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Instant Communities, Machines for Living:

Danchi Apartments and the Production of Public Housing in Postwar Japan

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in History

by

John Lyman Leisure

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ABSTRACT OF THE DISSERTATION

Instant Communities, Machines for Living:

Danchi Apartments and the Production of Public Housing in Postwar Japan

by

John Lyman Leisure

Doctor of Philosophy in History

University of California, Los Angeles, 2021

Professor William Marotti, Chair

This dissertation examines the development of public apartment complexes built by municipal authorities and the Japan Housing Corporation after World War II. It addresses the questions: 1) Why was it in the postwar period that dwelling in multistory apartments became a normalized practice of everyday life in Japan? 2) How did the state emerge as a leading innovator of housing after the war? and 3) Who were the publics that housing policy was addressed to? This inquiry begins with the dehousing of urban areas in Japan by the United States Army Airforces during 1945 in which wooden domiciles of the working population were decimated. After the war, the Japanese government acted to coordinate the production and financing of houses to shelter surviving citizens. The first state-aided structures were rudimentary wooden dwellings referred to as overwinter housing. In the late 1940s, experimental multistory concrete apartments were developed at Takanawa and Toyamagahara in Tokyo.

During this period, municipalities throughout the archipelago began to develop residential *danchi*—large-scale housing tracts administered as single sites.

From 1947-1954, the construction of *danchi* apartments was driven by municipalities supported by local tax dollars and state-aid. In this period, the star house, flat, and terrace house—three basic types of concrete apartments—were developed. When the Japan Housing Corporation (JHC) was formed in 1955 it constructed these three basic types in large numbers throughout the archipelago. As a public corporation (kōdan), the Japan Housing Corporation was financed by state and private loans, building both apartments for rent and for sale. Apartments for rent were primarily constructed in and around major metropolitan areas. They became a media phenomenon in the late 1950s, and from that time on the word *danchi* was highly associated with the activities of the Japan Housing Corporation. Apartments administered under the Public Housing Law (1951) were intended for low-income earners, while JHC built danchi apartments were addressed to the middle-income segment of the working population. These apartments were gendered residential environments designed by men for efficient operation by full-time housewives charged with home keeping and childcare. The image that the Japan Housing Corporation worked to build was one in which danchi apartments were presented as modernized dwelling environments and crucibles for the postwar community, places to raise educated children who would be tomorrow's citizens.

The postwar construction of *danchi* and the preferential publics they sheltered can be seen within a longer history of the development of concrete apartments, both as a category and as a technology of dwelling. In Japan, multistory concrete apartments were first constructed on Hashima, an island off the coast of Nagasaki, in 1916 as a means of concentrating labor near the pit head of a coal mine operated by the Mitsubishi combine. After the Great Kantō Earthquake in

1923, state-aid and international donations allowed for the concentration of capital in the Dōjunkai Foundation, which was charged with building wooden and multistory concrete apartment housing in Tokyo and Yokohama. By the late 1930s, construction of new apartments ceased and public housing activities were folded into the Housing Corporation (*jūtaku eidan*) in 1941, which was tasked with expanding worker housing as it related to the war effort. Public housing built after 1945 both referred to and consolidated this technology, but embarked on a significantly new project: the nation-wide production of concrete apartment housing for public consumption.

Danchi apartments functioned as machines for living, while the danchi complex at large constituted an instant community. They were geared toward the rational management of everyday life and the biological reproduction of nuclear families. Aggregating urban dwellers, many of whom were strangers to each other, danchi were styled as residential tabula rasa on which an urban future for a postwar public could be written. By the 1970s, the postwar housing problem (sengo no jūtaku mondai), defined as a quantitative lack of dwellings, was overcome, but the economics of housing prevented a lasting solution. As the Japan Housing Corporation worked to increase the standard of living in newly built projects, it participated in an aesthetics of obsolescence and a politics of progress that made its earlier products appear less desirable. Rather than view danchi apartments as fundamentally in decline by the 1970s, a decade in which tens of thousands of units were produced yearly, this study casts them within cycles of obsolescence—the sequential deprecation and delegitimization of prior production that is immanent to the manufacture of new commodities.

Overall, this study is positioned within a global comparative register that considers architectural and urban planning discourse as it developed in the 19th and 20th centuries. Public

housing in Japan was not developed in a vacuum, but neither was it derivative of international forms and practices. Public housing in Japan responded to modern economic conditions, as well as the effects of war. These were global forces which no country was truly isolated from. In postwar Japan, *danchi* apartments were policy. They were modern projects that represented the state's attempt to reshape national everyday life and encourage the production of preferential publics—those who would live economically and be seen as the model citizens of Japan after 1945. *Danchi* apartments cemented a nation-wide trend toward high-rise living and the partitioning of people through the space of the apartment. A trend that began after World War II and has not yet ended.

The dissertation of John Lyman Leisure is approved.

Katsuya Hirano

Robin Davis Gibran Kelley

Dana Cuff

William Marotti, Committee Chair

University of California, Los Angeles

2021

To all those in search of affordable housing

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Biographical Sketch

John Lyman Leisure holds a B.A. in History and Political Science from the University of Southern California, an M.A. in Regional Studies East Asia from Columbia University, and an M.A. in History from the University of California, Los Angeles. He was a Fulbright Fellow at Kanazawa University and a Visiting Researcher at Kogakuin University in Japan. He has been the recipient of numerous fellowships, including those from the Japan Foundation and the Nippon Foundation. In recent months, he presented on "Constructing Housing Culture: From MoMA's Japanese Exhibition House to the Cold War Kitchen (1954-1959)" at the Association for Asian Studies annual conference, and "A Crisis of Shelter: Urban Destruction and Public Housing in 1940's Japan" at the University of Southern California.

"A house is a machine for living in. Baths, sun, hot water, cold water, controlled temperature, food conservation, hygiene, beauty through proportion." –Le Corbusier, <i>Toward an Architecture</i>
"Some people curse [these apartments] saying they're like a wall of chicken coops. But then again, there are many who move in here thinking they've arrived in heaven. Within each and every window, a working home." -Nishiyama Uzō, <i>Nihon no sumai, Vol. 1</i>
"Everyday life is the supreme court where wisdom, knowledge and power are brought to judgement." –Henri Lefebvre, <i>Critique of Everyday Life, Vol.1</i>

Introduction: Instant Communities, Machines for Living

"As soon as the *danchi* apartments are built the move-ins begin. A town of 1,000 units or 2,000 units rises in a single day. Yesterday nobody knew each other. Then, in an instant, they came together and created a new community." *Umarekuru jūtaku to toshi*, Nihon jūtaku kōdan (1960)

This dissertation examines the role state investments in large-scale public apartment complexes played in reshaping the contours of everyday life in Japan after World War II. In less than twenty years after the end of the war, multistory concrete apartments transformed what it meant to dwell in metropolitan areas. As one and two-story wooden residences ceded space to stacked concrete, homes in urban areas were transformed as units in buildings rather than as structures unto themselves. Lifeways structured by the close proximity of sliding front-doors to streets and alleyways were made to flow between cylinder-locks and staircases. Emerging out of bootstrapped experimental projects in the late 1940s, public apartments—typified by large-scale scale communities referred to as *danchi*—became the most visible marker of the vertical and horizontal expansion of urban areas in postwar Japan. The production of public apartment housing in the postwar was a national project with local inflection. Spurred by state money with strings attached to design objectives, concrete projects touched scores of cities throughout the archipelago. Metropolitan areas like Tokyo and Osaka, as well as smaller regional cities like Tottori on the southwestern side of Honshū, received public investment through residential infrastructure. Said differently, public projects were not limited to large population centers along the relatively more prosperous, albeit recently decimated, eastern seaboard, but were geographically dispersed in their application.

-

¹ Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan nenpō '70* (Tōkyō: Nihon jūtaku kōdan, 1970), 69. Refer to figure labeled "todōfuken-betsu jūtaku kensetsu kosū." Tottori minsei-ka jūtaku kakari, "Shiei jūtaku ichiran hyō," 1954, Box 208, Folder 001251, Uzō Nishiyama Memorial Library, Kyoto, Japan. Labeled as Tottori shiei jūtaku zumen.

While not everyone lived in public housing, large-scale apartment complexes came to symbolize a higher standard of living and a return to growth in the postwar era. The production of danchi was a principle means by which the state maintained domestic security while fostering the national economy in the first two decades after 1945.² Danchi—a planning term which refers to a tract of land administered as a single site—over time became highly associated with the materiality of rectilinear concrete apartments and the people who lived in them (the so-called danchi-zoku or danchi tribe). Danchi has often been translated into English as "the projects," which attempts to create a fraternity between similar-type public housing schemes developed in countries, such as the United States, Brazil, France, and the former Soviet Union, evoking both the potential and the pitfalls of these attempts to engineer society at the scale of the city or what Kenny Cupers refers to as "the social project." As the definition of *danchi* has evolved over time, from a technical term in the early postwar, to a nation-wide cultural phenomenon in the late 1950s, to a 21st century social problem centered on an aging society and urban decay, a convenient gloss such as "the projects" or "apartment complex" fails to capture important historical shifts in both its meaning and its application in urban areas in Japan. In this study, I seek to provide a more capacious understanding of danchi. I treat danchi not only as land or the apartments on that land, but also as a technique of spatialization geared toward expanding cities and ordering resident populations.

Danchi were the postwar state's unfinished business. 5 When the crisis of food and

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² Cf. Laura Neitzel, *The Life We Longed for: Danchi Housing and the Middle Class Dream in Postwar Japan* (Portland: MerwinAsia, 2015), 22.

³ Murakami Sachiko, "Atarashiki shomin 'danchi-zoku': apāto sumai no kurashi no techō," *Shūkan Asahi* (20 July 1958). Cf. Neitzel, *The Life We Longed For*, xiv. See also, note 5, Neitzel, *The Life We Longed For*, 24; and 35-36.

⁴ Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis: University of Minnesota Press, 2014), xii.

⁵ Cf. Neitzel, *The Life We Longed For*, 22.

clothing following the war abated in the early 1950s, it was housing that remained a grave concern.⁶ The so-called postwar housing problem (*sengo no jūtaku mondai*) was more than the identification of a statistical shortfall in the number of available dwellings compared to the number of families in need of a house.⁷ It stood in for an hydra-headed state project that aimed to address a lack, not just of dwellings, but of a firm bond between the people (as subjects) and the state as the legitimate purveyor of national, sovereign space. *Danchi* were a means of enacting a settlement procedure, a process in which housing served as a mechanism for defining residential territory and building communities in an effort to shelter a preferential public—economically and biologically active people whose domestic education was guided by the state. In relation to state authority, this postwar settlement procedure was different than settler colonialism under empire.⁸ The construction of *danchi* apartments occurred within the bounds of the nation-state as defined by the terms of surrender following the Potsdam Declaration.⁹ Those displaced by or excluded

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 $^{^6}$ Kensetsushō jūtaku-kyoku, $J\bar{u}taku$ nenkan (Tōkyō: Shōkokusha, 1951), 41. The report notes that on a relative basis, the stabilization (antei) of housing ($j\bar{u}$) was the most deficient. See also Kensetsushō jūtaku-kyoku, $J\bar{u}taku$ kensetsu yōran (Tōkyō: Nihon kenchiku gakkai, 1953), jobun.

⁷ Kensetsushō jūtaku-kyoku, *Jūtaku nenkan* (Tōkyō: Shōkokusha, 1951), 41. The Ministry of Construction provides an explanation of housing difficulties (*jūtaku-nan*) and the housing problem (*jūtaku mondai*). The discussion that continues through the book frames the postwar housing problem. See also Ann Waswo, *Housing in Postwar Japan: A Social History* (London: RoutledgeCurzon, 2002). 46. When including houses destroyed in the air raids and returnees from abroad, the estimated lack of dwellings was 4.2 million units.

⁸ For more on settler colonialism as it concerns Japan, see Sidney Xu Lu, *The Making of Japanese Settler Colonialism: Malthusianism and Trans-Pacific Migration, 1861-1961* (Cambridge, UK: Cambridge University Press, 2019). Katsuya Hirano, "Thanatopolitics in the Making of Japan's Hokkaido: Settler Colonialism and Primitive Accumulation," *Critical Historical Studies* 2, no. 2 (Fall 2015): 191–218. Tristan R. Grunow et al., "Hokkaidō 150: Settler Colonialism and Indigeneity in Modern Japan and Beyond," *Critical Asian Studies* 51, no. 4 (October 2, 2019): 597–636.

⁹ "Potsdam Declaration: Proclamation Defining Terms for Japanese Surrender," July 26, 1945, accessed July 8, 2021, https://www.ndl.go.jp/constitution/e/etc/c06.html. Point 8 of the declaration makes explicit that "The terms of the Cairo Declaration shall be carried out and Japanese sovereignty shall be limited to the islands of Honshu, Hokkaido, Kyushu, Shikoku and such other minor islands as we determine." See also "The Cairo Declaration," November 26, 1943, History and Public Policy Program Digital Archive, Foreign Relations of the United States, Diplomatic Papers, The Conferences at Cairo and Tehran, 1943 (Washington, DC: United States Government Printing Office, 1961), 448-449. https://digitalarchive.wilsoncenter.org/document/122101

from *danchi* were other members of the population already assumed to be within the sovereign purview of the state. Public apartment complexes did not pave over native populations or foreign residents so much as they stood against other forms of community that were already composed of people considered to be citizens. The goal of the *danchi* as a settlement procedure was to structure residential communities and everyday life in such a way that it was generative of a domesticated public—the state's preferred subjects—people whose everyday life was structured according to principles of economy in dwelling and domestic hygiene. *Danchi* were sites of accumulation both physically and fiscally, concentrating productive bodies and their economic potential. As a technique of spatialization, *danchi* acted to overcode forest land, military bases, agricultural fields, and other forms of housing, turning them into a new type of territory—a modernized residential community. When this happened, the former uses and users of the land were superseded by the transplanted public.

Danchi names the spatial arrangement of a residential community developed according to a plan that rationalizes construction activities, site layout, unit design, administration, and resident subscription with an eye toward economies of scale. While a danchi (the tract) was typologically agnostic, meaning that the site could be used for detached single-family homes, two-story terrace houses or multistory concrete apartments, the word danchi is often invoked in popular media as a metonym for concrete apartments built by the Japan Housing Corporation after 1955. As Laura Neitzel has observed, the form and materiality of the JHC danchi, epitomized by the 2DK (two rooms plus dining kitchen) unit and the consumer goods that filled it, anchored the aspirations of the postwar middle class. During the 1950s and 1960s, many in Japan longed for a danchi-modern life centered on the trendsetting dining kitchen and the class

 $^{^{10}}$ Cf. Kensetsushō jūtaku-kyoku, $J\bar{u}taku$ kensetsu yōran, 25. See also page 1, Jūtaku-chi kaihatsu no igi.

status that it conveyed. This conceptualization has shaped an understanding of housing practices not only for those who lived in the first few decades of the postwar, but also for present audiences. *Danchi* is a word that evokes the memory and life of this time. The June 2016 issue of *Tōkyōjin* magazine, for instance, featured "tōkyō natsukashi no danchi" (Tokyo nostalgic *danchi*), describing them as "akogare no raifusutairu" (a dreamy lifestyle). While many of the actually built concrete structures have reached the end of their architectural lifespan or decayed due to under-investment, the word *danchi* still functions today a marker for the memory of those postwar golden years—the *kōdo keizai seichō*—a period of high speed economic growth in which Gross National Product (GNP) rocketed upward. Those who long for these golden years express a fondness not only for the *danchi* lifestyle, but also for a time in the past when growth still seemed possible. Amidst contemporary rhetoric of "an aging society," "economic stagnation," "the lost decades," and "the rise of China," aspirations have been temporally displaced to the fecund soil of these *danchi* decades where hope blossomed.

Mass Destruction: A Prelude to Postwar Housing

As I argue below, the widespread destruction of homes in Japan throughout 1945 resulted from dehousing as both a strategy and practice that aimed to decimate the urban workforce and

¹¹ Cf. Neitzel, *The Life We Longed For*, xiv; 133.

¹² "Tōkyō natsukashi no danchi," *Tōkyōjin*, no. 371 (June 2016), mokuji.

¹³ "T9 kōdo keizai seichōki no tōkyō hibarigaoka danchi," Edo-Tōkyō hakubutsukan, 5F, accessed July 8, 2021, https://www.edo-tokyo-museum.or.jp/p-exhibition/5f. See also, Neitzel, *The Life We Longed For*, 131.

¹⁴ This idea is dramatized in the fictional film *Umi yori mo mada fukaku* [After the Storm], dir. Koreeda Hirokazu (Tōkyō: AOI Pro., 2016). The main character Shinoda Ryōta (Abe Hiroshi) returns to the Asahigaoka Danchi where he attempts to reconnect with his family, including his aging mother, estranged wife, and son.

¹⁵ See "The lost decade," in Naoki Abe, "Japan's Shrinking Economy," *The Brookings Institution*, February 12, 2010), accessed July 8, 2021, https://www.brookings.edu/opinions/japans-shrinking-economy/. See also feature section, "Aging Society," *The Japan Times*, accessed July 8, 2021, https://www.japantimes.co.jp/tag/aging-society/. See also Nicholas D. Kristof, "The Rise of China," *Foreign Affairs* (November/December 1993), https://www.foreignaffairs.com/articles/asia/1993-12-01/rise-china.

destroy the industrial potential of the imperial war machine without regard for human life. Best understood as a thanatopolitics of housing, dehousing inverted the relationship between domestic space and life—turning homes from life-supporting spaces into life-taking spaces. Early postwar housing policy attempted to counteract the effects of dehousing by designing housing to shelter the population at scale, while encouraging the return of wage workers to urban areas. Although housing policy and actually built units in the late 1940s did not solve absolutely for a crisis of shelter, they manifested the state's attempt to grab hold of the population through residential space and the structure of everyday life in an effort to promote domestic security.

From March to August 1945, the United States Army Air Forces (USAAF) incendiary bombing campaigns destroyed large swaths of residential infrastructure throughout the archipelago, particularly in urban areas. Housing was not just collateral damage during the war, it was the prime target of low-altitude firebombing runs that visited thousands of M69 napalm bombs on the rooftops of wooden residences. Achieving military supremacy in Japan was predicated on dehousing, a practice in which residents were targeted by way of the residence. As understood by the Committee of Operations Analysts, the Japanese imperial war machine relied on sprawling networks of urban residences for the "production of war materials." Destroying a house meant destroying a workshop of war. It was also an indirect means of dislocating, disabling, and murdering labor employed within the home or at other sites throughout the city. As Thomas R. Searle has emphasized, military strategists at the time reasoned that "it made a lot of sense to kill skilled workers." Reframing members of the civilian population as agents of war production allowed the USAAF to deploy its air strategy in a completely new way. As E.

¹⁶ Committee of Operations Analysts, Report of Committee of Operations Analysts (November 11, 1943),

¹⁷ Thomas R. Searle, "It Made a Lot of Sense to Kill Skilled Workers," *Journal of Military History* 66, no.1 (January 2002): 118.

Bartlett Kerr's extensive analysis of the firebombing in *Flames Over Tokyo* details, the destruction of homes was part of a fundamental shift in USAAF tactics that moved from the precision targeting of military installations and large-scale manufacturing facilities to the carpet bombing of urban areas. The March 9-10 air raid over Tokyo, one of the deadliest of the entire war, destroyed more than 267,000 homes, killed at least 85,000 people, and left more than 1,000,000 homeless.

What intelligence gathering activities on both sides of the attack made visible was housing as a specific dimension of modern cities. As the occupation of Japan began in late 1945, reports produced by the United States Strategic Bombing Survey (USSBS) attempted to prove statistically what seemed to have been proven practically—that decimating domiciles had reduced the enemy other's ability to wage war. Even if the atomic bombs dropped on Hiroshima and Nagasaki in August 1945 facilitated a demand for unconditional surrender, they were well within an overall strategy of area bombing and dehousing. What reports like the USSBS Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947) evidence is that successive air raids on urban areas throughout the archipelago did more conventionally what atomic weapons did efficiently and instantaneously: destroy urban areas and kill, maim, and dehouse the resident population. It was the overlay of flammability and productivity that made housing such a convincing target. Urban intelligence gathering activities for the war made it possible to characterize congested residential areas as sites of industry, then, as David Fedman and Cary Karacas detailed in "A

¹⁸ E. Bartlett Kerr, *Flames over Tokyo: The U.S. Army Air Force's Incendiary Campaign against Japan, 1944-1945* (New York: D.I. Fine, 1991), 44.

¹⁹ Kerr, Flames Over Tokyo, 6.

²⁰ See "Atomic Energy: The Technical Facts," in *New Republic* 122, no. 14 (April 3, 1950): 6-7. Note this is a special section; page numbering starts from 1.

²¹ See United States Strategic Bombing Survey, Urban Areas Division, *Effects of Air Attack on Osaka-Kobe-Kyoto* (June 1947). Also referred to as USSBS no. 58.

cartographic fade to black," the USAAF used aerial reconnaissance photography to map these areas and assign them a flammability score.²² Produced in November 1942, the Office of Strategic Services' (OSS) *Tokyo—Inflammable Areas* (Map no. 877) shows how sections of the city were abstracted and made legible based on the degree to which they were likely to burn.²³

It is no coincidence that the areas with the highest flammability, labeled as Asakusa-ku, Honjo-ku, Fukagawa-ku, Nihonbashi-ku, and Kyobashi-ku, were also "the city's working class and artisan [shitamachi] district[s and] the same area that fires had destroyed as a result of the Great Kantō Earthquake" in 1923.²⁴ Underinvestment in these places and the people within them made Tokyo as a whole vulnerable. As they became kindling for USAAF incendiary devices, urban neighborhoods were transmuted from sources of labor to a domestic threat. Targeting poverty—poor housing and the urban working class—became a vehicle for victory in the Pacific. The density of dwellings, overcrowding, and wooden construction meant that clusters of M69s would be highly effective against urban homes, creating uncontrollable conflagrations similar to those that occurred in the wake of the Great Kantō Earthquake. From the perspective of the USAAF, the destruction of Tokyo on March 9-10, 1945 was so successful that firebombing tactics developed by Major General Curtis E. LeMay became the model for obliterating scores of cities beyond Tokyo, including major industrial hubs like Osaka, Nagoya, and Kobe.

The mass destruction of urban areas in Japan was more than a shock and awe campaign designed to hasten surrender, revealing that housing was a vein of vulnerability that ran throughout the nation. In the lead up to the attacks, housing, which was made visible and

²² David Fedman, Cary Karacas, "A cartographic fade to black," *Journal of Historical Geography* 38 (2012): 306-328, https://doi.org/10.1016/j.jhg.2012.02.004.

²³ Fedman and Karacas, "A cartographic fade to black," 313.

²⁴ Refer to area names on Map no. 877. See Fedman and Karacas, "A cartographic fade to black," 313. See also Edward Seidensticker, *Low City, High City: Tokyo from Edo to the Earthquake* (New York: Alfred A. Knopf, 1983), 2.

intelligible through logics of health, economy, and geography, emerged as vital infrastructure that mattered for both the nation and the imperial war machine. As I argue, framing homes as critical infrastructure enabled their incorporation into a wartime thanatopolitics of housing.²⁵ On the side of the Allies, a thanatopolitics of housing manifested as both the rhetoric and practice of dehousing—the destruction of residences without regard for the life of the residents. The mass production of B-29s and M69s in America translated into the mass destruction of urban domiciles and people in Japan. Quantitative incineration, fanned by logics of elimination aimed at working class residents and poor housing conditions, meant that a wartime thanatopolitics of housing also named a calculus of destruction the limit of which was the total obliteration of the enemy other. This helps explain why firebombing campaigns did not stop at major industrial areas, but involved the systematic scorching of cities throughout the archipelago. On the side of the Other, a thanatopolitics of housing meant exposing the domestic population to death for the duration of the war. By making urban residences and their residents part of the imperial war machine through production activities, the wartime Japanese state committed civilians—as much as kamikaze pilots—to death in the name of preserving the nation and defending the sacrosanct body of the emperor. At war's end, what soldiers and returnees from other spaces of the empire met with was a crisis of shelter—a domestic wasteland in which the destruction of domiciles reduced millions to a condition of extreme precarity.

As the Occupation of Japan began in late 1945, addressing a crisis of shelter catalyzed by the war became an avenue for the Japanese state to reassert its authority over the people who remained through housing. The signifier $j\bar{u}$ (\pm) functioned rhetorically to call attention to shelter

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 $^{^{25}}$ The concept of than atopolitics as it concerns dehousing during the war is given further treatment in Chapter 1.

(housing) as a fundamental structure necessary for human survival. The stability of everyday life and the preservation of national order became a key objective for the Japanese government, even as the Supreme Commander for the Allied Powers (SCAP) General Douglas MacArthur and General Headquarters (GHQ) pursued war crimes trials and rewriting the constitution. Said differently, while GHQ/SCAP focused on dismantling the imperial war machine, culling personnel, and rethinking the ideology of postwar governance, it largely left housing policy and rehousing activities up to domestic experts and the Japanese state. While SCAP did order the dissolution of the Housing Corporation (jūtaku eidan), which had been responsible for building homes for wartime workers and their families, this had the effect of stimulating rather than restricting rehousing activities. After the Housing Corporation was dissolved, municipalities funded by state-aid and local tax receipts emerged as leaders in home construction technology. When the Ministry of Construction was established in 1948, it acted to help consolidate housing technology by authoring manuals and guidebooks, as well as directing resources to the creation of standardized plans.

