment complexes with children during 1977–1978. While urban modes of transportation were a particularly common challenge with children, the housewives mainly expressed fear over the perceived “dangers” of urban life due to the dominating male population. In particular, a fear of one's physical safety and the threat of sexual violence kept women from not only pursuing employment, but visiting urban areas.

Pay inequality further discouraged women from joining the workforce. The few women who did occupy positions within the corporate world remained limited to supporting administrative roles with no real path to a higher position. Women gained economic power and public presence through these roles, but nowhere near enough to challenge the male-dominated environment. Together, this multitude of fears inhibited how women interacted with the city and prevented them from pursuing employment and outside social activities.

An initial sketch of the capsule’s design may suggest how Kurokawa understood women’s role within the space [Figure 6]. This image, produced at the beginning stages of the NCT’s design, shows an interior sketch of a

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35 Lefebvre, *The Production of Space*, 68.


capsule and the inner hallway leading to the capsule’s entrance. A man is pictured reclining on the bed, his bare feet stretched outward and his hands behind his head as it rests upon a pillow. In the hallway, a woman walks up a set of stairs to presumably enter the capsule while wearing a dress fully covering her body and carrying a purse.

Both figures likely exist as tools to scale the viewer’s perception, but the woman’s behavior and location is markedly different from the man’s, showing a clear gender division. The woman is not enjoying the space like the man whose hands rest behind his head and spread out across the bed in a relaxed position. She is not even occupying the capsule and is depicted climbing the stairs rather than as present in the living space. It is unlikely that Kurokawa, under the gendered expectations of the 1970s, would have represented the woman lying in bed, avoidant of any domestic duties, in the way the male is depicted.

Conclusion

The salaryman/housewife relationship persisted as a perceived attainable middle-class dynamic in Japan until the 1990s when Japan’s economic crash changed social standards around who could work and caused Kurokawa, Metabolists, and Japanese modern architects to once again rethink urban housing. The NCT in the 1990s economy became obsolete and impractical as a place solely for salarymen which led to it being marketed for other uses beyond domestic space. It took a financial disaster for the NCT to advertise its space to other populations outside of the salaryman. When new residents did appear in the 1990s and 2000s, many of whom were female visual artists and musicians, they drastically changed the space’s defining elements, removing built-in cabinets and outdated technology. In many cases, residents removed the bed to accommodate dedicated studio spaces.

Kurokawa believed the NCT, as a utopian architecture, possessed the capacity to improve urban life. However, it preserved the salaryman/housewife relationship that maintained normative gender roles and prevented Japan from socially evolving to include women in their workforce. Thus, institutionalizing the legitimacy of gender inequality on a new modern architecture expected to rebuild Japan.

Metabolist philosophy adhered so closely to biological, mathematical, and scientific theories that gender went largely ignored as an element to consider by architects chiefly interested in challenging modernist theories, forms, and concepts. Too often modern utopian architectural projects respond to formal elements like material accessibility, mass production, and efficiency. Yet, they fail to anticipate changing societal relationships. The NCT complies with decades of institutional thought that restricts women to the home and maintains male power in the public sphere. The Nakagin Capsule Tower reveals how the built environment possessed the power to detract from women’s opportunities outside of the home during the 1970s, affecting how women lived their lives and the range of choices and possibilities open to them.

Bibliography


Figure 1: Kisho Kurokawa, Nakagin Capsule Tower, Tokyo, Japan, 1970-1972. Courtesy of Wiki Commons.
Figure 2: Kisho Kurokawa Architect & Associates, Interior design of capsule, Tokyo, Japan, 1970. Courtesy of Zhongjie Lin.

Figure 3: Kenzo Tange, Plan for Tokyo, 1960—Toward a Structural Reorganization, Tokyo, Japan, 1960. Courtesy of ArchEyes.
Figure 4: Kenzo Tange, Hiroshima Peace Memorial, Tokyo, Japan, 1945, photo by Yasuhiro Ishimoto. Courtesy of The Museum of Fine Arts Houston.

Figure 5: Folding Screen Depicting Only a Male Population at Edo Castle, Edo, Japan, 1847. Courtesy of National Museum of Natural History.
Figure 6: Kisho Kurokawa Architect & Associates, Original sketch by Kurokawa of the interior capsule design, Tokyo, Japan, 1970. Courtesy of Zhongjie Lin.