Housing the Nation after War

As explored in Chapter 2, much of the fundamental technology for *danchi* site planning and rectilinear concrete apartment buildings, including the construction of lived-in prototypes, was developed during the Occupation.²⁷ Unlike the Great Kantō Earthquake of 1923, which mainly effected Tokyo and Yokohama, the USAAF incendiary bombing campaigns delivered nation-wide destruction that prompted nation-wide reconstruction. When including

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²⁶ Cf. Neitzel, *The Life We Longed For*, 6.

²⁷ Notable instances of apartment construction and community development before the war (what I refer to in Chapter 2 as precursors) included the activities of the Mitsubishi combine on Hashima (Gunkanjima) and the activities of the Dōjunkai Foundation, discussed below. However, it is important to emphasize that the overall form of these communities, as well as their social structures and policy frameworks were different from postwar public housing programs.

superannuated structures and demand from returnees, in addition to houses that had been destroyed during the war, the estimated national need for housing was 4.2 million units.²⁸

Because the firebombing had disproportionately targeted urban areas and working class housing, public programs were aimed at quantitative rehousing and the return of the working population to city centers. The rationalized production and placement of wooden houses at scale on comprehensively designed tracts like the Suminodō Danchi in Osaka became the basis for doing the same with apartments as the government shifted investment to the construction of multistory rectilinear concrete buildings. After apartment prototypes at Takanawa (1948) and Toyamagahara (1949) in Tokyo proved viable, cities throughout the archipelago participated in the construction of *danchi*-type concrete apartment housing.

Who got housing or housing financing and on what terms was given legal definition by the Housing Finance Bank Law (*jūtaku kinyū kōkohō*) in 1950 and the Public Housing Law (*kōei jūtakuhō*) in 1951, shortly before the Occupation formally ended.²⁹ When the Japan Housing Corporation Law (*nihon jūtaku kōdanhō*) was promulgated in 1955 (after the Occupation), creating a public corporation that would be the institutional successor to the defunct Housing Corporation (*jūtaku eidan*), technology for the creation of *danchi* (here referring to the housing tract and apartment buildings) was already in place. What the Japan Housing Corporation (JHC) did was shift the constituency of *danchi* apartments by creating higher end units, raising rents, and leveraging mass production for the provisioning of equipment and furnishings.³⁰ Unlike municipalities, the Japan Housing Corporation was able to produce its products—reinforced

²⁸ Waswo, *Housing in Postwar Japan*, 46. See also Hisaakira Kano, "Public Housing in Japan," *Annals of Public and Cooperative Economics* 30, no. 1 (1959): 76.

²⁹ See Waswo, *Housing in Postwar Japan*, 51-57.

³⁰ JHC apartments were more expensive than similar type housing regulated by the Public Housing Law (1951), but could still be seen as affordable for the middle-income segment of the population that was its target constituency. Cf. Neitzel, *The Life We Longed For*, xiv.

concrete apartment communities—throughout the archipelago and stamp them with the Corporation's easily recognizable logo $(j\bar{u})$ house.³¹



Fig. 1: Logo, Japan Housing Corporation.

The JHC further developed national brand awareness through extensive photographic projects that imagined a confraternity of residents in an attempt to create a sense of togetherness despite the gargantuan and geographically disperse communities it built. Corporation housing (kōdan jūtaku) was intended for middle-income families who were trumpeted as model citizens for a "new Japan." JHC danchi residents were encouraged to be financially and biologically active, keep tidy modern homes, and hold white-collar jobs. Almost ten years after the war, Japan Housing Corporation apartments became the bedrock of a social future that was addressed to

 $^{^{31}}$ Note that the logo, a stylized 住 ($j\bar{u}$), resembles a multistory apartment building. Nihon jūtaku kōdan kankō iinkai, *Nihon jūtaku kōdan shi* (Tōkyō: Nihon jūtaku kōdan, 1981), 416. n.b. The editor attribution in the *Nihon jūtaku kōdan shi* is misprinted as Nihon jūtaku kōdan shi 20-nenshi kankō iinkai. It should read Nihon jūtaku kōdan shi kankō iinkai. The 20-nenshi is the previous version of this history published in 1975.

³² Kano, "Public Housing in Japan," 77.

national growth. *Danchi* were the manifestation of domestic order, monuments to the sate's progress in overcoming poor housing conditions as it constructed new forms of everyday life for postwar citizens.

Looking at housing in Japan from 1945 through the creation of the Japan Housing Corporation in 1955, it is possible to see that *danchi* were developed as social structures used to ensure the ordered spatial distribution of the national community. Bodies, families, houses, and community space were arranged according to principles like *shokushin-bunri* (the separation of eating and sleeping) and *shūshin-bunri* (the separation of sleeping rooms).³³ Houses, as units in buildings, were standardized and separated by fireproof concrete walls, while *danchi*, as sites of community formation, concentrated thousands of people in a regularized way. While Japan as a whole could be considered a modern nation, there was a perception among experts that the domestic environment—built units of housing and housing communities—lagged behind in terms of development. Paradoxically, increases in the standard of living, which were predicated on the setting of such standards in the first place, enabled the identification of whole areas that now appeared as backward or feudalistic (*hōkenteki*).³⁴ As the lecture series *Asu no jūtaku to toshi* (Houses and Cities of Tomorrow) attempted to make clear to people in the late 1940s, modernized dwelling was both a mode of conduct and an object of postwar government.³⁵ If the

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³³ The concepts *shokushin-bunri* (食寝分離) and *shūshin-bunri* (就寝分離) were advanced by Nishiyama Uzō and led to spatial changes in the home. See "Shokushin-bunri The Separation of Eating and Sleeping Rooms," Dai Nippon Printing Co., https://artscape.jp/artword/index.php/食寝分離, accessed July 24, 2021.

³⁴ What is meant here by "backward" and "feudalistic" are modes of perceptibility not real conditions. These are pejorative terms used by planners and modernizers to describe the intended objects of modernization. As I discuss below, modernization was subtended by a politics (and aesthetics) of housing which allowed for the visual identification of and passing of judgement on types of housing and human communities based on the way these appeared to modernizers (often persons of authority or subject matter experts).

³⁵ Kensetsushō, Asu no jūtaku to toshi (Tōkyō: Shōkokusha, 1949).

firebombing had been a material assault on houses in Japan, the *Houses and Cities of Tomorrow* lecture series, supported by SCAP's Civil Information and Education Division (CIE), was indicative of an epistemological assault on what remained. Honing in on a pedagogy of postwar domesticity, experts sought to instruct people throughout the archipelago on how to live and how to prepare for changes in their everyday life.

Some, like Nishiyama Uzō, an architect, planner, and academic, approached this task with a genuine desire to help people and liberate them from unhealthy and inhumane living conditions that had persisted for decades in urban areas. Nishiyama's work was motivated by a critique of capitalism and a commitment to designing decent and dignified dwellings for the working class. Others who participated in the lectures, such as the architect and academic Tange Kenzō, tended to see inferior dwellings as housing inferior people who lacked developmental willpower. For instance, he observed that the people of Tōhoku were basically "living like animals," and told them so directly.³⁶ For Tange, households and household behaviors in Tōhoku reeked of feudalism: residents were living anachronisms, people out of place in time who needed to synchronize themselves to the modern movement by reforming their homes and communities.³⁷ In Tange's view, expert planned dwellings and community space were antithetical to the kind of residential situation found in Tōhoku.

While *danchi* were primarily addressed to urban areas and their peripheries, they were part of a quest to order both the postwar residence and the residential community. Concrete apartments, as dwelling units, epitomized modernized living space, while rectilinear apartment

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³⁶ Kensetsushō, Asu no jūtaku to toshi, 83.

³⁷ Tōhoku (northeastern Japan) has been and continues to be a target of modernization campaigns and is seen by many as a more "rural" area that exists at variance with the standards set by Tokyo. The point here is that as housing standards, new types of housing, and new models for idealized communities were established in the postwar they became another means for dehumanizing and discriminating against people in places like Tōhoku in the name of national progress.

buildings and their barrack like arrangement stood in for modernized community space. As featured in the 1952 film *Seishun no sekkei* (A Plan for Youth), public apartments were presented as bright and joyful spaces where cutting-edge features like the system-kitchen and dust chutes enabled the efficient performance of everyday life.³⁸ These apartments were meant to appeal to young families who would live, work, and raise children according to principles of economy in dwelling.³⁹ In building public apartments, the postwar state aimed to make a double intervention, seeking to promote domestic security while generating a preferential public. By design, *danchi* communities promoted an everyday life centered on principles of modern industry, human health, and moral hygiene with the aim of producing subjects who were agents of affluence.⁴⁰ In this sense, statistics alone do not adequately convey the significance of *danchi* as urban interventions that sought to generate and regulate national life. Seen at an aggregate level, *danchi* apartment units were never more than around 10% of the national housing stock during the first 20 years of production. This figure neglects that *danchi* inaugurated a paradigm shift in postwar domesticity, shaping young families and heralding a new category of community.⁴¹

The architecture and design technology that helped to produce *danchi* apartments subtended a postwar politics of housing that framed public apartment complexes as communities composed of modern homes and modernized residents. That postwar *danchi* were typologically

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³⁸ Seishun no sekkei. Nihon jūtaku kyōkai (Tōkyō: 1952)

³⁹ Cf. Neitzel, *The Life We Longed For*, xvi. As Neitzel notes, "Media and government designations of the young nuclear families in their bright, modern *danchi* apartments as 'vanguards' of postwar change would have their effects, helping to 'fix meanings,' and reestablish normative ideals of the postwar family and home." What I am emphasizing here is that concrete apartments constructed under the Public Housing Law (1951) also participated in constructing images of postwar domesticity several years before the Japan Housing Corporation was established and the word *danchi* was popularized. In retrospect it is possible to see the concrete apartments presented in A Plan for Youth (1952) as *danchi*, although at the time they would have been described as kōei jūtaku (public housing) or *konkurīto apāto*.

⁴⁰ As opposed to preexisting vernacular communities, such as the one Tange identified in northeastern Japan (Tōhoku). n.b. the *danchi* bring order to both the space and the people within.

⁴¹ Before the late 1940s, concrete apartments were almost non-existent outside of Tokyo and Yokohama. The major exception being Hashima (Gunkanjima).

distinct from the earlier Dojunkai apartments and appeared as a new form of housing had a tremendous impact on setting models and modes of dwelling that still persist in the residential built environment of Japan to this day. For instance, the basic nomenclature for describing interior domestic space in terms of the number of rooms and room functions (e.g. 1K, 2DK, 3LDK) is still used for coding living space in Japan.⁴² Said differently, the epistemic intervention pushed by public projects exists over and above the number of units built in the early postwar. The images and discourse of *danchi* have proliferated in excess of the actual number of people who lived in these apartments meaning that the *danchi*-modern has become part of a nationalimaginary. In the early postwar, these images helped mediate the passage of citizens from a state of extreme precarity to postwar affluence as they overcame a crisis of shelter. While some experienced the danchi directly, others were second-degree modernizers. As magazines like Shufu no tomo (Housewife's Friend) and Modern Living illustrate, there was a general movement to model, and even exceed, the kind of rationalized kitchen space and other forms of domestic order that were made visible by trendsetting public apartments.⁴³ It was never the state's goal to turn every last inch of the archipelago into danchi. As they developed under the stewardship of the Liberal Democratic Party (established in late 1955), public apartment complexes, particularly those built by the Japan Housing Corporation, became hotbeds for the cultivation of human capital: entrepreneurial subjects who were the producer-consumers of a "new Japan." Raising

⁴² Nihon jūtaku kōdan sōmu-bu sōmu-ka, Nihon jūtaku kōdan nenpō '59 (Tōkyō: Nihon jūtaku kōdan, 1959),103. Refer to legend at bottom of page for explanation of the JHC's coding system. See also, Neitzel, *The Life We Longed For*, xv.

⁴³ See, for instance, *Modern Living* 13 (Tōkyō: Fujingahō, 1956); refer to advertisement for Sunwave stainless steel sink (front matter) and feature section on apartment living beginning on page 133. See also, "Daidokoro wo kōshite benri ni," *Shufu no tomo* (October 1959), 36-37.

⁴⁴ By entrepreneurial, I am referring here to the production of the self, rather than the founding of a business or corporation. The entrepreneurial subject—aspirational and highly motivated—is opposed to the allegedly backward others who appear to lack developmental willpower. See Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979*, ed. Michel Senellart, François Ewald,

the quality of the standard person, as much as raising the standard of living, was a goal for the postwar state. ⁴⁵ From the perspective of postwar planners, houses ordered according to prewar spatial arrangements were no longer capable of fostering the kind of developmentally-inclined subjects that the state desired for global economic competition after empire. Municipal public housing programs, and especially the Japan Housing Corporation, endeavored to show that, in the postwar, Japan, as a nation, was capable of producing modernized people. Its chief instrument was the concrete apartment community.

Concrete Structures

Conceptually, a multistory apartment building is a regularized arrangement of household space structured as units within a building (the superstructure), rather than as detached dwellings. The floors of the building constitute layers of artificial ground on which units rest. Stacking layers leads to the vertical extrusion of residential space, while planning and standardization ensures that the production of multiple layers does not occur haphazardly. In conjunction, overall site planning guarantees that serially reproduced apartment buildings achieve healthy horizontal distribution, allowing for adequate light and air between the buildings. This spatial arrangement, which rationalizes the distribution of households within a residential environment, made *danchi* into an apparatus for the regulation of life within a field of housing. It was this

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and Alessandro Fontana (New York: Palgrave Macmillan, 2008), 226.

⁴⁵ What I mean here by "standard person" is different from an "average person" in the same way that the "standard of living" is different from the "average way of living." Standard person refers to he state's preferred subject, someone who is educated, professionally employed, and an entrepreneur of himself. Similar to the way in which the standard of living evolved from the 2DK to the 3LDK over time, expectations for the "standard person" evolved from high school degree to college degree, for instance. 46 n.b. The emphasis here is on planning and standardization. JHC *danchi* could be compared to the Kowloon Walled City in Hong Kong, which was a vernacular multistory community that did not rely on master planning. It was criticized for similar reasons as the *furui machinami* (old townscape) in Japan, because it appeared to lack a visually rationalized distribution of living space. See, for instance, Sharon Lam, "Here's What Western Accounts of the Kowloon Walled City Don't Tell You," 02 Dec 2016, *ArchDaily*, accessed 24 Jul 2021, https://www.archdaily.com/800698/heres-what-western-accounts-of-the-kowloon-walled-city-dont-tell-you

regularity and rationalization that was visually and discursively opposed to prior forms of community that were subsequently described as the old townscape (*furui machinami*).



Fig. 2: Aoyama Apartments, Tokyo (c.1954); a municipal danchi⁴⁷

In the postwar, concrete apartments and multistory living (3-stories and above) were new for most people in Japan.⁴⁸ Unlike in America were high-rise buildings and apartment houses developed in places like New York and Chicago in the latter half of the 19th century, dwellings throughout the archipelago remained on a more human scale. With the advance of technology for the construction of buildings using reinforced concrete in the early 20th century, this began to

⁴⁷ Recognized as a model *danchi* by the Minister of Construction. Tōkyō-to jūtaku-kyoku, *Tōkyō-to* jūtaku nenpō 1954 (Tōkyō: Tōkyō-to kenchiku-kyoku sōmu-bu shomu-ka,1954), 23.

While present images of cities in Japan, such as Tokyo and Osaka, show metropolitan space as hypermodernized, replete with skyscrapers, neon lights, and tower mansions, prewar cities were crammed full of one and two-story wooden houses. Examples of concrete buildings, such as there were, could be classified as civic, institutional, or corporate. In other words, they were generally not used for housing.

change. The earliest example of a community composed of concrete apartments in Japan was located on Hashima (Gunkanjima), an island off the coast of Nagasaki, beginning in 1916. On Hashima, the Mitsubishi combine used reinforced concrete buildings to concentrate labor near the pit head of a coal mine. The extremely limited land area of the island and the need to defend against tidal encroachment meant that producing vertical space using concrete was an expedient and economical solution to the labor problem. As detailed in Chapter 2, while apartments on Hashima, in retrospect, constitute the first de facto danchi using reinforced concrete, they were not intended for general public use. 49 Apartments on Hashima were designed to facilitate the close proximity of coal miners to the site of coal extraction and were managed for the benefit of the Mitsubishi combine. Before 1945, housing on Hashima was not part of a national public project and the application of concrete technology for community development was initially limited to the island. Near the end of the Great War (c.1918), which brought into relief trade networks that benefitted from war procurements, a renewed focus on economic expansion in major port cities led city planners like Gotō Shinpei to propose the construction of concrete-type public apartment buildings in Tokyo. In Gotō's "Plan for Greater Tokyo" (1921; unrealized), concrete apartments were conceived of as a form of urban infrastructure that helped to manage and maintain an urban workforce.⁵⁰ While forward thinking, Gotō's vision stopped short of a comprehensive, national public housing program. The main obstacle was funding. At the time, city tax revenues were relatively low and private industry was uninterested in investing in capital

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⁴⁹ The emphasis here is on the pre-1945 period. After the public housing law was established in 1951, two apartment buildings #22 (intended for public servants) and #13 (intended for teachers) were designated as public housing (*kōei jūtaku*). See Akui Yoshitaka and Shiga Hidemi henshūsha, *Gunkanjima jissoku chōsa shiryō shu*, (Tōkyō: Tōkyō denki daigaku, 1984), gunkanjima indekkusu.

⁵⁰ Shimpei Goto, "Greater Tokyo Plan for 7,000,000 Population," in *The Trans-Pacific 5*, no. 6 (1921). Source in English in the original.

intensive concrete housing projects.⁵¹

When the Great Kantō Earthquake struck Tokyo and Yokohama on September 1, 1923 it sent shockwaves through housing and fiscal policy. Disruption to cooking fires and industrial facilities during the quake caused flames to erupt into conflagrations that burned significant portions of the wooden housing stock in both cities.⁵² More than clearing the ground, the earthquake resulted in an unprecedented financial windfall. Charitable donations, foreign loans, and the allocation of government money for reconstruction provided capital for remaking both cities. 53 Established in 1924, the Dōjunkai Foundation (zaidan-hōjin dōjunkai) was envisioned as a special purpose vehicle for funding and administering the construction of concrete apartments and wooden houses in Tokyo and Yokohama.⁵⁴ The Dōjunkai built apartment houses like the Edogawa Apartments as fire-resistant residences that would provide urban denizens with modernized dwellings. Communities built by the Dojunkai were comparable to international projects such as Ernst May's New Frankfurt housing development constructed at Frankfurt am Main, Germany beginning in 1925. Rather than derivative of May's work, the Dōjunkai apartments were contemporaneous developments.⁵⁵ The relatively deluxe Edogawa Apartments even exceeded what might be described as the house for existenzminimum (minimal living), a concept that helped to organize the construction of economical dwellings that emerged out of the second meeting of the Congrès internationaux d'architecture moderne (CIAM 2), and were closer

⁵¹ Goto, "Greater Tokyo Plan," 54.

⁵² Edward Seidensticker, Low City, High City, 1-6.

⁵³ The Bureau of Reconstruction and the Tokyo Institute for Municipal Research, ed., *The Outline of the Reconstruction Work in Tokyo & Yokohama* (Tokyo: The Sugitaya Press, 1929); see description and tables beginning on page 185.

⁵⁴ Dōjunkai, *Dōjunkai jūnen shi* (Tōkyō: Dōjunkai, 1934), 3.

⁵⁵ Michelle L. Hauk, "Postwar Residential New Towns in Japan: Constructing Modernism" (M.A. thesis, Washington University in St. Louis, 2015), 73, https://openscholarship.wustl.edu/samfox_arch_etds/1/.

in principle to apartment houses built in New York and Chicago. ⁵⁶ While it is possible to characterize the Dōjunkai as the first public housing program in Japan to rely heavily on concrete apartment technology, the scope of its activities was not national. ⁵⁷ After the Second World War, concrete apartments were incorporated into a national housing policy framework that incentivized their construction and subscription, providing state-aid and setting income-based rents to ensure affordability. From 1948 through 1954, thousands of *danchi*-type concrete apartment units were built throughout the archipelago by municipalities. Private corporations like Kume kenchiku jimusho (Kume Sekkei) and Ichiura kenchiku sekkei jimusho (Ichiura Housing and Planning), in conjunction with municipal architects, helped to develop three basic types of concrete public housing: the star house, the terrace house, and flat-type apartment buildings. ⁵⁸ When the Japan Housing Corporation was established in 1955, it leveraged the technology and prototypes from these earlier municipal housing programs in designing apartment communities for the middle-income segment of the population. ⁵⁹

As demonstrated by Nishiyama Uzō's 1946 Shinkenchiku special issue titled "Shin-nihon

⁵⁶ Nishiyama Uzō, *Nihon no sumai 1* (Tōkyō: Keisō shobō, 1975), 114-113. For more on the Dōjunkai Foundation and apartments, see Dōjunkai edogawa apātomento kenkyūkai, *Dōjunkai apāto seikatsushi: edogawa apāto shinbun kara* (Tokyo: Sumai no Toshokan Shuppankyoku, 1998). See also, Maruku Burudie, *Dōjunkai apāto genkei: nihon kenchikushi ni okeru yakuwari* (Tōkyō: Sumai no Toshokan Shuppankyoku, 1992). See also Marco Pompili, "Modern Multi-unit Housing in Japan and the Dōjunkai Apartments (1924–34)," Fabrications 24 no. 1 (2014): 26-47. See also, Shilpi Tewari & David Beynon, "Tokyo's Dojunkai experiment: courtyard apartment blocks 1926–1932," Planning Perspectives 31 no. 3 (2016): 469-483. On *existenzminimum*, see also Hauk, "Postwar Residential New Towns in Japan," 46. ⁵⁷ Cf. Hauk, "Postwar Residential New Towns in Japan," 26. See also, Neitzel, *The Life We Longed For*, xiv.

⁵⁸ See Nihon jūtaku kōdan kenchiku-bu sekkei-ka, *Kyōdō jūtaku hyōjun sekkei zushū* (Tōkyō: Nihon jūtaku kōdan, 1955). Design for the 55-4S-2K-2 flat-type apartment is attributed to Kume kenchiku jimusho (now Kume Sekkei) and the 55-5P-2DK star house is attributed to Ichiura kenchiku sekkei jimusho (now Ichiura Housing and Planning). My thanks to Ōtsuki Toshio (University of Tokyo) for brining this document to my attention. My thanks also Kume Sekkei and Ichiura Housing and Planning. ⁵⁹ The middle income segment was legally excluded from earlier public housing because of relatively higher income; however, there was demand among that segment for similar type apartment housing. The JHC was established to meet this demand. See Jūtaku kyōei, *Hyakumanko e no michi*, (Tōkyō: Jūtaku kyōei, 1981).

no jūtaku kensetsu" (Housing Construction for a New Japan) and Ikebe Kiyoshi's "Shibuya-ku fukkō keikaku an" (Shibuya Ward Reconstruction Plan), explored in Chapter 2, ideas for constructing concrete apartment buildings as a mode of public housing were being discussed immediately after the war. 60 Nishiyama aimed to promote housing as a science, illustrating a bold vision for the quantitative production of rectilinear concrete apartments that departed formally and stylistically from the earlier Dōjunkai apartments.⁶¹ Resembling the work of French architect and planner Le Corbusier, Nishiyama's apartment blocks were envisioned as urban interventions that would house people as they helped shape the city. Ikebe's plan for a remade Shibuya Station (preserved for present audiences by the National Archives of Modern Architecture in Japan) presents an urban utopia in which multistory apartment buildings are used to concentrate commuter-consumers near a major transportation hub in Tokyo. 62 Ample green space and sinuous pathways in between the buildings offer respite from the apartment's industrial aesthetic, while also relieving structural congestion around the station. Due to material constraints and the need to construct shelters rapidly for the 1945-1946 winter, the production of concrete buildings lagged behind these bold visions for postwar housing. In 1947-1948, Abe Mikishi, president of the Ward Damage Reconstruction Board, succeeded in procuring materials and financing to begin experimenting in concrete while promoting the idea that apartments could be the foundation for postwar urban areas and tools for modernizing everyday life. The first postwar prototype reinforced concrete (RC) apartment building that could serve as a model for future public housing developments was completed in 1948. Built on property appropriated from the

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⁶⁰ Ikebe's plan was unrealized. As discussed in Chapter 2, Nishiyama's sketch anticipates actually built apartments.

⁶¹ Cf. Neitzel, The Life We Longed For, 8-9.

⁶² As opposed to the concentration of labor near the site of production, as was the case on Hashima (Gunkanjima) or a residential use area (*jūtakugai*).

Takanawa Imperial Residence in Tokyo, the Takanawa Apartments demonstrated a rudimentary *danchi* composed of two rectilinear concrete apartment buildings housing forty-eight apartment units that became the model for subsequent developments. As the production of coal and concrete ramped up toward the end of the Occupation and restrictions on basic materials were lifted, the quantitative production of concrete apartments began.

A Plan for Youth and the Pedagogy of Postwar Apartments

While *danchi* in Japan today are associated with an aging population and domestic decline, the demographic situation in the first few decades after World War II was inverted. Demographic charts produced in 1967 by the Japan Housing Corporation using data from the 1960 census show that the national population in 1960 was primarily composed of persons younger than 40 years of age. The single largest demographic segment was children between the ages of 10-15 (12% of total) who would have been born shortly after the war.⁶³ The overall image of the population was a standard pyramid, with a wide base of young people and relatively few elderly at the top. Another demographic chart, selecting only for those who resided in Japan Housing Corporation *danchi*, appears widely distorted by comparison. Less than 2.5% of all residents were over 65 years of age, while children between 10-20 years of age account for a mere 8% of the total. The largest demographic segments were adults between the ages of 20-40 and children under 10 years of age. Overall, what the charts indicate is that the inhabitants of JHC *danchi* were primarily young couples with very young children.

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⁶³ Cf. Hauk, "Postwar Residential New Towns in Japan," 86.

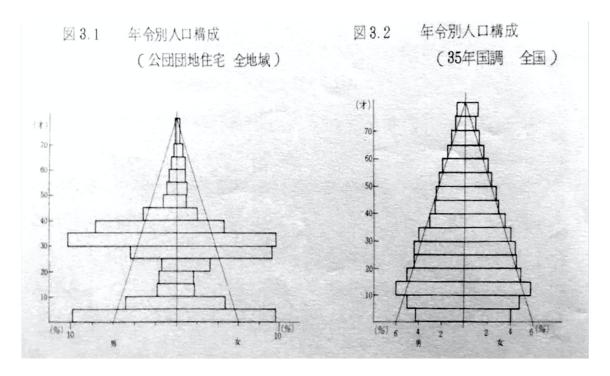


Fig. 3: JHC *danchi* population chart by age (left); national population chart by age (right). Japan Housing Corporation (1967).

Providing affordable housing for families just beginning in an effort to encourage marriage and childrearing after the war was an early goal of the public housing program. As dramatized in the 1952 film *A Plan for Youth*, produced by the Japan Housing Association (not to be confused with the Japan Housing Corporation), concrete apartments appeared as ready-made homes in a ready-made community.⁶⁴ As discussed in Chapter 3, the film begins by showing urban overcrowding, implying that a dearth of affordable housing is inhibiting marriage prospects and restricting family formation. Styled as a drama, the film is a cleverly designed pedagogical device that simulates the arrival of young couples to a *danchi*-type public apartment complex. The rectilinear apartment blocks displayed in the film are presented as desirable dwellings that are a joy to live in. This structure of feeling is important. The performance of joy

 64 n.b. Japan Housing Association (nihon jūtaku kyōkai) vs. Japan Housing Corporation (nihon jūtaku kōdan).

shows that apartment dwellers were enthusiastic about rather than depressed by their new mode of living.⁶⁵ The form of the building and the modernized equipment and furnishings inspire curiosity and play. The young couple, Ichirō and Yoshie, the stars of the film, demonstrate how easy it is to use and enjoy the apartment space. While not everyone was eligible for or received one of these ready-made residences, the film encourages adult citizens to apply for housing and participate in the public housing lottery. As the film's title suggests, public law housing in the early 1950s was future oriented. Apartments were conceived of as the launch pad for families blasting off to high-speed growth rather than as flop houses for the poor and destitute.⁶⁶

As the 1951 Public Housing Law ($k\bar{o}eij\bar{u}taku\ h\bar{o}$) made clear, public apartment housing before the creation of the Japan Housing Corporation was intended primarily for low-income families. In the context of the early postwar economy, low-income was not taken to mean permanently poor. As Ann Waswo notes in *Housing in Postwar Japan*, "access to both type 1 and type 2 [public housing] units was limited to persons in steady employment generating incomes sufficient to assure the payment of rents.⁶⁷ Type 1 units rented for around 600 yen per month, while type 2 units rented for 2,100 yen per month with an income cap of 20,000 yen per month.⁶⁸ As shown in *A Plan for Youth*, public housing was meant to be an affordable option for

⁶⁵ Later sociological surveys analyzed the situation of apartment residents, but as far as the film was concerned, it presented a picture of domestic bonhomie. See, for instance, Nihon jūtaku kōdan kenchikubu chōsa kenkyū-ka, *Apāto danchi kyojūsha no shakai shinrigakuteki kenkyū sono ni* (Tōkyō: Nihon jūtaku kōdan, 1961).

⁶⁶ To use the word "welfare" here would be somewhat misleading because entry to these public housing projects presupposes current employment and income, which becomes a measure of worker productivity and the value of a person/household to the nation. Therefore, it is better to characterize *danchi* for low-income residents as affordable housing. Here, "affordable housing" means a rent commensurate with one's present income, facilitating aspirational advancement and the promise of increases in future productivity.

⁶⁷ Waswo, *Housing in Postwar Japan*, 52.

⁶⁸ Waswo, *Housing in Postwar Japan*, 53. As Waswo goes on to note, middle school graduates had a starting salary of around 6,000 yen per month at the time, while mid-level bureaucrats earned around 20,000 yen per month.

productive young couples who were expected to contribute their bio-power as much as their labor-power to the recovering nation. In the early postwar, having babies and educating children was as important as building office buildings and developing corporations. To press this point, the conjugal couples in *A Plan for Youth* are juxtaposed to a homeless drunk who is intended as a caricature of a lazy, non-productive citizen. In this sense, concrete public apartments in postwar Japan were not welfare for the poor, but fabulous prizes for aspiring young couples. The excitement expressed by the adults in the film suggests that while relatively low-income they are members of a submerged middle class using public housing as a vehicle to rise up.

As a new type of community that structured a new type of lifestyle, *danchi* apartments were complex domestic edifices that warranted the creation of resident training manuals. Apartment dwellers were encouraged become adept operators of modernized homes and live according to design. In the 1950s, the Japan Housing Association, as well as the Japan Housing Corporation, produced living guides for current and prospective residents. The Japan Housing Association's Konkurīto apāto sumaikata dokuhon (Reader for How to Live in Concrete Apartments), published in 1958, deconstructed everyday life in concrete apartments down to its component parts, detailing how the danchi community as much as the danchi apartment was a machine of machines designed to maintain human life. Literate resident-users were instructed in the operation of kitchen space and gas meters, as well as protocols for using dust chutes, flushing toilets, and handling garbage incinerators. The Reader detailed the way in which apartment units existed at the intersection of flows of gas, water, and electricity, and instructed residents in the monitoring of these flows so as to better manage everyday expenditures. Rather than assume residents were incapable of understanding the technical complexity of the apartment, the manual is predicated on a relatively high level of prior schooling and seeks to co-opt residents as skilled

operators of the modern home. Trained by the manual, the resident-user was expected to properly manipulate the apartment-machine for the efficient upkeep of everyday life.

The Japan Housing Corporation's *Sumai no shiori* (New Living Guide), adapted from the Japan Housing Association's Reader, was published later in 1958 and introduced residents to "the problems and techniques of living in brand-new apartments" (*atarashii apāto seikatsu no mondai ten ya sumaikata no gijutsu wo*). Featuring a 2DK (two rooms plus dining kitchen) apartment on the fourth floor of a *danchi* apartment building, the *New Living Guide* walked the reader through a day in the life of a *danchi* dweller, covering everything from drain pipes to the location of plug sockets inside the unit. As evidenced by the instructions for "How to properly use the gas bathtub," the resident-user was made responsible for the regular operation of machines found in the apartment. The in-unit bathtub, for instance, was not without its hazards. The resident-user needed to take care in filling the tub, cleaning the gas burner, and circulating the water to ensure the equitable distribution of heat. As the later JHC promotional film *Danchi e no shōtai* (An Invitation to the Danchi) would emphasize, failure to properly ventilate the bathroom could result in the asphyxiation of the user.⁶⁹

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⁶⁹ Nihon jūtaku kōdan, *Danchi e no shōtai* (1960); this film is included on the DVD *Danchi biyori* (Arubatorosu, 2008).

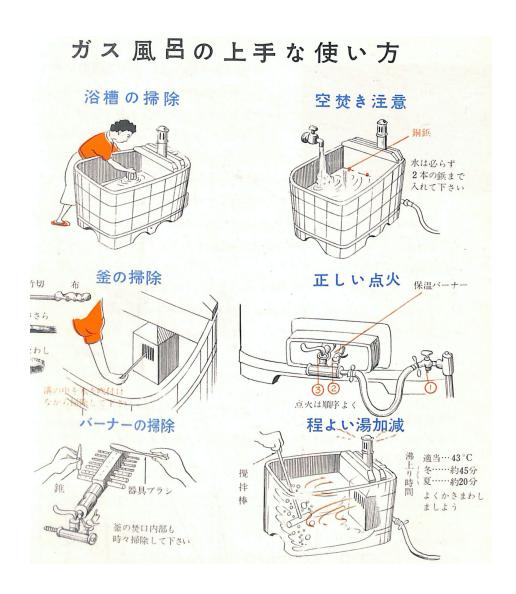


Fig. 4: Proper operation and cleaning of gas bathtub in a JHC apartment unit. Sumai no shiori (1958).

As early as 1947, films like *Nijūnengo no tōkyō* (Tokyo: Twenty Years Later) suggested that housewives who operated the dwelling-machine well could experience liberation from the daily grind of housework. As an example, the film showed a romanticized image of a woman reclining with her children in the park-like surroundings of a housing community. The JHC's *New Living Guide* (Kantō Branch) also reinforced the relationship between practices of dwelling and the experience of enjoyment. Section one of the *New Living Guide* (Kantō Branch) titled

danchi no kurashi (Danchi Living) began with the heading "tanoshii danchi seikatsu no tame ni" (In order to live an enjoyable danchi life). Instructed by an anonymous corporate author, residents learned that while the danchi is "a pleasant place surrounded by beautiful lawns and provisioned with parks and convenient facilities," it is a form of "collective living in which one house is separated from the next above and below and side to side by concrete walls." The concentration of households both vertically and horizontally meant that a person's private actions could have public consequences. As the New Living Guide illustrated, the improper handling of waste water to toilets, sinks, and bathrooms could adversely affect the experience of other tenants. The Guide suggests that in order for everyone to live well people had to follow established procedures and be mindful of their neighbors beyond the concrete walls (people who they might never meet or see directly). The transparency of the diagrams in the book reveals these hidden others that reside in neighboring concrete boxes.

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⁷⁰ Nihon jūtaku kōdan, *Sumai no shiori* [New Living Guide]. (Tōkyō: Nihon jūtaku kōdan, 1958). Note this pamphlet was produced by the Kanto Branch of the Japan Housing Corporation. While similarly titled, the layout and information differs from the one previously mentioned.

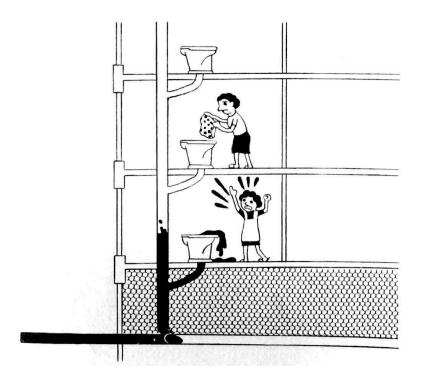


Fig. 5: New Living Guide illustration of a clogged toilet caused by resident in upper unit, which inconveniences the tenant in the lower unit. *Sumai no shiori* (Kantō Branch, 1958).

Conditioned by manuals and guidebooks, *danchi* residents could use the ready-made apartment complex as a public utility, fulfilling their desire for better housing while participating in state-aided domestic modernization. While the government did not directly police behaviors inside apartments, it stacked the deck in favor of a rationalized everyday life by fusing architectural technology with economic modes of conduct. The Japanese state was not alone in constructing a postwar politics of housing subtended by a neoliberal apartment pedagogy. As Kenny Cupers observes, the term *usager* (user) entered the lexicon in France in the 1930s denoting "a person who uses (a public service, the public domain)," but by the 1950s it was used in the context of public housing to describe a person situated "between the realms of citizenship

and private consumption."⁷¹ As discussed in Chapter 3 and Chapter 5, in *danchi*, the instant communities of postwar Japan, a resident-user operated their public apartment as a machine for living, taking advantage of the ready-made apartment as a public service, while benefits from the efficient management of everyday life accrued principally to the family as an essentially privatized social unit.⁷² The government intended that logics of industry, which included the calculation of expenditures, the economy of bodily movement, the metered flow of resources, as well as the efficient management of time would be in effect at every stage of the production-consumption circuit: from the offices were homes were designed, to the sites where homes were built, to the space of the lived-in home itself. Far from feudal remnants or workshops of war, the postwar concrete apartment with the housewife-manager in the kitchen control room was a modern machine for the efficient production of everyday life.

The issuance of construction manuals that could serve as a reference for municipal architects, as well as private corporations, also mattered for a pedagogy of postwar housing. The *Jūtaku kensetsu yōran* (Housing Construction Handbook), for instance, was a comprehensive manual described as "kōei jūtaku no ichi danchi kensetsu no tame no sekkei shiryō" (materials for the construction of danchi-type public housing). It was authored in 1953 by the Housing Division of the Ministry of Construction and published by the Architectural Institute of Japan two years before the establishment of the Japan Housing Corporation. As a detailed technical manual over 800 pages in length, the *Housing Construction Handbook* provided site planning diagrams and scientific calculations, as well as verbose descriptions of how various types of housing, including apartments, could be constructed and sited on danchi-type tracts. The manual

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⁷¹ Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis: University of Minnesota Press, 2014), xix, 30.

⁷² Pedagogy is discussed in Chapter 3, while privatization is discussed in Chapter 5.

demonstrates that by 1953 Nishiyama's vision of housing as a science that could combat the ills of the modern condition (overcrowding, domestic poverty, and unsanitary dwelling) was becoming a reality. More than the information needed to construct any single building or a tract, what a science of housing pointed toward was both the technological and social application of dwelling as a practice of government. As the work of the Japan Housing Corporation demonstrated beginning in 1955, concrete apartment *danchi* had moved beyond the beta-testing stage and were primed to become the centerpiece of a public corporation ($k\bar{o}dan$) whose mission was to settle middle-income citizens that represented a modernized, white-collar workforce.

The Danchi Imaginary: Models for the Postwar Public

When the Japan Housing Corporation was established by law in 1955, it was directed to build concrete apartment housing at scale for middle-income citizens. The first president of the corporation, Kanō Hisaakira, was a banker who had worked in England before the war. Kanō's task was to do the seemingly impossible, produce 20,000 units of housing in the first year of operation. His achievement of this goal was due to the prior advancement of concrete apartment technology and *danchi* site plans, as discussed in Chapter 2, as well as Kanō's corporatization of the public workforce. Speaking to employees in 1955 on the occasion of the Corporation's founding, Kanō said:

Today marks the inauguration of the Japan Housing Corporation. At the same time, it can be said that we as a nation are ushering in a new housing policy. Therefore, I think today is a very important day...As it is written at the beginning of the articles of incorporation for the JHC, Japan's housing problem is a pressing concern. Consequently, we must construct fireproof residences for professional workers as quickly as possible, and it is the goal of the JHC to construct these as collective, modern residential areas. Therefore, it is of the upmost importance as we proceed with this task that we think about how to do it swiftly and efficiently, as we are entrusted with the savings and taxes of the people—the

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 $^{^{73}}$ See Takasaki Tetsuro, Kosumoporitan kanō hisaakira no shōgai (Tōkyō: Kajima shuppan kai, 2014).

crystallization of their sweat and tears."74

As the name suggests, the Japan Housing Corporation was a public corporation (*kōdan*) that developed land for housing, constructed apartment buildings, and managed housing tracts as fully formed communities. To During the first few years of operations it produced several types of dwellings, including low-rise, single family detached houses like those at the Shōdai Danchi (104 units) in Fukuoka City, Kyushu. From the late 1950s through the 1960s, the corporation primarily built three types of concrete dwellings (star houses, terrace houses, and flats) on large parcels of land referred to as *danchi*. The benefit of building housing on a *danchi* was that the site was not fractured by imbricating property interests allowing it to be managed directly by the Corporation. *Danchi* were scalar spatial apparatuses that could be designed for only a few buildings, as in the case of the Takanawa Apartments, or scale to hundreds of hectares and thousands of units, as evidenced by the development of Takashimadira Danchi, completed in 1973 with 10,170 units.

⁷⁴ Kanō Hisaakira, *Sumai no kenkyū* 2 (1956), 59. Place of publication and publisher not identified.

⁷⁵ Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan no go annai* (Tōkyō: Nihon jūtaku kōdan, 1961), 4-10.

⁷⁶ Nihon jūtaku kōdan, *Nihon jūtaku kōdan nenpō '57* (Tōkyō: Nihon jūtaku kōdan, 1957), 63.

⁷⁷ Note that the JHC also built city apartments (*shigaichi jūtaku*), which were constructed using concrete, but were not necessarily sited on *danchi*. See Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan no go annai*, 7.

⁷⁸ As of 1974 Takashimadaira was the Japan Housing Corporation's largest *danchi* by unit count. See Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan nenpō 1974* (Tōkyō: Nihon jūtaku kōdan, 1974), 40.



Fig. 6: Blueprints for JHC flats, star houses, and terrace houses (clockwise from upper left).⁷⁹

As the first national administrator of trans-municipal concrete apartment complexes, the Japan Housing Corporation was wedged between previously built public projects and private residences.⁸⁰ The need for space compelled it to look to the metropolitan fringes where land was cheaper and pine trees were mute in their protest of the bulldozer's maw. From the very moment

⁷⁹ Composite image. See diagrams in Nihon jūtaku kōdan kenchiku-bu sekkei-ka, *Kyōdō jūtaku hyōjun sekkei zushū*.

sekkei zushū.

80 Cf. Neitzel, *The Life We Longed For*, 118-119. See also, Waswo, *Housing in Postwar Japan*, 57.

of its inception, the Japan Housing Corporation was forced to compete with other types of housing, marketing its products, *kōdan jūtaku* (lit. Corporation houses), as the pinnacle of domestic civilization in Japan.⁸¹ *Kōdan jūtaku danchi* (JHC apartments) were promoted as bright, modern, and secure. These white-washed concrete blocks were visible markers of postwar progress and barracks for the state's preferential public.

During the *danchi* decades (the 1950s and 1960s), *kōdan jūtaku* became part of a diffuse *danchi* imaginary. As discussed in Chapter 4, what the *danchi* imaginary describes is the way in which large-scale apartment complexes were mediated visually and discursively through films, print journalism, annual reports, corporate histories, advertising pamphlets, and other ephemera. The Japan Housing Corporation willfully co-produced this *danchi* imaginary. It excelled in marketing its apartment complexes as concrete communities centered on youth, modern living, and growth. As the ambitious photography project attached to its ten-year corporate history demonstrates, the JHC envisioned its *danchi* as containers for women and children who spent most of their days in and around the apartment complex. The focus on maternal care and biological growth was important because it signaled that Japan Housing Corporation *danchi* were generational communities. People could stay put and raise children from infancy to early adulthood without feeling a constant need to relocate.⁸² As instant communities, JHC *danchi* apartment complexes were ready-made environments that planned for both the dwelling and

⁸¹ n.b. *Kōdan jūtaku* later referred to more colloquially as *danchi*. The film *Nihon no jūtaku* [Houses of Japan], produced by the Japan Housing Corporation, presents JHC apartments as the pinnacle of civilization. See Nihon jūtaku kōdan, *Nihon no jūtaku*, 1957. Film made by Shinriken eiga K.K. For a synopsis, see "Nihon no jūtaku," *Jūtaku* (August 1957), 36.
⁸² While the 2DK (two rooms plus dining kitchen) floor plan is often citied as representative of JHC unit

While the 2DK (two rooms plus dining kitchen) floor plan is often citied as representative of JHC unit production, the Corporation built apartments with varying room sizes. These ranged from 1K (one room plus kitchen) to 4LDK (four rooms plus living dining kitchen). The intent was that families could find a right sized unit. In 1955, the 2DK was considered suitable for a "standard" young family (husband, wife, and two small children). As family needs changed people could conceivably relocate within the same *danchi* if other units were available.

attendant social services. Lage scale *danchi*, such as the Akabanedai Danchi in Tokyo, incorporated schools, medical facilities, and shopping centers, reducing the need for *danchi* housewives to commute off-site for child education and family care.⁸³ As much as the *danchi* apartment was a modernized dwelling, the *danchi* as a complex was a modernized community. In the *danchi*, a young couple could start a household in an apartment, even if they did not own the space, and raise their children efficiently in a residential environment that was primed for the production of a preferential public.⁸⁴



Fig. 7: Parents taking children to school in a JHC danchi. Nihon jūtaku kōdan jūnen shi (1965).

As discussed in the Chapter 4, the Japan Housing Corporation characterized its *danchi* as the *furusato* of a new urban public. At first blush, the terms *furusato* and *danchi* appear

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⁸³ Japan Housing Corporation, *JHC's Akabanedai Danchi: Biggest Ever Housing Estate in Tokyo* (Tokyo: Japan Housing Corporation, 1966).

⁸⁴ Most *danchi* apartments were for rent, but around 20% of JHC built *danchi* apartments were for sale on installment.

antithetical.85 Should not a newly constructed apartment complex and one's ancestral home town be mutually exclusive ideas? The Japan Housing Corporation thought differently. The Corporation envisioned that danchi apartments would have a generational duration. It anticipated that for children who grew up in apartments, the concrete community (danchi) would be their furusato—a hometown to which they might one day return. 86 JHC-built concrete apartment communities were styled as the cornerstone of "a new Japan"—the postwar nation. The atarashii furusato (new hometowns) were material manifestations of an atarashii jidai (new era) and atarashii seikatsu (new lifestyle). The adjective atarashii (new) expressed a temporal break between the postwar, wartime, and prewar, signaling a fresh start for Japan. 87 The danchi dwelling public became, as much as they were made into, objects of curiosity, admiration, and jealousy emerging as the vanguard of a modernized postwar domesticity. The novel equipment, furniture, and features of danchi apartments like the stainless steel sink, 2DK floor plan, steel door, cylinder lock, and in-unit bathtub have all functioned over time as part of a dismembered imagining that aimed to aestheticize the largest intervention by the state into the structure of domestic life since the founding of Japan as a modern nation in 1868.88

Danchi apartment complexes were a new type of community pattern. As social projects, they were radically decontextualized from the surrounding townscape and natural environment.

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⁸⁵ For more on the concept of *furusato*, see Jennifer Robertson, "Furusato Japan: The Culture and Politics of Nostalgia," *International Journal of Politics, Culture, and Society* 1, no. 4 (1988): 494–518.

⁸⁶ This is the condition that Koreeda Hirokazu explores in his film *After the Storm* (2016) in which Abe Hiroshi plays the prodigal son of a *danchi* resident who rediscovers the affective bonds of family life after he is forced to shelter in place as a rainstorm passes. The return to the *danchi* is a return to the *furusato*, showing that in 2016 it was still possible play out the generational endgame that the JHC planners had setup in the 1950s.

⁸⁷ Note that these kind of state projects assume the nation, as much as they worked to revive it. Public housing was not a politically neutral activity, but designed to preserve order and the continuity of the state after the war.

⁸⁸ See, for instance, Nihon jūtaku kōdan, *Nihon jūtaku kōdan nenpō '57, 6*.

By design, state-built apartment communities overcoded other forms of space that existed prior to their construction. To say that *danchi* constituted instant communities is to say that they created fully formed residential social space through institutional planning that did not rely on preexisting urban vernacular forms. As urban infrastructure projects, *danchi* were geographically agnostic. Concrete apartment communities were intended to function in snowy Sapporo (Hokkaidō), as much as typhoon ravaged Fukuoka (Kyūshū). *Danchi* brought with them subterranean networks of pipes and cables that connected life elsewhere to the city center, but could also function semi-autonomously through the incorporation of on-site water towers, septic tanks, and garbage incinerators.⁸⁹

Danchi as Discourse

Like so many others in the late 1950s and early 1960s, the Japan Housing Corporation was caught off guard when the word *danchi* went viral. Beginning with Murakami Sachiko's July 1958 Shūkan Asahi feature article titled "Atarashiki shomin 'danchi-zoku': apāto sumai no kurashi no techō" (*Danchi* dwellers, the new urban public: a diary of apartment living), residents of public apartments like those simulated in *A Plan for Youth* became an identifiable segment of the population, a public within a public—the *danchi-zoku*. Who were the *danchi-zoku* and what kind of lives did they lead? The people that Murakami identified as belonging to the *danchi* dwelling cohort in 1958 were primarily of urban, not rural origin. She describes a process by

⁸⁹ See Danchi e no shōtai [An Invitation to the Danchi] (1960). Film.

⁹⁰ Murakami, Sachiko, "Atarashiki shomin 'danchi-zoku': apāto sumai no kurashi no techō," *Shūkan Asahi* (20 July 1958). This article gave rise to the discursive representation of *danchi* by linking the people who lived in concrete apartments (the so-called *danchi-zoku*) with the form of the apartments themselves. See also Neitzel, *The Life We Longed For*, 59.

⁹¹ Why would people already living in the city want to move into a *danchi* apartment? As portrayed in *A Plan for Youth*, public apartments were styled as complete, if minimal, homes. The ready-made apartment freed a family from an overcrowded dwelling or a multi-generational household. In many cases, this meant moving from a single room into a fully equipped residential unit.

which concrete apartment complexes acted as social loadstones attracting people from across the various wards of Tokyo. For instance the JHC Midoricho Danchi was composed of people from Suginami-ku, Setagaya-ku, and Nakano-ku, while the Aoto Danchi housed people from Katsushika-ku, Kita-ku, and Adachi-ku. ⁹² Murakami's analysis made it possible to talk about public law housing (*kōei jūtaku*) and JHC housing (*kōdan jūtaku*) as being a part of the same category: *danchi*. By 1958, Murakami estimated almost a million people had experienced life in these concrete apartments. ⁹³ The coming to consciousness of the *danchi* dwelling public made it possible to speak of residents in public apartments as the vanguard of a modernized postwar domesticity. It also meant that scores of instant communities could be imagined as existing in association with one another, imparting the benefits and hazards of one to all the others.

By the mid-1960s, the Japan Housing Corporation was still trying to comprehend the multiple meanings of *danchi* and construct a narrative that incorporated both this word and its building activities. 94 "DANCHI—龙 为一团地…" (*Danchi*, *danchi*, *danchi*, *danchi*…) repeated the advertising copy of a JHC pamphlet from 1966 that provided information on apartments for sale in the Fuchūnikkō housing complex. 95 The refrain mimics the serialized production of the Corporation's housing—rectilinear buildings spaced at regular intervals containing standardized dwellings forming town-in-community housing tracts. There is something strange about the passage. The word "*danchi*" is written in three different scripts: *rōmaji*, *hiragana*, and *kanji*.

⁹² Murakami, "Atarashiki shomin 'danchi-zoku," 7-8.

⁹³ Murakami, "Atarashiki shomin 'danchi-zoku," 1.

⁹⁴ With the rise in popularity, *danchi* began to stand in for what the Japan Housing Corporation had previously referred to as $k\bar{o}dan\ j\bar{u}taku$ (Corporation houses) or more generally as apāto (apartments). In other words, *danchi* names not only the tract of land, but also the apartment buildings. The words $k\bar{o}dan\ j\bar{u}taku$ and $ap\bar{a}to$ were superseded by the word *danchi*.

⁹⁵ Nihon jūtaku kōdan tōkyō shisho, *Bunjō jūtaku no go-annai*, fuchūnikkō danchi (Tōkyō: Nihon jūtaku kōdan, 1966), 25. This page was printed at the back of other pamphlets advertising units for sale (*bunjō jūtaku*).

The copy was a non-sequitur, opening a section on construction financing for owneroccupied apartment units. It was also an important tell, signaling that even the corporation whose
raison d'être was to produce danchi apartments could not decide exactly, precisely, and onceand-for-all what danchi meant. Danchi were equally concrete apartment communities, an
abstract idea, and cultural curios. The repetition of "danchi, danchi, danchi" can be read as an
allegory for public housing projects built in Japan after 1945. Their form, and scale, and scope
made them physically and psychologically distinctive; the systematic reproduction of buildings
being as much a design premise as it was an economic imperative. As monoliths of a residential
modernity, danchi became the idealized homes of the postwar public.

In the 1960s, JHC and municipal apartments became fodder for comedy, parody, and criticism. Even if the portrayal was not always kind, these modes of social commentary also helped shape the image of *danchi*. In the 1963 film *Kanojo to kare* (She and He), directed by Hani Susumu, Japan Housing Corporation apartments appear to have colonized the metropolitan periphery. The narrative of the film is organized by the gradual elimination of a neighboring *bataya buraku* that exists just outside a *danchi* apartment complex. At the beginning of the film,

⁹⁶ Cf. Neitzel, The Life We Longed For, 104.

fireproof *danchi* apartments stand steadfast as the *buraku* burns in a scene eerily reminiscent of the wartime air raids. As the narrative continues, Hani's camera contrasts the productive, ablebodied *danchi* residents to the destitute, disabled *buraku* dwellers who scrape a living by harvesting trash from the *danchi*. In the end, the *buraku*, which has become a nuisance to the *danchi* dwellers, is leveled to the ground by a Mitsubishi branded bulldozer. The ultimate destruction of the *buraku* is shown to be the result of discriminatory human intervention, rather than a natural disaster.

The Perils of Progress

By the early 1970s, the postwar housing problem, which referred to the statistical shortfall of dwellings compared to the number of families in Japan was technically solved. As reported by the Japan Housing Corporation, there were now 31 million homes for 29 million families. ⁹⁷ While seemingly a moment of national triumph, the Tokyo Metropolitan Government (TMG) released a contrarian report in 1972 titled *Tokyo's Housing Problem* that detailed the way in which a spectacle of residential abundance was masking a persisting poverty of dwelling space. ⁹⁸ Imbalance in economies of space, the problem that the TMG tapped into, was something that Nishiyama Uzō had recognized in prewar Tokyo. What an economy of space here refers to is the way in which residential space is produced and maintained by a marketplace that is premised on profit rather than on the equitable distribution of dwellings.

The TMG report highlighted that a poverty of dwelling space was endemic to the modern condition, meaning that the availability of houses was not tantamount their equitable distribution.

Referring to the total number of dwellings in Japan, including those built by the JHC. See Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements* (Tokyo: Japan Housing Corporation, 1976), 10.
 Liaison and Protocol Section, Bureau of General Affairs, Tokyo Metropolitan Government, ed., *Tokyo's Housing Problem*, TMG Municipal Library, no. 5 (Tokyo: Tokyo Metropolitan Government, 1972).

Labor, which tended to concentrate around commercial centers and sites of industry, presented a demand for dwellings that could not be satisfied by a house anywhere. 99 More than 25 years after the war, thousands of families in Tokyo remained space challenged. Even the Japan Housing Corporation noted that the demand for right-sized affordable dwellings was around 10 million nationally. Recalling the situation in A Plan for Youth, the TMG observed that small dwellings were inhibiting family formation. The report suggests that couples who are rational economic actors will proceed first financially and then biologically when making decisions that affect householding. Unable to afford larger more expensive dwellings, space challenged couples decided not to have families. In the aggregate, this depressed the national birthrate. Here it is possible to see that the seeds of demographic decline were sown in poor housing conditions. Amidst the towering mansions (high-rise condominiums) of 1970's Tokyo, there was already a lost generation. The fact that many homes were considered modernized along the lines of early postwar danchi apartments did not mean that families in the present were somehow free from housing difficulties as they tried to ladder up over their life cycles, progressing from smaller to larger homes as family needs changed. 100

The problem was not exclusive to Tokyo. As detailed in the British Ministry of Housing and Local Government's *Homes for Today and Tomorrow*, England, Wales, and Scotland too were dealing with changing family needs that were associated with changing spatial needs. What the authors of the report describe as "new patterns of living" is akin to what the JHC described as "atarashii seikatsu." It was a change in life style indexed to the postwar and its attendant

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⁹⁹ For example, the availability of a dwelling in suburban Sapporo does not help an urban worker in central Tokyo.

¹⁰⁰ Cf. Waswo, *Housing in Postwar Japan: A Social History*. In her book, Waswo follows a family that laddered up over the course of their lifetime. However, not all residents who lived in *danchi* laddered up.

emphasis on economic development that mattered for the nation at large. 101 Similar to what Kristen Ross describes in Fast Cars, Clean Bodies, cultural change (read newness) in postwar France was seen in material goods (possessions) and the advertisements for them. These material goods served a triple function as proofs of progress and technical innovation, signs that the consumer economy was alive and well, and markers of social distinction. As the Ministry of Housing and Local Government report goes on to note, "the average pay packet nowadays buys a good deal more than it did in 1939...One household in three has a car; the same proportion have a washing machine. Television sets are owned by two households in three; so are vacuum cleaners; and one household in five has a refrigerator." ¹⁰² Increases in the standard of living were driven by a desire for more space and the perceived inadequacy of prior domestic arrangements. Not only did the family need more space as individuals within the home demand more privacy, but there was a want of larger homes that could serve as showrooms for a plethora of consumer goods. While new products appealed to consumers based on their usefulness and labor-saving functions, they also created demands for more space (e.g. a house with a two-car garage). 103 The Ministry of Housing and Local Government incisively observes that "Homes are being built at the present time which not only are too small to provide adequately for family life but also are too small to hold the possessions in which so much of the new affluence is expressed."104

¹⁰¹ Ministry of Housing and Local Government, *Homes for Today and Tomorrow* (London: Her Majesty's Stationary Office, 1961), 1. As noted in the report, "Since the end of the war, the country has undergone a social and economic revolution, and the pattern of living is still changing fast."

¹⁰² Homes for Today and Tomorrow, 1-2. Cf. Simon Partner, Assembled in Japan: Electrical Goods and the Making of the Japanese Consumer (Berkeley: University of California Press, 1999).

¹⁰³ As Cowan notes, the proliferation of so-called labor-saving appliances paradoxically resulted in more time spent on housework. See Ruth Schwartz Cowan, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York: Basic Books, 1983). While devices were advertised to reduce the labor needed for a discrete, specific task, in the aggregate they could increase the time spent on housework, because tasks that might formerly have been done by others fell to the housewife. This speaks to the gendered nature of housework, as well as the division of labor in the home.

¹⁰⁴ Homes for Today and Tomorrow, 2.

The TMG report authors are not convinced that increases in income will do much to solve spatial problems because these problems are immanent to postwar capitalism. Rather than suggest a liberal economic solution, which appeared to yield nothing more than a temporary offsetting of contradictions inherent in production-consumption (read capital) cycles, the TMG report proposes a radical solution: a housing-first policy in which right-sized and affordable dwellings are the basis for living, rather than something to be gained in the future. As opposed to laddering up, the family in need of housing would be provided with a home commensurate with family needs from the start. In some ways, a housing-first policy marked an ironic return to the very type of program that early postwar planners attempted to engineer. Because concrete dwellings were capital intensive, the government rightly assumed that many people would not be able to afford the full purchase price of a home. In the 1950s, Type 1 and Type 2 public housing, along with JHC apartments, approached a housing-first policy by producing a spectrum of spatial types (1K, 2DK, 3DK etc.) across a range of incomes, from very low to middle, ensuring that people could match spatial needs to affordability. 105 While challenging the dominant economic system, this approach does not necessarily get away from a politics of housing that is also a practice of government. Said differently, while the economic system is dumped the state remains.

In the 1970s, the JHC responded to increased demand and increased costs of construction by building some of its largest *danchi* by number of units. Forced to compete with private corporations and other forms of housing, the JHC was caught in the double bind of capitalism: production and consumption. Rather than achieving a true home-first housing policy, the JHC participated in a politics of progress and an aesthetics of obsolescence by making new units

 $^{^{105}}$ However, this was really not a housing-first policy in the way that TMG envisions it because it is still tied to economic development.

(larger apartments with better equipment) that effectively devalued earlier models. ¹⁰⁶ Reading between the TMG report and JHC reports, it is possible to see that there are two types of needs which are superimposed on one another. In the case of the TMG report, there is a technical shortage of space that drives demand for an increase of dwelling. Above and beyond this, as the JHC notes, there is a demand for ever more modernized dwellings and increased space due to consumer desires—the perception that what one currently has is insufficient and that there is something else out there that can bring satisfaction.

The aesthetics of obsolescence is a framework for understanding the devaluing of prior forms through the production of newer models. 107 This helps explain why the modernized and trendsetting 2DK apartment of the late 1950s was already considered outmoded by early 1970s with the normalization of the 3LDK. The JHC report notes that the standard family of a wife and two children would now feel cramped in a 2DK, and it is the 3LDK (with an additional bedroom and living room) that is considered the standard dwelling for the standard family. What is often misrecognized as decline is a politics of progress driven by an aesthetics of obsolescence, which creates a fetish for the new while making recently old (obsolesced) products appear inferior by comparison. The key point to stress here is that there is no way to fundamentally solve the housing problem through increased production because obsolescence is immanent to the production cycle itself. Even if spatial needs can be met quantitatively, desire cannot be quashed

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¹⁰⁶ Cf. Lisa Anne Klarr, "Useless: The Aesthetics of Obsolescence in Twentieth Century U.S. Culture" (Ph.D. diss., 2017), https://dukespace.lib.duke.edu/dspace/handle/10161/14412

Note that this idea can also be extended to people in the sense that the "production" of human capital is also an inherently comparative procedure. This is why Tange was able to suggest that the people of Tōhoku were inferior to others who had a "developmental will" and were seen as capable of investing in their living conditions as much as in themselves. From the present vantage point (2021), it is possible to see the same kind of discrimination repeated, in the sense that the early postwar models for an everyday life filled with a certain set of consumer goods and styles of living has been replaced by those considered up-to-date.

because the production-consumption cycle is reproduced with each new product. This is why the TMG report ultimately proposes that housing problems, here meaning an imbalance in the equitable distribution of dwellings, can only be solved by remaking the housing economy. What the TMG calls "home rule" is the name for a new (economic) system that is based on housing equity.¹⁰⁸

While a noble goal, the TMG report cannot quite get away from housing as a practice of government that seeks to intervene in urban space and organize the everyday lives of the resident population. Said differently, while housing equity is a goal so too is expert led interventionism. Moreover, the report does not overcome a biopolitics of housing or the way in which economies of space matter for family formation. While radical, the specter of population management still hovers behind the report. The TMG's act of self-criticism is notable considering that at the time many people, as well as the state itself, were harvesting the fruits of economic growth while hanging on to a ballooning Gross National Product (GNP). ¹⁰⁹ By the time the Japan Housing Corporation's mandate ended in 1981 as it was transformed into the Housing and Urban Development Corporation, it succeeded in overseeing the construction of more than one million units of housing. ¹¹⁰ Today, boxed-life (apartment living) has become the norm in urban areas throughout Japan, while a process of settling the public that began under occupation and has not yet ended. The Urban Renaissance Agency (UR), the institutional successor to the Japan Housing Corporation and the Housing and Urban Development Corporation, still manages more than 1.5

¹⁰⁸ The pun "home rule" reinforces the role of government as it suggests that a housing first policy will be subtended by a practice of government that ensures an equitable distribution, as opposed to consumer capitalism which tends to reproduce inequality.

¹⁰⁹ n.b. This report was issued before the 1973 Oil Shock, which disrupted global markets and called free-flowing consumer capitalism into question.

¹¹⁰ See Jūtaku kyōei, *Hyakumanko e no michi*. The title of this book says it all "The way to one-million units of housing." It is intended as a reflection on the JHC and the corporation's success.

million units of housing, much of which consists of danchi built in the 1960s to the 1980s.

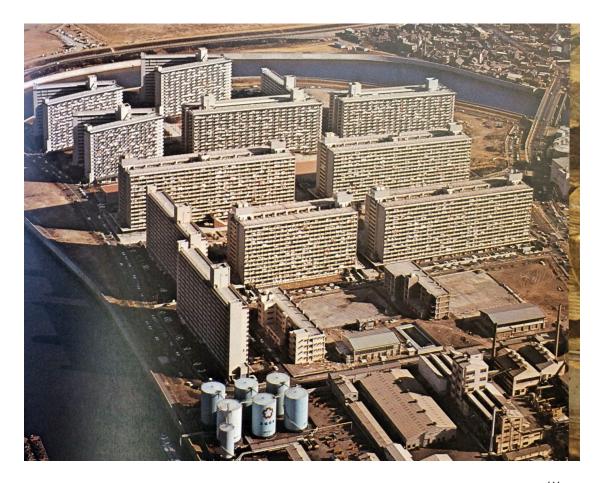


Fig. 8: JHC Toshima 5-chome Danchi (4,959 units). Nihon jūtaku kōdan nenpō, 1974.¹¹¹

Chapter Overview and Structure of the Text

Due to the outsized influence of the Japan Housing Corporation on the historicization of public apartment housing in the postwar, this study pays particular attention to the period before the establishment of the JHC, a time when *danchi* were being built by municipalities, but before they were considered stars on the national stage. Chapters are arranged thematically, but the

Toshima 5 chome was completed in 1972. Located in Tokyo Kita-ku, it is listed as the 7th largest JHC built *danchi* as of 1974. Takashimadaira, located in Tokyo Itabashi-ku, was the largest at 10,170 units. See table in Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan nenpō 1974*, 40.

overall temporal progression is from 1945 to 1981.¹¹² Chapter 1 details the decimation of urban domiciles by USAAF incendiary attacks during 1945, which set the stage for the surviving Japanese state apparatus to reassert its authority over the population through public housing as a practice of government. Chapter 2 (Part 1) steps back in time to show precursors to postwar *danchi* by examining early 20th century concrete apartments, particularly those built on Hashima (Gunkanjima) by the Mitsubishi combine, and those built in Tokyo and Yokohama by the Dōjunkai Foundation. It also considers designs for housing communities developed by the wartime Housing Corporation (*jūtaku eidan*).¹¹³ Chapter 2 (Part 2) examines the development of concrete apartments, focusing on prototypes for postwar public housing programs. It demonstrates how experimental projects from the late 1940s and early 1950s set the basic models that would later be reproduced by the Japan Housing Corporation.

Chapter 3, with its focus on the practice and pedagogy of everyday life, examines public education campaigns in the 1940s through the mid-1950s that aimed to familiarize people with changes in the structure of dwelling in Japan, as well as the proper use of concrete apartments. In the late 1950s, the word *danchi* was popularized by print journalism and helped to organize a discourse of dwelling centered on large-scale concrete apartments, particularly those built and operated by the Japan Housing Corporation. Chapter 4, which covers a period of time from the establishment of the Japan Housing Corporation in 1955 through the late 1960s, demonstrates how the JHC worked to construct *danchi* as instant communities that housed new humans—the state's preferred citizen-subjects—while styling its concrete apartment complexes as *furusato*

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¹¹² In other words, from the firebombing of urban areas in Japan during World War II to the nominal disbanding of the Japan Housing Corporation.

While a national public housing program centered on concrete apartments began in the late 1940s, it was necessary to show that attempts to structure communities using concrete apartments had succeeded before the war. Examples of comprehensive site planning and the standardization of housing units needed to be taken into account.

(hometowns) of a "new Japan." Chapter 4 shows how images of *danchi* life produced and promoted by the JHC competed with filmic portrays that disclosed the return of a thanatopolitics of housing after the war.

Chapter 5, which covers the 1970s, explores how a politics of housing continued to function even after the so-called postwar housing problem was technically solved. It discusses the political economy in which public housing is situated and shows how the modernization of dwellings relies on industrial techniques and cycles of capital regeneration. Raising the standard of living was not simply a positive increase in the architecture of dwelling, because it was subtended by an aesthetics of obsolescence. What an aesthetics of obsolescence refers to in the context of this study is the way in which the structural devaluation of prior forms by the production of new commodities produces a perception of progress at the same time as it makes previously produced objects appear old or inferior.¹¹⁴

The Conclusion considers how instant communities and machines for living helped shape postwar publics by instantiating a politics of housing as a practice of government. Pushing beyond the declension narrative, which describes the *danchi-zoku* as fallen stars and *danchi* apartment complexes defunct social edifices, I gesture toward the future biopolitical implications of *danchi*. Contemporary apartment complexes are being positioned within a discourse of "revitalization" that seeks to deal with aging buildings as well as aging residents, providing the rational for further urban interventions.

Overall, I argue that *danchi* apartment complexes manifested a settlement procedure of extended duration and were rapidly constructed, scalar communities designed for the efficient

Press, 2016). See also Evan Watkins, *Throwaways: Work Culture and Consumer Education* (Stanford: Stanford University Press, 1993).

¹¹⁴ Cf. Klarr, "Useless: The Aesthetics of Obsolescence in Twentieth Century U.S. Culture." See also Daniel M. Abramson, *Obsolescence: An Architectural History* (Chicago: The University of Chicago

production of everyday life in service of generating a preferential public—economically and biologically active citizen-subjects—whose domestic education was guided by state-sponsored pedagogical initiatives. I also argue that the production of postwar concrete apartment *danchi* began in the late 1940s and was refined in the early 1950s through state-aided municipal initiatives before the establishment of the Japan Housing Corporation in 1955. The image of concrete apartment complexes as spaces where young couples could raise children in modernized homes of their own was developed for public-law housing (*kōei jūtaku*) and later enhanced by the Japan Housing Corporation. The JHC characterized its apartments (*kōdan jūtaku*) as a superlative expression of these earlier public projects, showing them as spaces where new human beings were formed and presenting them as the apex of civilization in Japan.

In the late 1950s and early 1960s, print and film media helped to establish the word danchi as an organizing concept that referred to large-scale concrete apartment complexes, shifting the terms of public discussion from earlier words such as konkurīto apāto (concrete apartment), kōei jūtaku (public housing), and kōdan jūtaku (JHC apartments). As a widely recognized category of dwelling that was national in scope and application, danchi referred to both municipal and JHC danchi, but over time has become particularly popular in referring to concrete apartment complexes built between 1955 and 1981 by the Japan Housing Corporation. As concrete structures, subjects of discourse, and mediated objects, danchi apartments have become imbedded in the fabric of everyday life since the 1940s, functioning over time to normalize economic modes of conduct centered on the rationalization of dwelling and domestic behavior. As instant communities and machines for living, danchi apartments were not only forms of shelter, but also manifested the state's ability to order the resident population in a way conducive to domestic security. Through the provision, promotion, and pedagogy of large-scale

apartment housing, the state attempted to legitimate its role as administrator of a resurgent Japan populated by a preferential public suited to the postwar era. In what follows, I show that the construction of *danchi* apartments after the war was part of a process that aimed to get people to settle, encouraging them to reproduce, to work, and to consume in service of Japan, the nation. As the Eagles sung it, "you can check-out anytime you like,/But you can never leave!"

Chapter 1: A Crisis of Shelter: Housing in the Aftermath of the Pacific War

"The heart of Tokyo is gone. Ashes and still flaming ruins cover the ground where large industry, small industry and homes stood only twenty-four hours ago in fifteen square miles of the center of Japan's capital." —Warren Moscow (*New York Times*, March 11, 1945)

Introduction

Beginning with the mass destruction of the densely populated working class quarters of Tokyo on either side of the Sumida River—the littoral artery attached to the heart of the city—strategic bombing of urban areas in Japan from March to August 1945 set aflame a national crisis of shelter. In the span of six months, more than two million homes were incinerated, nearly three hundred thousand people killed, and the residential economy eviscerated from Sapporo to Kagoshima. For Tokyo, it was the worst disaster since the Great Kantō Earthquake of 1923, which sparked a conflagration that consumed half the housing stock, killed over a hundred thousand people, and left more than a million homeless. Composed primarily of closely packed one and two-story wooden structures abutting narrow streets and alleyways, urban areas throughout the archipelago proved to be as highly flammable in 1945 as Tokyo was in 1923. Yet, the loss of houses caused by incendiary attacks during the Pacific War was neither accidental nor natural. Urban workers and their places of residence were intentionally targeted—casualties and widespread damage were anticipated.

It was not just that houses had burned because they were constructed of inflammable materials or because cities like Tokyo lacked comprehensive urban planning and modernized

¹¹⁵ United States Strategic Bombing Survey, Civilian Defense Division, *Final Report Covering Air-Raid Protection and Allied Subjects in Japan* (February 1947), 197. Also referred to as USSBS no. 11. ¹¹⁶ United States Strategic Bombing Survey, Urban Areas Division, *Effects of Air Attack on Osaka-Kobe-Kyoto* (June 1947), 15. Also referred to as USSBS no. 58. See also Mark Selden, "A Forgotten Holocaust: US Bombing Strategy, the Destruction of Japanese Cities and the American Way of War from World War II to Iraq," in *The Asia-Pacific Journal: Japan Focus* 5, no. 5 (May 2007): 6.

infrastructure to mitigate fire-spread, but because homes had been systematically and relentlessly targeted in air raids carried out by the United States Army Airforces (USAAF). In developing weapons and planning attacks, the USAAF argued that places of residence were also workshops of war. Intelligence reports alluded to cottage industries that fed factories with piecework and human labor, keeping the insatiable imperial war machine alive. Pilots who flew the missions were encouraged to see urban areas and the homes they contained as vital to the enemy's war economy. The August 1945 edition of *Impact* magazine reminded B-29 squadrons that causing domestic destruction by way of "strategic air blitzkrieg" was necessary to "destroy the Japanese industrial community. Model residences constructed at Dugway Proving Ground in Utah and Eglin Field in Florida served as test sites for incendiary devices that were mass produced for use in the raids. Light weight incendiaries like the M69 (six-pound napalm bomb) were expertly crafted to penetrate and inflame urban domiciles. The imagined commensurability of simulated structures at Dugway and Eglin with actually existing homes throughout Japan proved

¹¹⁷ For analysis of fire prevention measures, see United States Strategic Bombing Survey, Civilian Defense Division, *Final Report Covering Air-Raid Protection and Allied Subjects in Japan* (February 1947), 7. The report notes that in Japan, "where building construction was characterized by flimsy wood and paper buildings housing an extremely dense population, little or no attempt was made in peacetime to reduce or regulate the dangerously inflammable conditions." Though measures were taken to "create firebreaks and fire lanes by demolishing buildings" as it became apparent that more cities would be subject to air raids, these activities were ineffective in preventing fire-spread due to the bombing pattern. However, the breaks did serve as evacuation routes and indirectly contributed to saving lives.

These observations were repeated again in addressing the housing crisis during the Occupation. See discussion below and General Headquarters, Supreme Commander for the Allied Powers, Public Health and Welfare Section, *Public Health and Welfare in Japan* 1 (1949), 94. The report notes that "Japan is a country of many small manufacturers and cottage industries, a good portion of dwellings are used for both living and business purposes."

Office of the Assistant Chief of Air Staff, Intelligence, "Fire Blitz," *Impact* 3, no.8 (August 1945), 19. See also Thomas R. Searle, "It Made a Lot of Sense to Kill Skilled Workers," *Journal of Military History* 66, no.1 (January 2002): 122, http://www.jstor.com/stable/2677346.

¹²⁰ David Fedman, Cary Karacas, "A cartographic fade to black," *Journal of Historical Geography* 38, no.3 (2012): 314, https://doi.org/10.1016/j.jhg.2012.02.004. See also Dylan J. Plung, "The Japanese Village at Dugway Proving Ground," *The Asia-Pacific Journal: Japan Focus* 16, no. 8 (April 2018): 7-12, https://apjjf.org/2018/08/Plung.html.

to be catastrophic.

As discussed in this chapter, domestic knowledge of modern urban areas—urban intelligence—subtended the USAAF strategy to dehouse industrial populations and decimate urban economic space in Japan. ¹²¹ Throughout the war, so-called industrial analysts working for the Office of the Assistant Chief of Air Staff, Intelligence recommended and reinforced the systematic scorching of cities across the archipelago using incendiary attacks. ¹²² Burning homes, they argued, was a more effective means of decimating industry than precision attacks. As a result, residential ruination was widespread. Domestic damage caused by the raids ignited a national crisis of shelter that smoldered into the Occupation and its aftermath. In the discussion below, a crisis of shelter refers to a condition in which the residential built-environment of an area or nation becomes so inadequate to the task of supporting human life that it invites large-scale government or humanitarian intervention.

Intelligence gathering activities existed on both sides of the attack—the planning and the postmortem. Data used as evidence for the effectiveness of the air raids collected from police reports, census data, government survey teams, and air force analytics was also used in planning postwar housing. As the Urban Areas Division of the United States Strategic Bombing Survey (USSBS) set about the macabre task of tabulating the ruination caused by the raids, remnants of the imperial-bureaucratic apparatus that had recently exposed the population to war assumed responsibility for reconstruction and began to formulate a postwar housing policy. Under the war weary and watchful eye of the Supreme Commander for the Allied Powers (SCAP) General

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Dehousing can be understood as the forcible removal of residents through domestic destruction. In this context, it does not necessarily imply preserving the life of residents. Prior to war, dehousing was used in the context of slum clearance. I distinguish urban intelligence from what Fedman and Karacas call "spatial intelligence" as an analytic organized around the city as both a spatial and social category.

122 Office of the Assistant Chief of Air Staff, Intelligence, "Fire Blitz," *Impact* 3, no.8 (August 1945), 19.

¹²³ Waswo, *Housing in Postwar Japan*, 46.

Douglas MacArthur and his staff at General Headquarters (GHQ), the surviving Japanese state grabbed hold of life at its most basic level—shelter—making the population governable by and through housing in a way that it had not been before the war.

Public housing policy introduced following the Pacific War was remarkable for its scope and scale. It transcended earlier disaster response housing measures, such as those developed by the Dōjunkai (the organization responsible for building housing in Tokyo and Yokohama following the Great Kantō Earthquake of 1923), as well as the imperial state's wartime home building program led by the Housing Corporation (jūtaku eidan). Responding to the devastation from the incendiary attacks would require rehousing efforts in more than one hundred urban areas and industrial sites throughout Japan. The need to provide temporary shelters, rebuild homes, and make allowances for the fireproofing of cities was felt simultaneously, if not unevenly, across the country. This trans-archipelagic crisis of shelter was as much an economic problem as it was one of dwelling and the domicile. Government aided housing projects faced the dual task of rebuilding both houses and the housing economy. More than emergency relief, public housing initiatives after the war endeavored to effect a return of the working population to war-damaged cities while gradually raising the standard of living for workers and their families. State institutions, ranging from national ministries to local governments, constructed housing policy to benefit those who could best contribute to postwar economic recovery. In effecting a return to the cities of the working population and helping to rehouse workers close to sites of industrial production, public housing programs aimed to resettle economically and biologically active members of the population—wage workers and their families. 124

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¹²⁴ Cf. Neitzel, *The Life We Longed For*, xviii. As Neitzel observes, "those deemed the most productive members of society would be the primary focus of housing policy." What I am emphasizing here is that productivity can be understood in a double sense: economic and biologic.

In this chapter, I argue that a national crisis of shelter developed in urban areas throughout Japan in 1945 primarily as a result of wartime dehousing campaigns—the intentional targeting of dwellings and the people within those dwellings with the aim of destroying industrial productivity and decimating the industrial community—and that beginning in August 1945 initial postwar housing policy attempted to counteract the effects of systematic dehousing by planning to shelter the population at scale, while encouraging the return of wage workers to urban areas. Although Japanese authorities took charge of rehousing efforts, reports made by the U.S. Army, GHQ's Public Health and Welfare Section, and the United States Strategic Bombing Survey demonstrate an acute awareness of the domestic devastation and continuing humanitarian crisis.

I also argue that dehousing, as both a strategy and practice, can be understood best as a thanatopolitics of housing.¹²⁵ What a thanatopolitics of housing expresses is the inversion of the relationship between domestic space and life—turning life-supporting spaces into life-taking spaces;¹²⁶ wartime dehousing campaigns were calculated attempts to destroy domestic space and kill, maim, or dislocate portions of the population that mattered most for the production of

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¹²⁵ See Michel Foucault, "The Political Technology of Individuals," in *Technologies of the Self: A Seminar with Michel Foucault* (University of Massachusetts Press, 1988), 160. As described by Foucault, from the perspective of the state "the population is nothing more than what the state takes care of for its own sake [and], of course, the state is entitled to slaughter it...the reverse of biopolitics is thanatopolitics."

Thanatopolitics is a negative inflection of biopolitics in which conceptual emphasis is shifted from life-making to life-taking activities. In other words, thanatopolitics expresses a death effect within a biopolitical epistemology. See Michel Foucault, "The Political Technology of Individuals," in *Technologies of the Self: A Seminar with Michel Foucault* (University of Massachusetts Press, 1988), 160. The logic that makes biopolitics operative—the notion that "the physical and economic elements of the state [constitute] an environment on which the population depends and which conversely depends on the population"—is the same logic at work in thanatopolitics. See also Timothy Ivison, "Developmentality: Biopower, Planning, and the Living City" (PhD diss., Birkbeck College, University of London, 2016), 87: "Since the body and its milieu are now an intrinsic system, the dwelling and the city become the immediate environment – the logical space that must be addressed for the first time by regulation."

equipment and services necessary to continue the war. Dehousing as thanatopolitics is a two-way street: on one side it is the logic by which an enemy-other imagines (and actualizes) the destruction of homes as a form of domestic infrastructure necessary for both economic production and daily life; and on the other, the terms through which a belligerent state exposes its domestic population to death for the duration of the war. In waging war, modern states expose their populations to death by reasoning that people and national economies are reciprocally related and co-constituting, meaning that there is no longer a fundamental difference between sovereign populations and agents of war production. In total war, a life-producing state becomes primarily a death-dealing state.

KOISHIKAWA-KU HONGO-KUJU ASAKUSA-KU HONGO-KUJU ASAKUSA-KU HONJO-KU IMPERIAL KANDA-KU IMPERIAL KANDA-KU

CENTER OF TOKYO SHATTERED BY B-29'S

Fig. 9: Center of Tokyo Shattered by B-29's. *New York Times*, March 11, 1945.

March 11, 1945

Dehousing the Industrial Population

The carnage was horrific, but calculable. ¹²⁷ The XXI Bomber Command's night raid that began on March 9, 1945 and continued into the early hours of March 10 dropped nearly 1,700 tons of incendiary ordnance and sparked a conflagration that destroyed more than 267,000 buildings, killed at least 85,000 people and rendered more than 1,000,000 homeless. ¹²⁸ Writing for the New York Times, Warren Moscow described the events of that single night as a "holocaust" in which over three-hundred American B-29's had "laid waste" to Tokyo. It was a stark reminder that imagined mass destruction could be actualized. ¹²⁹ When deciding on a strategy for the air raids in late 1944, Colonel John F. Turner remarked that he was "intrigued with the possibilities... of complete chaos in six cities killing 584,000 people" using recently tested incendiary bomblets. ¹³⁰ Raising the humanitarian alarm on the eve of the March attack, Secretary of War Henry Stimson protested that precedent had not been to "inflict terror bombing on civilian populations." ¹³¹ Wasn't there a way to wage war and limit human casualties? Nevertheless, preparations continued. Approving the raid, General Henry H. Arnold, head of the

¹²⁷ I avoid the hyperbole "inestimable" or "incalculable" because what follows is an accounting of war damage. I am not suggesting that a true count can necessarily be known, but that the before and after was dependent on a calculus of destruction that attempted to quantify damage to structures and human casualties. In many cases, figures remained estimates, even though a consensus later developed around specific numbers. In the main text, numbers have been rounded to better convey relative magnitudes. Where it makes sense to do so, footnotes contain a more specific number or alternative estimate.

¹²⁸ E. Bartlett Kerr, *Flames Over Tokyo: The U.S. Army Air Forces' Incendiary Campaign Against Japan 1944-1945* (New York: Donald I. Fine, 1991), 6. Compare with Fedman and Karacas, "A cartographic fade to black," 319. Compare with Twentieth Air Force, Chemical Section, "Special Report on Incendiary Attacks Against Japanese Urban Industrial Areas" (December 1945), 8. Compare with USSBS no. 55. This report lists 256,000 for buildings destroyed. Compare with USSBS no. 90, 102. This report lists deaths as 83,793 and homeless as 1,008,000. Compare with United States Strategic Bombing Survey, Physical Damage Division, "Effects of Incendiary Bomb Attacks on Japan: A report on Eight Cities" (1947), 67, 94. See also Selden, "A Forgotten Holocaust," 9.

¹²⁹ Compare with explanatory note in Selden, "A Forgotten Holocaust," 21.

¹³⁰ Kerr, Flames Over Tokyo, 80.

¹³¹ Kerr, *Flames Over Tokyo*, 145. See also Selden, "A Forgotten Holocaust," 5. Cf. Fedman and Karacas, "A cartographic fade to black," 310. Arnold himself mentions this earlier in 1940, but is won over to the incendiary strategy and choses to ignore it.

Army Air Corps, reinforced Col. Tuner's earlier destructive speculation when he said that in pressing the attack it was necessary to be "inhuman and ruthless." ¹³²

Beginning with the Tokyo raid, the systematic firebombing of cities in Japan amounted to a form of incendiary mass destruction in which dwellings and denizens figured as primary targets. 133 As David Fedman and Cary Karacas have detailed, cartographic intelligence of Tokyo leading up to the March attack that mapped urban geography, identified target areas, and anticipated the extent of the ruination, made it possible to commit urbicide—the intentional destruction of cities and their populations—on a large-scale with high confidence. ¹³⁴ As related by E. Bartlett Kerr in Flames over Tokyo, the March raids signaled a fundamental shift in United States Army Airforces (USAAF) strategy, moving from precision bombing of military targets to the wholesale clearing of cities. 135 Tested against model Japanese dwellings at Dugway Proving Ground in Utah and Eglin Field in Florida, the effectiveness of lightweight incendiary devices (M69s) against two-story wooden structures had been so convincing that many among the military, from Gen. Arnold to Major General Curtis E. LeMay, dispensed with lingering moral reservations. 136

Flipping the script on casualties, Arnold and others used the acknowledgement of the

¹³² Kerr, Flames Over Tokyo, 145.

¹³³ Selden, "A Forgotten Holocaust," 1. See also Twentieth Air Force, Chemical Section, "Special Report on Incendiary Attacks Against Japanese Urban Industrial Areas" (December 1945), 2. "Mass incendiary attacks" is the language used in the report.

¹³⁴ For a definition of urbicide, see Fedman and Karacas, "A cartographic fade to black," 313-314. See also Martin Coward, Urbicide: The Politics of Urban Destruction (New York: Routledge, 2009). Coward's work contains the following contextual note: "The term 'urbicide' became popular during the 1992–95 Bosnian War as a way of referring to widespread and deliberate destruction of the urban environment. Coined by writers on urban development in America, urbicide captures the sense that this widespread and deliberate destruction of buildings is a distinct form of violence."

¹³⁵ Kerr, Flames Over Tokyo, 44. Cf. Office of the Assistant Chief of Air Staff, Intelligence, "Fire Blitz," Impact 3, no.8 (August 1945). Precision attacks continued but the overall ratio was 20%.

¹³⁶ For a more detailed look at dwellings constructed at Dugway Proving Ground to simulate those in Japan, see Dylan J. Plung, "The Japanese Village at Dugway Proving Ground," The Asia-Pacific Journal: Japan Focus 16, no. 8 (April 2018), https://apjjf.org/2018/08/Plung.html.

apocalyptic potential of mass incendiary attacks as justification for their primary use in Japan. Civilian casualties and disruptions to the urban workforce were not just the result, they were the premise. The more the urban residential damage, the more the human dislocation, which meant greater disruption to the war economy. LeMay's tactical innovation going into the March raid was to bring the destruction home by abandoning high-altitude precision bombing in favor of low-altitude carpet bombing. 137 Using the B-29s against design, LeMay ordered pilots to fly individually (out of formation), at night, below 8,000 feet. 138 Theoretically, this would put the B-29s at greater risk of anti-aircraft fire but maximize the M69s incendiary potential. 139 As it happened, the altitude identified by LeMay proved to be a goldilocks zone in between the ceiling for light-caliber automatic weapons and the floor for anti-aircraft batteries then in operation. 140 Almost two years of preparation that began in earnest following the October 1943 "Japan— Incendiary Attack Data" report delivered by the Office of the Assistant Chief of Air Staff, Intelligence, and ramping up with LeMay's rigorous training runs and revised tactics, allowed the Twentieth Air Force's XXI Bomber Command to deliver a knockout blow to Tokyo that night in March: M47s lit the targets followed by a steel rain of M69s. 141

At the time, the March 9-10 raid was unequivocally the empire's worst military disaster. Yet it would ultimately represent only a fraction of the domestic ruination caused by war. Surveying the extent of the destruction occurring on the four main islands of Japan, the Economic Stabilization Board later estimated that the number of houses completely destroyed by

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¹³⁷ Takemae Eiji, *Inside GHQ: The Allied Occupation of Japan and Its Legacy* (New York: Continuum, 2002), 26.

¹³⁸ Kerr, *Flames Over Tokyo*, 146.

¹³⁹ Kerr, Flames Over Tokyo, 148.

¹⁴⁰ Kerr, Flames Over Tokyo, 180

¹⁴¹ Note that M47s were also used, but the March 9-10 Tokyo air raid primarily relied on M69s.

¹⁴² Kerr, *Flames Over Tokyo*, 189. n.b. This occurred before the Battle of Okinawa and the atomic attacks on Hiroshima and Nagasaki in 1945.

fire or otherwise damaged during the war amounted to 2.4 million dwellings. ¹⁴³ Tokyo accounted for one third of all losses, with more than 700,000 homes destroyed. The atomic blast in Hiroshima leveled 100,000 houses, while in Nagasaki almost 33,000 homes were obliterated. In greater Kyushu, Kagoshima lost 35,000 houses and Kumamoto 14,000. Elsewhere, Osaka saw 350,000 homes destroyed, while Hyogo and Aichi prefecture each lost almost 200,000. Hokkaido remained relatively unscathed with just over 4,000 destroyed. Overall, urban and industrial areas suffered acutely, but even rural areas lost a combined 100,000 dwellings. ¹⁴⁴

General Arnold's war report in 1947 summed up these figures in recounting the magnitude of destruction. He noted that casualties throughout the archipelago exceeded half a million persons with 2.2 million houses destroyed and 9.2 million homeless. These numbers served as a proxy for the effectiveness of the seven-month long incendiary bombing campaign that focused less on precision targeting of military-industrial facilities and more on decimating urban areas and the industrial army—factory hands and able bodies contributing to the war effort. As Thomas Searle has highlighted, General Ira C. Eaker (deputy to Gen. Arnold) recalled that "it made a lot of sense to kill skilled workers by burning whole areas." Arnold himself had made a similar point in his war report noting that "the casualties caused had significant effects in dislocation of industrial manpower and on enemy morale." The skilled workers referred to were not only targeted at large-scale sites of production—factories and their adjacent

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¹⁴³ Jūtaku nenkan 1951, ed. Kensetsushō jūtaku-kyoku (Tōkyō: Shōkokusha, 1951), 360.

¹⁴⁴ Jūtaku nenkan 1951, ed. Kensetsushō jūtaku-kyoku, 360.

¹⁴⁵ Thomas R. Searle, "'It Made a Lot of Sense to Kill Skilled Workers," *Journal of Military History* 66, no.1 (January 2002): 123.

¹⁴⁶ Thomas R. Searle, "It Made a Lot of Sense to Kill Skilled Workers," 118. See also Sheldon Garon, "On the Transnational Destruction of Cities: What Japan and the United States Learned from the Bombing of Britain and Germany in the Second World War," *Past & Present* 247, no.1 (May 2020): 253. ¹⁴⁷ Thomas R. Searle, "It Made a Lot of Sense to Kill Skilled Workers," 123.

infrastructure—but also at places of residence and along with their families.¹⁴⁸ Intelligence reports leading up to the attack attempted to frame houses as small-scale sites of production for war materials. Domiciles were imagined to exist in a web of industrial production and industrial labor so thoroughly intertwined that it made little sense to differentiate between factory and home.¹⁴⁹



Fig. 10: Dugway Proving Ground—Model Japanese Dwelling. Japan Air Raids.org.

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¹⁴⁸ Garon, "Transnational Destruction," 252.

¹⁴⁹ Office of the Assistant Chief of Air Staff, Intelligence, "Fire Blitz," *Impact* 3, no.8 (August 1945), 19. "In many cases the 'factory' buildings were the flimsy homes of the workers themselves."



Fig. 11: Typical Japanese House. British Mission to Japan, 1946.

So-called area bombing and dehousing (or less euphemistically urbicide and domicide) was a strategy pioneered by the British in the war against Germany, beginning in 1942.¹⁵⁰ In a March 30, 1942 memorandum, Frederick A. Lindemann (Lord Cherwell), science advisor to Prime Minister Winston Churchill, detailed the way in which 22 million Germans could be targeted with more than a third "turned out of house and home" using 10,000 bombers dropping payloads on "the built-up areas" of German cities.¹⁵¹ Much to Churchill's frustration, the

¹⁵⁰ Searle, "It Made a Lot of Sense to Kill Skilled Workers," 106. See also Max Hastings, *Bomber Command: The Myths and Realities of the Strategic Bombing Offensive*, 1939-1945 (NY: The Dial Press, 1979), 127.

¹⁵¹ Max Hastings, *Bomber Command: The Myths and Realities of the Strategic Bombing Offensive*, 1939-1945 (New York: The Dial Press, 1979), 127. See also

http://www.worldfuturefund.org/wffmaster/Reading/Bombing/cherwell.htm. See also Robert L. O'Connell, *Of Arms and Men: A History of War, Weapons, and Aggression* (Oxford University Press,

USAAF operating in Europe were initially resistant to participating in area bombing that so obviously targeted civilian infrastructure. ¹⁵² Leading up to the March raid, incendiary bombing of Kyushu in late 1944 and Honshu in early 1945 reflected the USAAF's continued emphasis on destroying specific sites of industry (as opposed to entire industrial areas), despite lessons in Germany. As Kerr notes, results of these more limited attacks were below expectations. In particular, the XX Bomber Command's attack on the Imperial Iron and Steel Works in Kyushu (referred to as Yawata Day) was a negative example of the usefulness of daylight precision bombing—damage to the target was negligible, while bombers were heavily exposed to enemy return fire. ¹⁵³

After the March 9-10 raid, LeMay's statement (reprinted in Moscow's article) made clear that area bombing was highly effective and implied that it would be used again. ¹⁵⁴ The loweraltitude night run over Tokyo had delivered the best results so far in Japan. In the press statement, LeMay explicitly said that the raid targeted "an urban industrial area of Tokyo" near the Emperor's Palace. ¹⁵⁵ Listing specific targets that had been damaged, such as the Ogura Oil Company, the Rising Sun Petroleum Terminal, and the Ueno railroad station, he also mentioned that "hundreds of small business establishments…and thousands of home industries were also in the area wiped out." ¹⁵⁶ In emphasizing the interconnections between the urban area and war

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^{1989), 284.}

¹⁵² Thomas R. Searle, "'It Made a Lot of Sense to Kill Skilled Workers," *Journal of Military History* 66, no.1 (January 2002): 107.

¹⁵³ Kerr, Flames Over Tokyo, 67-68.

¹⁵⁴ Warren Moscow, "City's Heart Gone in Tokyo Assault," *New York Times*, March 11, 1945. LeMay says in reference to the incendiary attacks, "They will pursue that purpose stubbornly." Richard Sams presents a detailed investigation of a subsequent raid that hit Tokyo's Toshima ward on April 13-14, 1945. See Richard Sams, "Perdition: A Forgotten Tokyo Firebombing Raid," in *The Asia Pacific-Journal: Japan Focus* 14, no.12 (June 2016).

Note that the palace was not burned in this raid. It was later burned, despite instructions to avoid it.
While the reiteration of specific military targets might be seen as an attempt to draw attention away from the number of casualties, this was not necessarily a goal of LeMay's statement. As mentioned above, the USAAF did not intend to hide casualties, but to use them as proof of the effectiveness of their

industry, LeMay blurred the distinction between civilian space and military space, military bodies and civilian bodies. 157 He implied, as had Churchill, that in a total war waged at a national level there was no longer any meaningful separation between those who pulled the trigger and those who manufactured the bullets. The war machine was not localized to a specific place or operative only on the front lines. In effect, it was contiguous with the nation itself.

Area bombing was not just a tactic of modern warfare, it was developed from an understanding of modernity and the modern city—the idea that urban areas were places where industrial production happened and where labor was concentrated. The Report of the Committee of Operations Analysts (November 11, 1943) that provided intelligence for the air raids in Japan viewed houses themselves as critical sites of production noting that "many small houses in Japan are not merely places of residence, but workshops contributing to the production of war materials." 158 Whether or not these homes proved to be the workshops of war that intelligence reports described was difficult, if not impossible, to ascertain after the fact. As mentioned in the "Special Report on the Incendiary Attacks Against Japanese Urban Industrial Areas," which studied incinerated areas on Honshu from October 26 to November 8, 1945, the devastation was so thorough and the target areas so vast that "no attempt was made to make detailed appraisal of the damage on the ground." The primary purpose of the survey was to grasp the effectiveness

tactics and as a justification of a strategy that relied on continued area based incendiary attacks. Implicitly, the reports suggested that in industrial areas the difference between civilians and agents of war was moot and that destroying the potential to make war meant destroying factories and fixed capital as much as the human labor that drove the machines.

¹⁵⁷ This did not begin with LeMay, it was part of the strategy of incendiary area bombing linked to the war in Germany and also the logic used in preparations for the incendiary attacks.

¹⁵⁸ Committee of Operations Analysts, Report of Committee of Operations Analysts (November 11,1943), 2. The full subject title for the report reads: Report of Committee of Operations Analysts on Economic Objectives in the Far East. A note on the front cover marked "Important" reads: "This report is based on and summarizes detailed industrial studies which are integral to it." Economic relations and economic space are made to be targets. Economics is also the mode of analysis that links patterns of industry to war production.

159 Twentieth Air Force, Chemical Section, "Special Report on Incendiary Attacks Against Japanese

of incendiary devices (they were effective) and not necessarily to validate assumptions made about the socio-economic realities of the area itself.¹⁶⁰

The assumption that urban areas writ large were complicit in war-making proved to be one of the deadliest theories of modern warfare. Clearing urban areas through incendiary attack was most effective when done at a scale sufficient to catalyze an uncontrollable conflagration. As mentioned in the November 1943 COA report, "maximum industrial disruption in an urban area will be attained by attacks of a magnitude sufficient to overwhelm the firefighting resources of the area in question; simultaneous attacks on many urban areas may well overwhelm the relief and repair facilities of the country as a whole." In this passage, the COA report fully exposes the logic of area bombing: effectiveness at scale. Disruption scaled form the space of individual dwellings to industrial facilities and entire urban areas, becoming commensurate with the space of the nation. As long as the war continued, every urban area was at risk of becoming a target.

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Urban Industrial Areas" (December 1945), 7. Not necessarily the case for all reports, the British Mission after Nagasaki is quite detailed and provides some structural analysis. This relatively early report points to the general frustration on the part of surveyors, who confronted many structures that were ruined beyond recognition.

¹⁶⁰ Later USSBS reports did attempt to validate assumptions about the socio-economic realities of the area, where possible. However, this was done in a way that usually reinforced earlier presumptions, rather than challenge them.

¹⁶¹ Committee of Operations Analysts, Report of Committee of Operations Analysts (November 11,1943), 2.

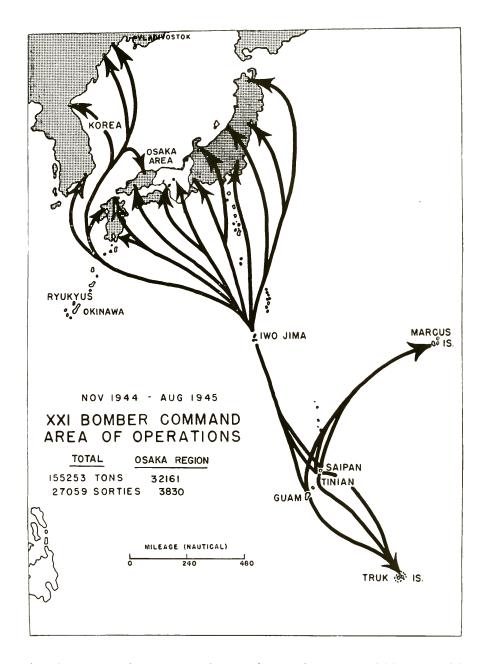


Fig. 12: XXI Bomber Command Area of Operations, Nov. 1944 - Aug. 1945. United States Strategic Bombing Survey.

In practice, many cities beyond Tokyo were incinerated to some degree. As demonstrated by the Economic Stabilization Board's housing figures cited above, beginning with the March attack the USAAF carried out successive area bombing missions that continued until early August 1945. Toyama (a city on the western seaboard of Honshu at a latitude similar to Tokyo)

was among the worst hit in terms of relative spatial destruction. Mentioned even today in the Official Toyama City Travel Guide, "99% of the city center was destroyed on the night of August 1, 1945...by 173 B-29 bombers" in the lead up to the atomic attacks on Hiroshima and Nagasaki. 162 Though a different order of weapon and unprecedented, the use of atomic weapons at Hiroshima and Nagasaki a few days later on August 6 and August 9, 1945 was well within a strategy of area bombing that made no attempt to consider an the inhabitants of urban areas as sacrosanct. The primary difference between atomic weapons and thousands of tons of incendiaries was one of efficiency not necessarily strategic effect. 163 Atomic weapons were capable of completely obliterating an area using a single aircraft and a single device—risk to personnel was minimized while destruction to the target area was maximized. 164 The further development of nuclear weapons after 1945 would take area bombing to its logical (global) conclusion: 165 it became possible to target major urban areas within a territory anywhere on earth and be assured of the instantaneous widespread destruction of life and property.

One representative analysis that shows how atomic weapons continued to be incorporated into a strategy of area bombing and dehousing after 1945 is contained within the New Republic's April 3, 1950 issue. The section titled "Military Applications of Atomic Energy" estimates dehousing in England, the United States of America (USA), and the Union of Soviet Socialist

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¹⁶² "Historical Overview Amazing Toyama: Gateway to the Northern Japan Alps," Toyama-City Tourism Association, accessed September 5, 2020, http://www.toyamashi-kankoukyoukai.jp/en/historical/
¹⁶³ By "effect" I am not talking about incineration versus irradiation, but the general clearing of an area.

See "Atomic Energy: The Technical Facts," in *New Republic* 122, no. 14 (April 3, 1950): 6-7.* The primary goal was not to expose people to radiation, but to demonstrate the area clearing effect. *This is a special section; page numbering starts from 1.

164 Photographs by the US Army Signal Corps show burned out areas of Tokyo that look eerily similar to

Photographs by the US Army Signal Corps show burned out areas of Tokyo that look eerily similar to the nuclear devastation of Hiroshima and Nagasaki. Mark Selden, "A Forgotten Holocaust: US Bombing Strategy, the Destruction of Japanese Cities and the American Way of War from World War II to Iraq," in *The Asia-Pacific Journal: Japan Focus* 5, no.5 (May 2007): 13.

¹⁶⁵ See "Atomic Energy: The Technical Facts," in New Republic 122, no. 14 (April 3, 1950): 6-7.

Republics (USSR) drawing on information from a report made by the British Mission to Japan which studied the effects of the atomic bombs on Hiroshima and Nagasaki in 1946. The article estimates that a Hiroshima-type atomic bomb detonated on a British city with a population density of 29,000 persons per square mile would result in more than 100,000 casualties and over 100,000 homes damaged or destroyed. Extending the analysis, the article estimates the number of uranium-plutonium bombs and hydrogen bombs it would take to dehouse 20 million people in the USSR (UP=100; H=5) and 15 million people in the USA (UP=75; H=5). He as stated, the mission objective would be to: "inflict housing damage on large cities in Russia or the US by improved U-P bombs, comparable to damage inflicted on German cities by conventional bombs in area raids." With the advent of the Cold War, the area bombing strategy developed over Germany and Japan boomeranged back on the United States and Great Britain, becoming the gravest of threats to American and British publics.

While the March 9-10 Tokyo air raid stands out statistically on many counts, including the high casualty figures, damage to other urban areas like Osaka and Kobe was comparably horrific. The March 13 air raid on Osaka employed 275 B-29s dropping more than 1,700 tons of incendiary ordnance at an altitude of 7,000 feet. 167 It dehoused 500,000 people. 168 The March 17 Kobe air raid employed 307 B-29s flying just below 7,000 feet, dropping 2,300 tons of incendiary ordnance. 169 This raid dehoused 238,000 people. 170 Deaths were significantly lower (3,900 persons in Osaka and 2,600 in Kobe) due to civilian relocation, with 425,000 evacuated in

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¹⁶⁶ See "Atomic Energy: The Technical Facts," in New Republic 122, no. 14 (April 3, 1950): 7.

¹⁶⁷ United States Strategic Bombing Survey, Urban Areas Division, *Effects of Air Attack on Osaka-Kobe-Kyoto* (June 1947), 24, 36, 162. Also referred to as USSBS no. 58.

¹⁶⁸ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 36, 162.

¹⁶⁹ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 156.

¹⁷⁰ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 36, 162.

Osaka and 98,000 evacuated in Kobe.¹⁷¹ The total number of residents dehoused (bombed out) in Osaka over seven raids conducted between March and August 1945 amounted to almost 1,135,000 persons. For Kobe, the number of dehoused was just over 452,000 people.¹⁷²

Analysis of structural damage reported by the United States Strategic Bombing Survey's Urban Area's Division (UAD) in June 1947 shows photographic evidence of ruination similar to that of Tokyo. The image entitled "The commercial heart of Osaka" shows the structural equivalent of an urban cardiac arrest: a scattering of fire-resistant buildings stand solemnly among veins of charred rubble and scorched earth. The USSBS's extensive postmortem determined that incendiary urban violence had gutted the city of its economic potential and successfully disrupted the population and local government. Over the Osaka Report's one hundred and forty-five pages, the UAD builds a case for the effectiveness of area bombing by showing how dehousing correlated to declines in industrial production and war making potential. Graphs detailing changes in electric power consumption, coal consumption, gas consumption, and the movement of iron and steel, all attempt to gauge economic activity by way of numerical abstraction.

The graph entitled Electric Power Consumption Osaka is representative of the impact of the raids on industrial manufacturing. While there is a general downward trend for all of 1945, there is an acute decline from February to March and an even more pronounced decline from June to July. From a near term peak of 100 million kWh in December, the graph marks total consumption for March at 62 million kWh and puts July around 7 million kWh.¹⁷⁴ The report explicitly attributes these declines to the March and June raids, noting that "the direct

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¹⁷¹ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 36, 162.

¹⁷² USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 36, 162.

¹⁷³ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 1.

¹⁷⁴ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 42.

consequence of area attacks...was an immediate and sharp drop in manufacturing."¹⁷⁵ Using electricity as a proxy for economic activity allowed USSBS analysts to quantify disruptions to the industrial war machine, which required continuous resource consumption to function.

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ELECTRIC POWER CONSUMPTION OSAKA

Fig. 13: Electric Power Consumption Osaka, Oct. 1943 - Aug. 1945. United States Strategic Bombing Survey.

TRANSPORTATION AND LIGHTING

EXHIBIT 6

Another graph, entitled "Industrial Labor Force Osaka Residents," which was produced

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¹⁷⁵ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 42.

from data collected by prefectural police, shows a precipitous decline in resident labor after February 1945. Reaching a peak of 700,000 persons in January of 1945, when including adult male, female, and student labor, the number of employed persons in August had fallen nearly in half. Student labor, which had risen considerably from June 1944 to January 1945, adding almost 150,000 persons, was nearly nonexistent by August. As the report notes, middle school students, along with technical and trade school students, were mobilized for war work in Osaka beginning in April of 1944. They worked at least eight-hour days for minimal compensation with working time converted into school time so that students could continue to receive academic credit.¹⁷⁶

Students were seen as more effective workers because they were already disciplined to operate in groups and respond to authority. Mobilized students were allocated by class and remained under the authority of their teachers. Using school discipline, the report observes that "students were easier to control and their morale during the raid period was much better than that of other conscript groups." Student groups, dispersed throughout the city and serving industries that ranged from aircraft production to shipbuilding, were also affected by dehousing. Following successive incendiary raids in June, the Factory Student Corps was established in July to provide dormitories close to sites of production for students who were "dehoused and had found no alternative place to live." In contrast to students, the report notes that geisha proved to be "completely unsatisfactory as industrial workers" because they were used to earning more and because they were "not temperamentally suitable for war work." Other females identified as registered prostitutes were exempt from industrial work because they were "essential for morale" in Osaka. Beginning in August 1944, women between the ages of 14 and 40 not

¹⁷⁶ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 111.

¹⁷⁷ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 111.

¹⁷⁸ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 111.

¹⁷⁹ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 111.

otherwise engaged in productive labor or considered essential homemakers were drafted. Almost 30,000 women or two percent of the female population in Osaka reported for work.

The case of the Osaka Army Arsenal (Osaka hōhei kōshō) illustrates the way in which dehousing and area attacks were used to disrupt industrial labor and interconnected production facilities. Despite employing more than 38,000 adults and 6,000 students for munitions production, the Osaka Arsenal was not directly attacked until August 14, one day before Emperor Hirohito announced the acceptance of the Potsdam Declaration. Why, despite its military significance, was the Arsenal not targeted earlier in a precision attack? The USSBS report suggests that viewing the Arsenal as a single site limited to the area around Osaka Castle was to misunderstand the Arsenal. As a tentacular industrial apparatus, the arms of the Arsenal reached far and wide throughout the city. The report notes that 30,000 additional workers were directly employed elsewhere in Osaka, while 200,000 workers labored in 71 directly contracted private plants, not to mention the numbers employed in an additional 750 subcontracted factories. 181

Destroying the Arsenal itself would, at best, have limited impact because it would not sufficiently disrupt the "complex local subcontracting pattern." An area attack would not only dehouse workers, but would also cutoff the reach of the Arsenal's arms. As the report notes, disruption to communications and transportation lines between the Arsenal and its civilian contractors was "highly embarrassing" following the air raids. The composite graph identified as "Osaka Arsenal" shows that electric power consumption and the yen value of munitions produced declined significantly after March and June. Based on the data presented in this graph, the August 14 precision attack that destroyed the Osaka Arsenal proper can be seen as a largely

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¹⁸⁰ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 127. The report notes that, "The Osaka Arsenal was responsible for about 20 percent of all ordnance production for the Japanese Army." ¹⁸¹ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 127.

¹⁸² USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 128.

symbolic gesture because productive man hours, electric power consumption, and yen valued production were already approaching zero by this date. 183

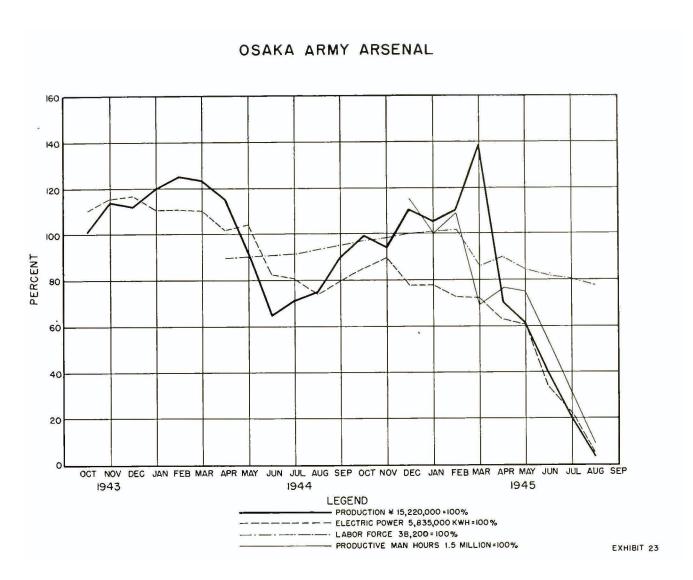


Fig. 14: Osaka Army Arsenal—Production Value, Electric Power, Labor Force, Work Hours. United States Strategic Bombing Survey.

Urban area attacks and dehousing cut across age, gender, and status, significantly affecting patterns of residential community. The Foreign Morale Analysis Division noted in July

¹⁸³ USSBS, Effects of Air Attack on Osaka-Kobe-Kyoto (June 1947), 129.

of 1945 that disruptive effects of the air raids included "the breakup of family, neighborhood and economic relationships" leading to generalized physical and social disorder. Those who survived the raids experienced a range of maladies including "hunger, sickness, nervous exhaustion and lack of security." 184 Hideko Tamura Friedman's remembrance of the atomic blast in Hiroshima, printed in The Bulletin of the Atomic Scientists' dehousing issue in 1995, details the way in which a single blast could dramatically alter family and community relations. Having relocated from Tokyo, Hideko was living with her extended family in Hiroshima when the bomb hit. Although her grandparents' house survived the attack, the family was devastated. Hideko's mother Kimiko, who had been mobilized for fire-clearance activities, was crushed and burned inside a building during the blast. Her cousin Hideyuki, a middle school student, died shortly after impact. Kiyotsune, another cousin, initially survived the explosion, but perished a few days later. Fleeing her house moments after the attack, Hideko met up with her neighbor, an elementary student named Noriko, who was suffering from radiation burns to her face. Returning to the city after the fires subsided, Hideko recalled arriving at a temple converted into a rescue station where "blackened bodies lay on the floor unattended. The stench of rotting flesh filled the air. Soft moans were the only signs of life."185

The vivid sense of morbid reality that Hideko Tamura Friedman details in "Hiroshima Memories" was later republished as part of her book *One Sunny Day* (1998). 186 This work can be compared to Ibuse Masuji's novel Black Rain (1965), Nakazawa Kenji's manga series Barefoot Gen (1973-1987), and Nosaka Akiyuki's short story "Grave of the Fireflies" (1967). These

¹⁸⁴ Office of War Information, Foreign Morale Analysis Division, *Japanese Home Morale Under* Bombing (July 30, 1945), 3.

Hideko Tamura Friedman, "Hiroshima Memories," in *The Bulletin of the Atomic Scientists* 51, no.3 (May 1995), 21.

¹⁸⁶ This book is published under the name Hideko Tamura Snider.

works, which range between memoir and fictive reimagining, attempt to convey what statistics alone cannot: the subjective experience of the collapse of everyday life during war that continues to haunt the present. While USSBS reports attempted to gauge psychological factors in assessing the impact of the air raids on worker morale, the duration of trauma and memory far outlasted the moment of impact. It is a testament to human resilience that Hideko Tamura Friedman was able to survive these attacks and relocate to the United States, where she went on to work in the Radiation Oncology Department at the University of Chicago Hospitals.

Reducing residents to a condition of extreme precarity and destroying the human community in an effort to stymie industrial production, prevent the reallocation of labor, and crush morale was what made dehousing by way of urban area attacks into a thanatopolitics of housing. The approach was quantitative and indiscriminate. It attempted to calculate in advance the area to be incinerated, the tonnage of ordnance required to ignite such an area, the number of people displaced, and the anticipated casualties. Seeing urban areas as a complex network of humans and machines working in concert to produce the enemy's war was an analytical and interpretive strategy written on both sides of the attack. It attempted to manage carnage by way of the law of averages and numerical abstractions, approximating the war machine's falling potential through corpses and kilowatts. It also othered people, casting them as part of the abstract categories 'population' and 'labor.' In what could be likened to "spooky action at a distance," remote planning produced real effects elsewhere when operationalized by the military. 187 Area raids "intelligently" disrupted enemy space, altering the distribution of the

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¹⁸⁷ Gabriel Popkin, "Einstein's 'spooky action at a distance' spotted in objects almost big enough to see," *Science* (April 25, 2018), doi:10.1126/science.aat9920. As Popkin notes, Einstein described the situation of quantum entanglement where two objects "will instantly change properties, as if the two are connected by a mysterious communication channel," as "spooky action at a distance." I employ this idea to demystify the communications channels that carry urban intelligence from USAAF analysts to the pilots executing the raids. Compare with Kevin Richardson's concept of "desk work violence." See Kevin H.

population and trading precise physical destruction for targeted chaos.

As noted by the mayor of Kobe, incendiary attacks threw labor like embers to the wind as the living environment was burned out from under them:

"With the intensification of air raids by the [US]AAF against the homeland, the day laborers scattered precipitously to local areas of safety, as a result of which it became ever more difficult to control them and to make them work in essential spheres. On the other hand, since many of the various war production factories of the metropolis (Osaka) and other cities had started evacuating, many workers, seeking personal safety and black market wages, avalanched into rural communities where food was plentiful."

Targeting the Tenements

The dislocation of residents and the destruction of homes without promise of rehousing is what differentiated wartime dehousing from its prior application as a means for readjusting urban areas with regard to slum clearance and sanitation, particularly in England and America. Earlier dehousing measures were designed to clear areas and manage populations according to calculated rates of illness and degrees of domestic fitness. As a practice for intervening into urban space, dehousing was developed from an analysis of residential environments based on scientific observations. Even so, dehousing was discriminatory. It distinguished one house from another, one side of the street from the other, and one resident from another, by labeling a residence or group of residences as a slum—an area with an unhealthy living environment. Although prewar dehousing efforts were ostensibly measures taken to disrupt disease, they too had destructive effects. In both cases (wartime and prewar dehousing), the human factor was central. Dehousing attempted to target the resident by way of the residence.

Whereas eviction refers to the removal of persons from the house, dehousing goes

Richardson, Scientific Wastelands and Toxic Utopias: The New Environmentalism of 1970s Japan (Ph.D. diss., University of California, Los Angeles, 2020). See also Selden, "Forgotten Holocaust," 13.

further, involving the clearing away of the structure along with the removal of the occupant. The *Manual on Unfit Houses and Unhealthy Areas* published in London in 1919 by the Ministry of Health demonstrates the way in which dehousing had earlier functioned as a technique for sanitizing urban areas. While death of the occupant was not one of the objectives, the report details the way in which individual structures and whole urban areas came to be identified for the purpose of clearance. As a lumberjack marks trees for cutting, the Ministry of Health marked areas for clearing. As stated in the Manual, "An area is unhealthy because of defects of planning (narrow streets, congested buildings, &c.) or because of defects of the individual houses (structural shortcomings, want of sanitary conveniences, &c.)...and as a rule, clearances must, for the present, be undertaken gradually, so as to avoid any serious de-housing." 189

The use of the phrase "serious de-housing" suggests that dehousing would be carried out to some lesser degree. Language used in the report makes evident that interventions were offensive in nature, letting local authorities know that "bad housing is to be...comprehensively attacked." Just how much dehousing was necessary depended on surveys to be conducted by the local authorities themselves. The Manual recommends that "conditions should be shown by different colors on a large scale map of the district so that...others may readily see what are the circumstances of the district." Said differently, the survey worked to translate a detailed investigation of an area into an easily consumed abstract visual aid so that an area could be acted upon—othering the area by measuring it against a standard of fitness and health.

While the Manual had noble goals (to promote health, clear dangerous areas, and

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¹⁸⁸ Using conventional demolition techniques.

¹⁸⁹ Ministry of Health, *Manual on Unfit Houses and Unhealthy Areas*, vol. 1, Policy and Practice (London: His Majesty's Stationary Office, 1919), 21.

¹⁹⁰ Ministry of Health, Manual on Unfit Houses and Unhealthy Areas, 23.

¹⁹¹ Ministry of Health, Manual on Unfit Houses and Unhealthy Areas, 6.

improve living conditions) it was also a pedagogical tool that schooled local authorities in urban discrimination. Out of a morass of dwellings and people it aimed to make certain areas sensible and identifiable for the purpose of judging them according to standards of domestic hygiene. From its national perch, the Ministry of Health tasked local governments with marking areas and made them responsible for clearing. Fitness did not rest solely with the dwelling. The manual elides the residence and the resident by noting that "the slum problem is one of persons as well as of accommodation." Subtending the practice of slum clearance (read dehousing) was the idea that an area and persons in the area were reciprocity related and co-constituted: the slum in the slum dweller and the slum dweller in the slum.

These practices were not limited to England. In a pamphlet entitled "Housing and Recreation" that was based on a lecture delivered at The American Museum of Natural History on November 22, 1938, Robert Moses (Commissioner of Parks for New York, N.Y.) employed this logic wholesale as he identified areas of New York City that would be subject to clearance. He noted that of 62,000 old law tenements and other converted dwellings housing an estimated two million people, around 25,000 were "far below standard." Using aerial photography, abstract mapping, and detailed shots of dwellings, Moses performed an urban spatial analysis similar to what the Manual on Unfit Houses proposes. He used white-lining and red-blocking to identify and mark urban areas for clearance and rehousing (dehousing is implied), foreshadowing the methods employed by the USAAF in developing targets for the Tokyo raid. White-lining

¹⁹² Ministry of Health, Manual on Unfit Houses and Unhealthy Areas, 23.

¹⁹³ Robert Moses, Commissioner of Parks, *Housing and Recreation* (New York, 1938). Paper read by Robert Moses at The American Museum of Natural History on November 22, 1938. Compiled as a printed folio containing maps and figures.

¹⁹⁴ The Manual of Unfit Houses used a "thick black line" for marking an unhealthy area. The idea is the same: linear bounding of an unhealthy area. See Fig. 2a in Ministry of Health, *Manual on Unfit Houses and Unhealthy Areas*.

here refers to the identification (through linear bounding) of an area and its population that is deemed domestically unfit and is therefore subject to clearance; red-blocking then codes an area within the clearance site that will be replaced by fit dwellings. As Moses said, "the only sensible procedure is to map these plots." Plots where "genuine slum clearance" could take place "because they are in the neighborhoods which have the worst housing conditions." ¹⁹⁵



Fig. 15: White Lining. Housing and Recreation, 1938.

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¹⁹⁵ Moses, *Housing and Recreation*, 12.

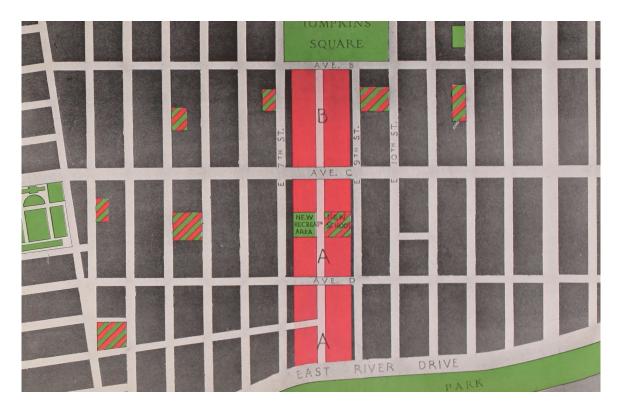


Fig. 16: Red Blocking. Housing and Recreation, 1938.

In Japan too, the tenements were targeted. The worse the perceived housing conditions the better the assumed inflammability of the target area. A photograph used in the Standard Oil Development Company report detailing flammable test structures at Dugway Proving Ground focused on "Tenement Buildings" in the commercial center of Nagoya. The photograph shows a built-up area in which narrow roads are barely visible amongst a sprawl of densely packed low-rise structures. An adjoining view of Osaka is described as "showing Workers Quarters in [an] Industrial Section." In the image, scores of smokestacks are visible against a crush of low-rise dwellings extending out to the horizon line. Following this, two more photographs show, respectively, worker housing at the Yawata Steel Mill, and housing adjacent to the main railroad line in Kobe.

As noted in the report, tenements were taken as the model because they represented the

"largest portion of roof area in industrial Japan." ¹⁹⁶ For planning purposes, roofs were assumed to be made either of tile, wood, or sheet metal. The houses themselves were built primarily with wood and without cement foundations. ¹⁹⁷ Interior furnishings ranging from *tatami* mats to a chest of drawers were also simulated at Dugway, but in general it was assumed that almost all furnishings would be combustible. ¹⁹⁸ The relationship between the materiality of the structure and the nature of the area helps explain the magnitude of destruction, but the imagined equivalence between these areas is also significant. Based on aerial photographs and representative dwellings, the USAAF assumed that because structures looked like tenement buildings and workers quarters that they were tinderboxes likely to be workshops of war and were therefore subject to dehousing. Judging the character of an area through reconnaissance photography was as important as testing and verifying the flammability of incendiary devices. It should be emphasized that the goal was not simply to burn what could be burned, but to incinerate the infrastructure of industry, which included the working population and their places of residence.

While the 1923 Great Kantō Earthquake and the conflagrations it ignited were cited as a reference point for the Tokyo raid, the COA analysis shows that the incendiary attacks were understood as a means for disrupting the working population and destroying industrial production necessary for the war. While it caused a tremendous loss of life and structural devastation, the Great Kantō Earthquake, as a natural disaster, certainly did not involve the willful targeting of industrial areas—it demonstrated the vulnerability of these areas to fire. The

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¹⁹⁶ Standard Oil Development Company, *Design and Construction of Typical German and Japanese Test Structures at Dugway Proving Grounds, Utah* (May 1943), 11. This report was commissioned by the Chemical Warfare Service-Technical Division (SPCW 161, March 12, 1943).

¹⁹⁷ Standard Oil Development Company, *Design and Construction*, 11.

¹⁹⁸ Standard Oil Development Company, *Design and Construction*, 13. See also Dylan J. Plung, "The Japanese Village at Dugway Proving Ground," 7-12.

COA report makes clear that the primary objective of the air raids was area clearance and dehousing that would disable functioning economic space. The report says that "small plants and household shops form an integral and important part of the Japanese economic system." These generalized targets were indistinctly contained in congested residential sections that were "highly vulnerable to incendiary attack." The report imagined that, if successful, this kind of attack would burn 180 square miles and render about 12 million people homeless in twenty cities that ranged from Tokyo (population 6.7 million) to Nobeoka (population 79,000). Both the November COA report and LeMay's statement to the press (mentioned above) make evident that dehousing by way of area bombing, as it was employed in Japan, was not just about forcing workers from their homes as the term might have earlier suggested, but to completely destroy houses as sites of production, if possible kill the workers themselves, and render an area uninhabitable so as to prevent the return of the working population. This idea drove the planning process and it was again reiterated by LeMay after the attack.

The magnitude of the incineration as well as the nature of the areas attacked is significant in examining the development of public housing policy following the war. It also mattered for what types of structures were actually built. As discussed in the sections below, the postwar calculus of housing developed from a quantitative understanding of loss, as well as the nature of that loss. It needed to respond to a national crisis of shelter in which thousands and hundreds of thousands of homes were lost in cities ranging from Tokyo to Kumamoto. It also understood that what the firebombing had destroyed was urban areas and industrial potential. Postwar public housing policy driven by the Japanese government was addressed to urban and industrial publics,

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¹⁹⁹ Committee of Operations Analysts, Report of Committee of Operations Analysts (November 3,1943),

²⁰⁰ Committee of Operations Analysts, *Report of Committee of Operations Analysts* (November 3,1943), 26.

people who were housed in cities and sites of industry.²⁰¹ Unlike slum clearance and rehousing, it was not necessarily aimed at sanitizing urban areas and unhealthy dwellings (incendiary raids seemed to have already done this), but about building housing in a structured way that would encourage a return of the working population and restore the housing economy. Where slum clearance had been framed within a program for public health, postwar housing policy would be developed through logics of economy and industry. The principal aim of forward looking urban housing policy was the stabilization and growth of working publics and their families. The economic potential of those rehoused was an important consideration in what kind of housing got built and who got that housing.²⁰²

Japan as Economic Unit

When Emperor Hirohito announced the acceptance of the Potsdam Declaration by prerecorded radio address on August 15, 1945, he signaled that the empire (*dai nippon teikoku*) would be among the casualties of war.²⁰³ Counterintuitively, what the dissolution of empire allowed for was the creation of a new Japan. While the Emperor's radio address used the words *kokutai* (national body) and *teikoku* (empire), the Potsdam Declaration used the words "Japan" and "the Empire of Japan" in spelling out its demands for surrender.²⁰⁴ The Potsdam Declaration

²⁰¹ The focus on home ownership and land reform does not necessarily address the recovery of the working population after area clearance and dehousing.

²⁰² Looking at comparative histories of public housing in England and America shows that the visibility and intelligibility of the city was a factor in understanding the materiality of dwelling and led to strategies for analyzing urban areas. Whereas prewar ideas of dehousing and clearance were a factor in rehousing working populations that relied on abstract mapping subtended by a logic and optics of health, Fedman and Karacas have detailed how photographic maps became important in directing bombers, calculating flammability, and determining the efficacy of war strategy.

 $^{^{203}}$ The broadcast was recorded the previous day on August 14 and played on August 15. It is also referred to as the Jewel Voice Broadcast ($gyokuon-h\bar{o}s\bar{o}$). The Emperor read aloud the Imperial Rescript on the Termination of the Greater East Asia War. As John Dower points out it in *Embracing Defeat*, this was the first time the Emperor addressed his subjects in this way. See John Dower, *Embracing Defeat* (New York: W.W. Norton, 1999), 33.

²⁰⁴ The Potsdam Declaration (the Proclamation Defining Terms for Japanese Surrender) was issued on July 26, 1945 at Potsdam, Germany.

was quite clear that what Emperor was made to accept, above all, was a definition of Japan enumerated in terms of sovereign territory. The Declaration stated that "Japanese sovereignty shall be limited to the islands of Honshu, Hokkaido, Kyushu, Shikoku and such minor islands as we determine."

As made evident in the earlier Cairo Declaration (1943), the Empire of Japan had not been just Japan for quite some time. In noting the extent of imperial aggrandizement, the Cairo Declaration called out Manchuria, Pacific islands seized after 1914, including Formosa and the Pescadores (to be returned to the Republic of China), as well as the "enslavement of the people of Korea," which implied the Korean peninsula. Fe Yalta Agreement (1945) went even further, identifying the Kuril Islands, the southern Sakhalin Islands, the port of Dairen, and other territories that had been annexed from Russia in 1904 during the Russo-Japanese War. As Edwin Martin pointed out in 1948, the fundamental objective of these declarations and agreements (reinforced by post-surrender policy statements) was to "strip Japan of her territorial acquisitions since the Meiji Restoration." Looking broadly from 1868 to 1945, it is possible to see that colonial conquest (and later the concept of a Greater East Asia Co-prosperity Sphere) had become central to an empire that was, in principle, geographically unlimited. Until the Potsdam Declaration, Japan, as such, had no clear meaning apart from what was understood as

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²⁰⁵ "The Cairo Declaration," November 26, 1943, History and Public Policy Program Digital Archive, Foreign Relations of the United States, Diplomatic Papers, The Conferences at Cairo and Tehran, 1943 (Washington, DC: United States Government Printing Office, 1961), 448-449. https://digitalarchive.wilsoncenter.org/document/122101

²⁰⁶ The US Navy was tasked with controlling the central and southern Kurils on August 11, 1945. The situation was resolved on August 18. The Kuril arc passed to Soviet control. Takemae notes that Roosevelt's death "effectively voided" the Yalta agreement. The Kuril Islands, not mentioned in General Order no. 1, were viewed as a "strategic asset." See Takemae, *Inside GHQ*, 50.

²⁰⁷ Edwin M. Martin, *The Allied Occupation of Japan* (Stanford: Stanford University Press, 1948), 35. Note that the Meiji Restoration is conventionally dated to 1868. The Meiji Period officially lasted from 1868-1912.

dai nippon teikoku (The Empire of Japan). 208

When viewing the set of documents related to surrender that includes the Cairo Declaration, the Yalta Agreement, the Potsdam Declaration, the Imperial Rescript on the Termination of the Greater East Asia War (the radio address), the Instrument of Surrender, and General Order Number One, what emerges is Japan as a spatially limited sovereign territory under the control of the Supreme Commander for the Allied Powers (SCAP).²⁰⁹ The Potsdam Declaration states that "we do not intend that the Japanese shall be enslaved as a race or destroyed as a nation." In effect, what the Potsdam Declaration declares is that Japan is an ethnoracial nation contained within the limited sovereign territory of Honshu, Hokkaido, Kyushu, Shikoku and minor islands.²¹⁰ Formally, it was not the Occupation forces that were tasked with guarding the socio-spatial integrity of Japan, but the police. General Order no. 1 is explicit on this matter. While the Order calls for all military forces to lay down their weapons and surrender, it maintains that "the Japanese Police Force in the main Islands of Japan [nihon kokudo nai] will

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²⁰⁸ *Dai nippon teikoku* is codified by the Meiji Constitution (1889). The Constitution was promulgated in the 22nd year of Meiji. The last major war for dominion over the territory that would be considered the home islands of Japan was the Boshin War (1868-1869). The consolidation of power over the northeastern territory, much of which is present day Tōhoku and Hokkaidō, effectively marked the defeat of the Tokugawa shogunate and founded the basis for Meiji rule. This territory was not considered exogenous territory by the Potsdam Declaration. Imperial forces later invaded Taiwan in 1874 and annexed the Ryukyu kingdom (Okinawa) in 1879. These acts of appropriation were at the forefront of territorial expansion by the Empire of Japan (*dai nippon teikoku*). See Tōru Hōya, "A Military History of the Boshin War," in *The Meiji Restoration: Japan as a Global Nation*, Robert Hellyer and Harald Fuess, eds., (Cambridge: Cambridge University Press, 2020). See also, Donald Keene, *Emperor of Japan: Meiji and His World*, 1852-1912 (New York: Columbia University Press, 2002).

The Supreme Commander for the Allied Powers (SCAP) was the title given to the chief executive officer of the occupation of Japan. It refers (at times ambiguously) to the executive officer and his General Headquarters (GHQ). See "Supreme Commander For The Allied Powers (SCAP)," *Japan: Places, Images, Times & Transformations*, accessed July 29, 2021, https://www.japanpitt.pitt.edu/glossary/supreme-commander-allied-powers-scap.

²¹⁰ This is not to suggest that such a definition of Japan was not possible before the Potsdam Declaration, but to emphasize that this was not the category used in the radio address. Emperor Hirohito did not address only the citizens of what is afterwards understood as Japan, but all the subjects of *dai nippon teikoku* (the Empire).

be exempt from this disarmament provision. The Police Force will remain at their posts and shall be held responsible for preservation of Law and Order."²¹¹ The purview of the police, as well as their application of force, was made to be coextensive with the newly defined territory.

Alongside these uniformed officers, a second definition of the police was called to order during the events of surrender: the Japanese Government. As Martin notes, speaking of directives for the Occupation, "a great help in this, as well as an indispensable guide and policeman for [an economic recovery] program, must be an invigorated Japanese Government." As a pedagogue-in-corrections-officer, the government would take charge of inculcating in the minds of people "the importance of economic recovery and…their own responsibility for what happens to them."²¹²

While the terms of surrender unequivocally eviscerated the empire without, they permitted the recovery of an nation within—one supported by a largely intact pre-surrender bureaucratic apparatus oriented toward a future of liberal-democracy. Even before the so-called Reverse Course of 1947-48²¹³ that shifted Occupation policy toward an emerging Cold War strategy of containment and alliance building spearheaded by George Kennan and William Draper with Joseph Dodge at the fiscal helm,²¹⁴ initial post-surrender policy was already heavily skewed in favor of an economic revival favorable to the United States and its allies.²¹⁵ As

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²¹¹ Unlike Imperial Army and Navy personnel, certain police forces were not demobilized, but remained armed and were charged with monitoring the domestic population of Japan.

²¹² Martin, *Allied Occupation of Japan*, 100.

When Joseph Dodge arrived in Japan in early 1949 to serve as the representative of President Truman's nine-point economic stabilization directive to SCAP, policy was revised to promote fiscal discipline, reduce government intervention, and boost exports. While this change in policy diminished Douglas MacArthur's (SCAP) potential to author the economic future of Japan, it maintained an overall orientation toward capitalism that had existed from the start of the Occupation. See Martin, *Allied Occupation of Japan*, 74, 77. See also William Nester, *Power across the Pacific*, (London: Macmillan, 1996), 224. See also John Michael Purves, "Postwar Okinawa," accessed September 27, 2020, https://ryukyu-okinawa.net/pages/postwar3.html#_ftn6. Yen fixed at 360/\$1 on April 25, 1949.

²¹⁵ Martin, *Allied Occupation of Japan*, 26-27. Despite later course corrections, there was a demonstrable

described in "Part IV—Economic" of the "Statement of Policy, Approved by the President, Relating to Post-War Japan" dated September 6, 1945, point two reads: "Encouragement shall be given and favor shown to the development of organizations in labor, industry, and agriculture, organized on a democratic basis...forms of economic activity, organization and leadership shall be favored that are deemed likely to strengthen the peaceful disposition of the Japanese people."

When the postwar Constitution was later promulgated on November 3, 1946, it was mum on the matter of territory and the police.²¹⁶ The edict signed by the emperor referred to a "new Japan" (*shin-nihon*) in which sovereignty resided with the people.²¹⁷ Because the Constitution itself did not specify the territory over which the sovereignty of the people would be exercised, it necessarily relied on the prior definition established by the Potsdam Declaration. That the Constitution did not again state the territory did not mean that the territory was self-evident, it implied that what was intended by the word Japan had been established elsewhere. The primary aim of the Constitution, literally its first order of business (Article 1), was to establish the

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awareness throughout the Occupation of the deep interlocking of territory, economy, and the population, which if misaligned would threaten the ability to rule. As Martin noted in 1948, "the slowness with which Japanese industry is recovering from war is one indication of the economic problems faced by a Japan of 78 million people confined to the four main islands." He observed that extracting reparations and restricting war-making potential needed to be balanced against maintaining a decent standard of living and the potential for future improvement of industry. Arbitrarily imposing geographic limits, inhibiting the movement of people, and choking off of essential imports like "food, iron ore, coking coal, oil, and bauxite" created as many problems as they solved. Economic activity was treated as a fundamentally political issue that went beyond the war itself. If not handled carefully, it could precipitate a crisis of government. Underestimating need "or permitting economic chaos and starvation" was seen less a means of indirect punishment and more as a threat to governance.

²¹⁶ The territory was legally established by The Treaty of Peace with Japan signed in 1951 at San Francisco. The Treaty clarifies the status of Korea, Formosa (Taiwan), the Pescadores, the Kuril Islands, and the Spratly and Paracel Islands. Okinawa is not mentioned. See Martin, *The Allied Occupation of Japan*, 35: "final legal confirmation of the transfer of the territories involved cannot take place until the signing of the Peace Treaty with Japan, *de facto* transfers have already taken place." When the Treaty was signed, Japan was then brought into the territorial world order as overseen by the United Nations. It is worth observing that these territories, formerly part of the Empire of Japan, have defined international security relations in East Asia since 1945.

²¹⁷ The Constitution of Japan (promulgated on November 3, 1946, and in effect on May 3, 1947) amended and superseded the Meiji Constitution (1889) which referred to *dai nippon teikoku*.

Emperor as a symbol and transfer sovereignty to the people. The sovereignty being transferred was the sovereignty over the four main islands and other minor islands indicated by the Potsdam Declaration.

At first glance, these issues of territory and sovereignty seem far away from a discussion of public housing in postwar Japan. Yet, these are the documents that establish answers to the questions: 1) what is Japan? and 2) who counts as Japanese? Postwar histories of housing in Japan that focus primarily on changes in the form of dwellings or housing policy tend to assume a transhistorical socio-spatial definition of Japan, as if issues of sovereignty and the Constitution can be bracketed off or set as an appendix to concerns of form and policy. Yet, it was a crisis of territory and population exacerbated by the end of the war, the loss of empire, and the bounding of Japan that helps explain the emergence of public housing as a technique for the socio-spatial ordering of the postwar population.

Addressing a Crisis of Shelter

Though seasoned to fires, earthquakes, and floods which yearly wreaked havoc on the predominantly wooden housing stock and necessitated constant rebuilding, never before had the inhabitants of the archipelago faced a crisis of shelter of such magnitude as the one that befell them in 1945.²¹⁸ The war had been brought home and it was urban housing that bore the brunt of the attack. When factoring in houses destroyed during the air raids, superannuated structures, those crippled by forces of nature, as well as returnees from the Asiatic-pacific theater and the spaces of empire, the immediate need for housing after the war was herculean: 4.2 million

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²¹⁸ See also General Headquarters, Public Health and Welfare Section, *Public Health and Welfare in Japan* (July 1948), 75. The PHWS observed that natural disasters occurring after 1945 also added to the housing shortage. However, these were marginal compared to the damage caused by incendiary attacks. See also Carola Hein, "Rebuilding Japanese Cities after 1945," in *Rebuilding Urban Japan After 1945*, ed. Carola Hein (New York: Palgrave Macmillan, 2003), 1.

dwellings.²¹⁹ Calculations regarding the distribution of the population across available national space had also changed. Unconditional surrender and the dissolution of empire required the forfeiture of colonial land and the prompt return of more than six million people from the colonies.²²⁰ Despite the war dead, the Japanese government faced a rapid increase in the population and newly created spatial constraints.

Hostilities had ceased at the height of summer, but there would be just three months to begin building before winter set in. With houses gone and supply chains crushed, building conditions were extremely adverse.²²¹ Many cities were wholly inadequate to the task of supporting human life.²²² As David Fedmen notes in "Mapping Armageddon," Japan was *yakenohara* (scorched earth). One person returning from the colonies succinctly summed up the view of the postwar hellscape as: "No homes in which to live, no clothes to wear, no money for

²¹⁹ 4.2 million units is the number generally citied, but due to population movements, superannuation, elemental damage etc., the calculated shortage of dwellings was sometimes higher during the occupation period. See General Headquarters, Public Health and Welfare Section, *Public Health and Welfare in Japan* 1 (1949), 94. Despite rebuilding activities, the PHWS notes that as of December 31, 1949 there was a shortage of 4.6 million dwellings, with 400,000 in additional demand driven by "increase of population (return of repatriates and service men), increase in family units, recurring disasters and unreplaced losses." See also Yorifusa Ishida, "Planning in the Reconstruction Period," in *Rebuilding Urban Japan after 1945*, ed. Carola Hein (New York: Palgrave Macmillan, 2003), 23-24.

²²⁰ David Fedman, "Mapping Armageddon: The Cartography of Ruin in Occupied Japan," in *The Portolan* 92 (Spring 2015): 7. Fedman observes that the total number of returnees from abroad was 6.7 million. See also Lori Watt, *When Empire Comes Home: Repatriation and Reintegration in Postwar Japan* (Cambridge, MA: Harvard University Asia Center, 2009), 2. Watt notes that the return was relatively rapid: "5 million arrived by the end of 1946."

²²¹ General Headquarters, Public Health and Welfare Section, *Public Health and Welfare in Japan* 1 (1949), 94. The PHWS noted that building activity continued to be inhibited by "lack of building materials, primarily lumber, high cost of materials, and poor distribution" well into 1949. Although PHWS does not connect these deficiencies directly to the incendiary attacks, the effects of area bombing and dehousing on supply chains, labor relations, and production potential persisted into the Occupation. The extent of these disruptions is exemplified by the Osaka Arsenal in the above analysis.

²²² United States Strategic Bombing Survey, Medical Division, *The Effects of Bombing on Health and Medical Services in Japan* (June 1947), 4. Also referred to as USSBS no.12. The report mentions that, counterintuitively, the raids had certain positive effects on public health in the sense that urban environments were so thoroughly incinerated that even pestilence did not survive. "These large urban areas destroyed by fire were, in effect, sterilized. Rats and mice, lice and fleas, were destroyed along with other animals and those human beings caught in the burned area. Neither food nor rubble remained…"

shopping—we were greeted by a life of nothing."²²³ As John Dower has documented, children too faced extremely precarious conditions in which daily life had been transformed from an expectation to an uncertainty. Over one-hundred thousand children were orphaned and made homeless during the first few years after the war. These were people who often fell between the cracks of housing policy.²²⁴ Reduced to rabble, children were counted in a way that was normally intended for "counting animals (*ippiki*, *nihiki*, and so on)."²²⁵ They were forced to live in "railroad stations, under trestles and railway overpasses, [and] in abandoned ruins...[they] survived by their wits—shining shoes, selling newspapers, stealing, recycling cigarette butts, begging...[while] some teenage girls unsurprisingly turned to prostitution."²²⁶ For every emergency dwelling that would be built, there was a boy or girl elsewhere desperately clinging to the unraveling threads of life.²²⁷

In the immediate postwar, the phrase 'food, clothing, and shelter' (i-shoku-jū) rhetorically

²²³ Fedman, "Mapping Armageddon," 1.

²²⁴ See General Headquarters, Public Health and Welfare Section, *Public Health and Welfare in Japan* (December 1948), 128-129. The report notes that "during the first year of the occupation little progress was accomplished in providing for homeless persons, orphans and waifs." A Children's Bureau within the Ministry of Welfare was established on March 15, 1947. Subsequently on January 1, 1948 the Child Welfare Law was put into effect. For a summary see pages 129-130.

Dower, Embracing Defeat, 63.

Dower, *Embracing Defeat*, 63; see also photograph and text on page 62: "Street Children near Tokyo's Ueno Station, 1946." The photograph depicts two emaciated children. One child holds his bare belly while the other smokes a cigarette. Dower observes that "...the war's youngest victims were treated abysmally. War orphans and homeless children almost by definition became 'improper' children. Forced to scramble for daily survival on the streets, they became treated as incorrigible delinquents."

227 SCAP attempted to correct this situation by working with the Japanese government to develop a framework for child welfare. The Children's Charter was promulgated on Children's Day (May 5, 1951). Its three general principles were: 1) Children shall be respected as human beings; 2) Children shall be given due regard as members of society; 3) Children shall be brought up in good environment. The Public Health and Welfare Section was particularly proud of this accomplishment. See General Headquarters, Medical Section, Public Health and Welfare Division, *Public Health and Welfare in Japan: Final Summary—1951-52*, Volume 1 (1952), 94. Note that the Public Health and Welfare Section was transferred to the Medical Section and renamed the Public Health and Welfare Division after June 30, 1951. See also Takemae, *Inside GHO*, 418.

anchored a response to an excess of death within Japan. 228 It was addressed to life, but necessitated by a state in which the death effects of war continued into occupation. In this sense, $i\text{-}shoku\text{-}j\bar{u}$ was part of a political strategy for managing life at the threshold of death. It became relevant when too much of the population remained exposed even though such exposure was no longer deemed desirable from the perspective of the state or the enemy-turned-occupier. As discussed below and in the next chapter, housing policy that began in an attempt to preserve life in the face of death outlasted that bare necessity and evolved into a means for organizing and administering life in the postwar. 229 Government programs developed to provide basic shelter proved to be a gateway for long-term intervention into urban areas and residential space in Japan. Addressing a crisis of shelter meant defining a postwar politics of housing.

Shelter was cast as the signifier $j\bar{u}$ ($\dot{\pm}$) within the rhetorical triptych i-shoku- $j\bar{u}$ (lit. clothing, food, shelter). ²³⁰ This triptych drew people's attention to three basic needs that were required for human survival. In framing its emergency response in terms of stabilizing these basic needs, state intervention was made to appear less as a political program and more as a biological imperative. Yet, i-shoku- $j\bar{u}$ was politics. It justified the temporary continuity of state

What an excess of death refers to is the way in which, from the perspective of the state and the enemy-turned-occupier, the continued loss of life after the war's end no longer mattered for achieving victory, but became a threat to regime preservation. The death effects of war refer to the way in which millions of people were on the brink of starvation and were exposed to the elements through lack of adequate clothing and shelter. For more on food insecurity, see Takemae, *Inside GHQ*, 406-408. For more on Housing insecurity, see Waswo, *Postwar Housing in Japan*, 46.

²²⁹ Cf. Neitzel, *The Life We Longed For*, xviii.

The phrase i-shoku-j \bar{u} existed in the prewar period, but it was in the post war that $j\bar{u}$ (housing/shelter) became politicized in dealing with the effects of dehousing after 1945 transforming into the sengo no $j\bar{u}taku$ mondai (postwar housing problem). Cf. Sano Toshikata, $J\bar{u}takuron$ (Tōkyō: Fukunaga Shigekashi, 1925), 7. As Neitzel notes, i-shoku-j \bar{u} "emerged as a subject of extensive debate and reorganization in the aftermath of World War II. In the process, the issue of everyday life became central to one of the foundational narratives of postwar Japan that suggested that the Japanese people themselves had been the ultimate victims of the nation's expansions and militarist aims." See Neitzel, *The Life We Longed For*, 4-5.

supported The Empire of Japan (*dai nippon teikoku*).²³¹ It also allowed the state to grab hold of life at the most basic level—shelter. With the institutional structure of government still in place, no time was lost in formulating housing policy. The wartime Housing Corporation (*jūtaku eidan*), later disbanded by SCAP for its role in the war, was allowed to remain active until December of 1946. On August 28, 1945, the Ministry of Health and Welfare (*kōsei-shō*) and the Home Ministry (*naimu-shō*) announced a five-year plan to build three million dwellings. The following week on September 4, a cabinet decision was made regarding the construction of 300,000 basic emergency dwellings to be built in war damaged cities. On November 5, the War Damage Reconstruction Board (*sensai fukkō-in*) was established, and later on November 21, the Residential Emergency Measures Order was promulgated to promote the conversation of existing structures into housing. ²³²

These policies are remarkable for their scope and scale and transcended earlier disaster response housing measures such as those developed by the Dōjunkai (the organization responsible for building wooden and concrete housing in Tokyo and Yokohama following the Great Kantō Earthquake of 1923).²³³ Responding to the devastation from the war would require

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The interrogation of Kitaoka Juitsu (Director of the Housing Corporation) shows that the USSBS was made aware of the building activities of the Housing Corporation and its prior instantiation, the Dōjunkai Society. The interrogation report for November 2, 1945 provides a statistical overview of the number of dwellings constructed monthly by the Housing Corporation (*jūtaku eidan*) from 1942-1945. The detail for 1945 shows 648 houses built in August and 792 houses built in September. The report also notes progress toward the goal of providing 300,000 temporary dwellings as "part of a countermeasure for raid-suffers to pass this winter." See USSBS, Interrogation no. 220 (2 November 1945).

²³² Jūtaku nenkan 1951, ed. Kensetsushō jūtaku-kyoku, 47.

²³³ Similar to the incendiary bombs dropped during the war, the 1923 earthquake resulted in conflagrations throughout Tokyo that not only killed thousands of people, but left many more homeless. Kitaoka's interrogation provided statistics for apartments built by the Dōjunkai Society, the predecessor to the Housing Corporation. The report notes 2,200 apartments built across 13 sites in Tokyo, and 272 across two sites in Yokohama. See also Waswo, *Housing in Postwar Japan*, 44, for note on scale of Dōjunkai operations.

Dōjunkai-like housing in more than one hundred urban areas. As photographs taken by the United States Army Signal Corps later revealed, air raid induced damage to urban areas composed mostly of wooden buildings resembled the nuclear wasteland of Hiroshima and Nagasaki.



Fig. 17: Aerial View of Tokyo—Air Raid Damage. View from Ryōgoku Station toward Tokyo Bay; Sumida River, right. *US Army Signal Corps*.

In September 1945, construction began on overwinter housing (*ettō jūtaku*).²³⁴ As depicted in later reports, these were basic wooden houses that measured approximately 20.6

²³⁴ *Jūtaku nenpō 1959*, ed. Tōkyō-to kensetsu-kyoku sōmu-bu shomu-ka (Tōkyō: Tōkyō-to kensetsu-kyoku sōmu-bu shōmu-ka, 1960). See foldout.

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square meters (6.25 *tsubo*) and were not intended for long-term use.²³⁵ Despite the goal of building 300,000 units, just under 43,000 units were constructed nationwide.²³⁶ When including other emergency policies, such the Residential Emergency Measures Order, in the end around 80,000 units were made available.²³⁷ While taking into consideration that building conditions were extremely adverse at this time, there was a wide gap between the stated policy, units actually built, and a need for shelter.

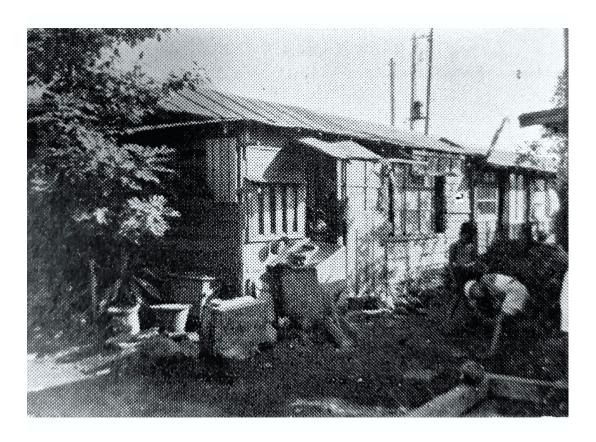


Fig. 18: Overwinter Housing. *Tokyo Municipal Housing Report*, 1959.

²³⁵ "Sengo no jūtaku seisaku: ōkyūkensetsu," *Jūtaku* 1, no. 1 (July 1952): 46. See also Yorifusa Ishida, "Planning in the Reconstruction Period," in *Rebuilding Urban Japan after 1945*, ed. Carola Hein (New York: Palgrave Macmillan, 2003), 24.

²³⁶ "Sengo no jūtaku seisaku: ōkyūkensetsu," *Jūtaku* 1, no. 1 (July 1952): 46. See also Waswo, *Housing in Postwar Japan*, 47.

²³⁷ *Jūtaku nenkan* 1951, ed. Kensetsushō jūtaku-kyoku, 63, 296. The math is as follows, *kanijūtaku* 42,959 plus *tenyō* 38,171 for a total of 81,130 units (*ko*). These figures are for government directed projects; does not necessarily include private construction or other forms of temporary dwelling. This is policy related construction. See also Waswo, *Housing in Postwar Japan*, 47.

Images from the Asahi newspaper and the US Army Signal Corps reveal a landscape marked by jerry-built structures. In one photo, boulders are used to hold down corrugated iron roofs atop rickety timbers as scores of rudimentary dwellings rest soberly in a field. In another, people and laundry hang about a serpentine shantytown that snakes its way across rubble strewn ground. Closer to air raid shelters than habitable homes, these informal dwellings provided living space, even if they were not always accounted for in government surveys or seen as a preferential modes of dwelling.

As noted by Ishida Yorifusa, home building during the reconstruction period included *minkan jiriki* and *kōsū-shugi*, which indicated that local and private initiatives were encouraged, as well as the quantitative construction of homes of any quality; building outside the metropolitan region was also taking place, especially near mining operations.²³⁸ In addition, initial SCAP policy favored rural land reform and ownership models aimed at disrupting capital concentrations that were seen as anti-democratic. Liberal interventions, such as expanding the right to vote to women went hand in hand with policy that was intended to halt what was seen as a trend toward residential serfdom—a condition in which people worked hard but did not own the land beneath their feet or the houses in which they lived. Nevertheless, including so-called rural areas—farm land and hinterlands—in housing calculations, which in the aggregate amounted to millions of people and millions of dwellings, tends to blunt the acute nature of the

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Yorifusa Ishida, "Planning in the Reconstruction Period," in *Rebuilding Urban Japan after 1945*, ed. Carola Hein (New York: Palgrave Macmillan, 2003), 23. Cf. GHQ's Economic and Scientific Section, Research and Statistics Division, observed in 1948 that even in the aftermath of war a significant amount resources (7.7 billion yen) had been directed to four programs that aimed to "attract and hold coal miners so that coal production could be stimulated." Through March 31, 1948, more than 32,000 dwellings for miners were built with repairs made to another 53,000 dwellings; the principle beneficiaries being the Mitsui and Mitsubishi mining operations in Kyushu and Hokkaido. See General Headquarters, Economic and Scientific Section, Research and Statistics Division, *Japanese Coal Mine Housing* (April 1948), 2.

crisis faced by urban areas. It diminishes the loss of lives and loss of structures and does not capture one of the key aspects of the incendiary bombing campaigns: the disruption to entire urban areas through the destruction of infrastructure, transport, and communications networks. For years, the number of new houses built in metropolitan areas would be dwarfed by the number of houses already in existence elsewhere.

One of the hazards of developing a picture of the reconstruction period that relies too heavily on high-level policy decisions is that these are not necessarily a reliable proxy for the reality on the ground. By the same token, there is also a tendency to prove government ineptitude by citing the statistically small number of public units built during the 1945-1946 overwinter emergency period and throughout the bulk of the Occupation from 1945-1952. For instance, the number of public units built is diminished when compared to total housing starts. As Ishida notes, "public housing built by local governments from 1945-1950 amounted to 274,000 units, only 9.9 percent of the total housing supply." This seeming insignificance belies one of the most important trends of the postwar period: government intervention into housing practices and residential daily life *increased* in terms of both scope and scale. For instance, as the Public Health and Welfare report notes, "The Board of Reconstruction was established in early 1946 and was made responsible for the surveying of housing needs and making available essential materials based on these surveys. It authorizes all building permits and as of 1 August 1946 such permits for all Japan have been controlled at the national level." Even if the government did not directly build units, it played a leading role in monitoring residential space, setting standards and financing housing.²³⁹ Moreover, the duel between rental and ownership, and public units versus private units, is in some ways a false dichotomy. The government's longterm goal was to restore

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²³⁹ Discussed in the following chapters. Note interaction between central and local governments.

the housing market (lending, construction, and exchange of units) and stabilize living conditions so as to make labor available to the economy (capitalized industry and services). This entailed a mix of public and private building, with state-aid flowing in the form of subsidized rents and loans used to offset the costs of construction. At no point was the goal to replace private land and private residences with a totalizing public model. Narrowing the picture to public units built does not factor in state-aid to private home builders and home owners, as well as state sponsored market making activities.

While Ishida is careful to note that dependent housing built by Occupation Forces also relied on Japanese labor and materials, diverting critical resources from housing the local population, this did not mean that Occupation Forces were blind to the residential apocalypse. The observation made by others that "Allied occupiers who entered Japan in late 1945 seem to have been oblivious to the suffering, poverty, and destruction that surrounded them," is, at best, shortsighted. While housing and poverty was not SCAP's first priority, detailed reports by Occupation Forces spread throughout the archipelago, as well as reporting done by the United States Strategic Bombing Survey and GHQ's Public Health and Welfare Section, demonstrate that Occupation Forces were not callous conquerors oblivious to the physical and social destruction caused by the incendiary attacks. If anything, they were hyperaware.

The Occupational History written by the 24th Infantry Division, for instance, notes that "the civilian attitude of the Japanese towards the occupation forces was kept under close surveillance. This involved interpreting newspaper editorials, interrogating citizens, and designating schools as intelligence targets."²⁴¹ The 24th Infantry Division's historians add the

²⁴⁰ Gary D. Allinson, *Japan's Postwar History* (Ithaca: Cornell University Press, 2004), 52.

²⁴¹ 24th Infantry Division, *Occupational History of the 24th Infantry Division for February-June 1946* (Okayama, Japan, 1946), 10. The 24th Infantry Division was first stationed in Matsuyama, Shikoku. The division headquarters was later relocated to nearby Okayama on Honshu.

caveat that surveillance and censorship meant that "the Japanese cannot truly say <u>precisely</u> what their opinions were," but it was felt that reporting and intelligence activity offered at least a window into local attitudes and opinions.²⁴² Among the voices recorded, such as an editorial opinion from the January 31, 1946 Nippon Kai newspaper that "denounced the position of the emperor as a god" because he "represented the militarists, capitalists, and bureaucrats," an interview obtained from the streets yielded the following observation regarding the Occupation Forces themselves: "I don't mind telling you that when we first heard that American occupation forces would come to Takarazuka, we were greatly startled, because we thought that they would commit assaults and plunder. But we are now very much pleased indeed to have them with us."²⁴³

With regard to housing activities, reports written by the United States Army 93d Military Government Company operating in Kyushu show that in January of 1946 there were 13,760 homeless families in Oita City with only 47 houses built since September 1, 1945. In February of 1946, there were 9,000 homeless families in Kumamoto City where only 677 houses had been built since September 1, 1945. Though a miserable report card for housing activities, the 93d Military Government Company survey demonstrates that occupation personnel were aware of the crisis of shelter. It would be a mischaracterization to say that Occupation Forces were

²⁴² 24th Infantry Division, Occupational History, 10.

²⁴³ 24th Infantry Division, *Occupational History*, 11-12.

²⁴⁴ United States Army, 93d Military Government Headquarters Company, *Quarterly Digest of 93d Military Gov't. Co. Activities Kyushu, Japan, Jan.-Mar. 1946* (Kumamoto, Japan, 1946), 359, 361. Note that the *Jūtaku nenkan* 1951 lists the total number of houses lost or damaged in the war for Oita at 4,491; the number of houses lost is not necessarily a proxy for the number of homeless families and vice versa at a given point in time because a single residence could have housed multiple families. As the activities of the 93d Military Government Co. attest to, the US Army did participate in calculating the extent of the housing problem, monitoring the homeless situation and enabling the flow of building materials, even though SCAP allowed the national government to set policy and handle construction efforts. Also note that while these statistics suggest the magnitude of the problem, they are organized at such a high level of abstraction that they homogenize differences in types of structure and quality.

ignorant of or unfeeling toward homelessness in Japan brought on by the firebombing because they were not more directly involved in rehousing efforts. Rather, a more complex picture emerges in which SCAP ordered housing built for service members and their families (dependent housing), as detailed in a recent study by Abhishek Nanavati, while the Japanese government was allowed to take charge of rehousing at both national and municipal levels.²⁴⁵ Reports by GHQ's Public Health and Welfare Section showed that initial rehousing efforts were inhibited by a "lack of building materials, primarily lumber, [the] high cost of materials, and poor distribution," but that by 1949 the "Japanese Government Housing Construction Program" was posting significant results. In calendar year 1949, for instance, over 400,000 houses (public and private) were built nationwide.²⁴⁶

²⁴⁵ See Abhishek Nanavati, "Co-Producing 'American Dreams': Military Family Settlements, Hydroponic Farming, and Local Labor in Occupied Japan, Okinawa, and South Korea, 1945-1972" (Ph.D. diss., Georgetown University, Forthcoming).

²⁴⁶ See GHQ, Public Health and Welfare Section, *Public Health and Welfare in Japan* 1 (1949), 94. The report does not clarify what is meant by "Japanese Government Housing Construction Program." The intended distinction is housing for Japanese citizens, not necessarily the number of houses directly built by the government. Note that figures for 1949 are at variance: cited as 496,328 houses on page 94, but as 377,700 in Chart 24. The official number of houses built in 1949 was 402,375. Compare with *Jūtaku nenkan* 1951, ed. Kensetsushō jūtaku-kyoku, 265.

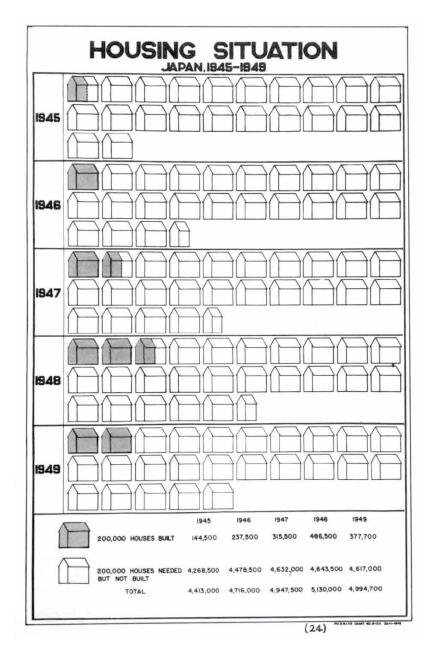


Fig. 19: Housing Situation, Japan, 1945-1948. Public Health and Welfare in Japan, 1949.

Monthly surveys conducted by the 93d Military Government Company confirm assessments made by the Public Health and Welfare Section that a dearth of timber and skilled labor impeded rehousing efforts. A remark included in the January 1946 Construction and Housing Report for Kumamoto reads, "I beg to ask your special favor for the items concerning

materials and labor."247 The report notes that a shortage of carpenters, nails, tatami, and qualified lumber were all inhibiting reconstruction activities, which were geared toward supplying 2,800 houses over the following six months. The report also provides detail which shows that government financial aid was flowing to housing related reconstruction efforts. For instance, the government was contributing \(\frac{4}{2}\),100 to those who built a 14 tsubo (46 square meter) house. Further comments on financing available to home builders describe loans and lending facilities that included the War Casualties Rehabilitation Board, the Prefectural Public Bodies, Residence Corporation, House Renters Association and a construction fund. Despite these efforts, inflation quickly eroded the impact these contributions had on supplying the necessary materials and labor for reconstruction efforts. Throughout the report there are references to rising prices and black market activities that hamper efforts.

Given the tremendous shortfall of both minimally provisioned government-built shelter and higher-quality private construction, train cars, boats, and busses were also converted into housing. In one instance, a so-called *yadobune* (a boat used as a dwelling) had been subdivided among three families. In midships, the largest space (4.5-mat living area, plus 1.5-mat closet and shelf) was occupied by a widow and her three children. At the stern, a 3-mat living area plus 1mat closet was occupied by a married couple. While at the bow of the ship a 3-mat living area plus 1-mat of closet space was occupied by two women. The deck of the ship allowed for independent access to each of the rooms and a toilet was positioned off the starboard side of the bow. Despite the rather sensible conversion of the ship into a form of housing, this was among

²⁴⁷ United States Army, 93d Military Government Headquarters Company, *Quarterly Digest of 93d* Military Gov't. Co. Activities Kyushu, Japan, Jan.-Mar. 1946 (Kumamoto, Japan, 1946), 358. ²⁴⁸ United States Army, 93d Military Government Headquarters Company, *Quarterly Digest of 93d* Military Gov't. Co. Activities Kyushu, Japan, Jan.-Mar. 1946 (Kumamoto, Japan, 1946), 359.

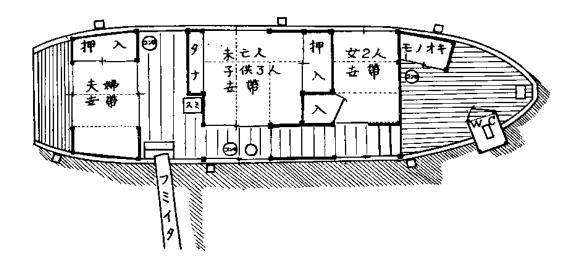


Fig. 20: Yadobune—a boat used as a dwelling. *Jūtaku*, 1952.

Ironically, the continued use of rapidly built low-quality emergency structures beyond 1945-1946 resulted in slum conditions that by the early 1950s were themselves the targets of housing policy. Writing for *Jūtaku* magazine in 1953, Ogita Makoto (Kyoto University) pointed out the continued presence of bus housing in the Kyoto, Osaka, and Kobe (*keihanshin*) area. He began by clarifying that bus housing (*basu jūtaku*) "is not a house with a bath attached to it, nor is it bus company housing." Like a *yadobune*, bus housing characterized a vehicle that had been converted into temporary residential space. In the diagram shown, the engine and wheels of a bus had been removed to provide a 4-mat interior living space, while a rudimentary

²⁴⁹ "Yadobune seikatsu," *Jūtaku* 1, no. 4 (1952): 19.

²⁵⁰ See *Jūtaku nenkan* 1951, ed. Kensetsushō jūtaku-kyoku (Tōkyō: Shōkokusha, 1951). The bus housing is photographed and identified as *furyō jūtaku* (slum housing).

²⁵¹ The English word "bus" when transliterated into Japanese sounds like the English word for "bath." Ōgita Makoto, "Basu jūtaku," *Jūtaku* 2, no. 10 (1956).

kitchen was constructed as an exterior attachment (*tatemashi*).²⁵² A companion diagram shows a site, referred to as a *danchi* (団地), where eleven buses have been circled around common facilities that include a watering hole and toilets. These common facilities and the low lot coverage ratio, which provided space between the structures, are the only things preventing the bus community from turning into a complete slum.

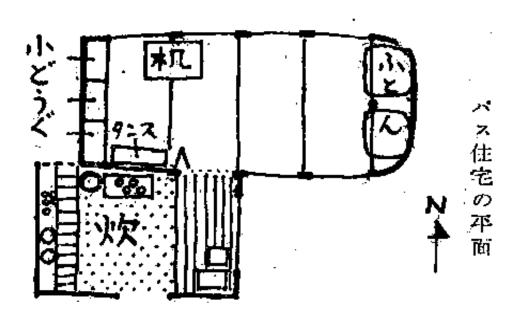


Fig. 21: Bus Housing—Floor plan. Jūtaku, 1953.

Despite these rudimentary facilities, the bus housing described by Ogita was slum-like.²⁵³ Residents described the buses as being unbearably cramped (*semai*), with all but the smallest

²⁵² See also Shioda Maruo, *Sumai no sengo shi: nihon no jūtaku mondai* (Tōkyō: Saimaru shuppan kai, 1975), 11-12. Note that Shioda is also paraphrasing Ogita's article. My discussion differs in that I am organizing this in reference to "slum" and "danchi" as key concepts, not just public housing.
²⁵³ I say slum-like here because Ogita uses the word slum in making sense of the community, even if he is

reluctant to attach that label in the full sense of the word. Ogita tries to understand the condition of the bus housers, interviewing them and interrogating their living environment, rather than just using the word slum to stigmatize the community.

families needing jerry-built exterior attachments. Lacking actual *tatami* mats, most of the busses were provisioned with *goza* (rush mats). These inferior surfaces were one above sleeping directly on the floor. This so-called goza-style life metonymically described the general low-quality of the residence and its facilities. One housewife summed up the abysmal state of thermal regulation with the phrase "summer's Taiwan, winter's Hokkaido," meaning that residents experienced the extremes of elemental variation. Under these conditions two or three infants had already passed away. Though the site was described as a *danchi* in principle, Ogita observes that because the buses were designated as temporary emergency housing (ōkyūkasetsu jūtaku) the site lacked further investments in infrastructure. There was no plumbing for sewage or drainage, which caused rainwater, as well as runoff from sinks and laundry, to be absorbed directly into the ground. This created a constant dampness within the housing area.

Ogita's usage of the word *danchi* is no accident. The bus housers occupy twenty-two units across two sites that amount to a combined 600 *tsubo* (2000 square meters) of municipal land. The city is ravenously eyeing the site, hoping to repurpose the *danchi* for a new construction project. Simulating the mindset of city officials, Ogita says "we want to somehow get rid of the bus housing so as to build multistory reinforced concrete public housing." Though the word eviction (*tachinoki*) is used to characterize this situation, the connotation is closer to dehousing (in the way that Robert Moses and the *Manual on Unfit Houses* used it) because it would involve the removal of the residents along with the residence. Ogita poses the question of eviction to a few women who were doing laundry in the communal area. One observes that although the housing is a bit run down the rent is very low, a mere 55 yen. Another notes that since they have already mixed their labor with the land to fix up the site, they feel settled and cannot just pack up at a moment's notice.

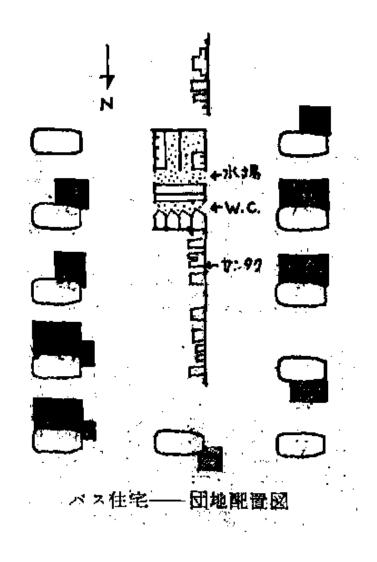


Fig. 22: Bus Housing—Danchi. Eleven busses grouped around common facilities. *Jūtaku*, 1953.

Beyond this, there are the intangibles of the community that eviction would also disrupt. The residents note that people of various occupations make up the settlement including a taxi driver and a salaryman, along with a widow and day laborers.²⁵⁴ Even though the residents'

²⁵⁴ The word 勤人 (lit. working person) is glossed in the original as サラリーマン (salaryman).

economic potential (*keizairyoku*) is not that impressive, they practice forms of mutual self-aid and are knit together through interpersonal relationships. Some of the residents are actually relatives of one another. Ogita observes that these kinds of connections do not necessarily follow residents to a new house. If everyone is scattered to the wind, these intangibles would likely be lost—rehousing would not only cost residents more in terms of aggregate rent, but their localized organic social safety network would also disintegrate. What Ogita points toward is that eviction (in this case dehousing) is seen as a positive from the perspective of city public housing officials who aim use the land more efficiently and build a new apartment complex. The residents, though aware of the hardships created by the present state of the bus housing, are likely to face additional challenges once their community collapses. Even if the residents understand the city's position, they do not see how a generally beneficial change in housing quality will benefit them in particular.

Ogita's article highlights the unevenness of the reconstruction period. Even into 1953, temporary emergency dwellings remained and were competing for space with new forms of housing like multistory reinforced concrete apartments. In the case of Japan Housing Corporation (JHC) apartments that would be built after 1955, it was not just that new apartments were opposed to other types of housing, including postwar emergency housing and earlier carpenter-built dwellings, but also that the JHC community was opposed to these kinds of organic communities of which the bus housing represented, where people of various occupations formed social safety networks and practiced mutual-aid. By contrast, JHC communities were presented as safe incubators for growing families, where children could play happily outdoors and where housewives kept tidy, modern homes. Apartment complexes that the JHC built forefronted the fiscal and biological potential of the community: JHC danchi residents were to be

a preferential public—the people of a new Japan—who were opposed to allegedly underperforming people residing in organic communities.

While policy was used to create housing, it provided a means for discriminating amongst types of housing and the people being housed. Emergency measures enacted during the immediate postwar period, as well as intervention by the national and local governments in housing financing and construction, proved to be a means for effecting a segmentation and distribution of the population through housing—separating people based on income, family type, and occupation—that continued well after the 1940s. As observed by the bus housers, it was not just the inefficient housing that would be cleared away, but the resident's low economic potential; the bus housers would be displaced and new residents with higher economic potential that could afford higher rents (even marginally so) would be welcomed. The goal of later policies and organizations like the Housing Loan Corporation (1950), the Public Housing Law (1951), and the Japan Housing Corporation (1955) was to produce housing that was geared toward organizing residential communities and everyday life based on income. The construction of these communities was enabled by careful investigations into hygiene, family size, apartment layout, appliances, and community arrangement. While these fields of inquiry had been developing before the war, as both Jordan Sand and Simon Partner have observed, what was new was their application in multistory apartment housing that was both large-scale and national.²⁵⁵ Unlike the prewar, the design and construction of concrete apartments and the stimulation of the housing economy was made central to the postwar economic development of Japan. The key shift in

²⁵⁵ See Jordan Sand, *House and Home in Modern Japan: Architecture, Domestic Space, and Bourgeois Culture, 1880-1930* (Cambridge: Harvard East Asia Center, 2003), www.jstor.org/stable/j.ctt1tfj9x7. See also Simon Partner, *Assembled in Japan: Electrical Goods and the Making of the Japanese Consumer* (Berkeley: University of California Press, 1999). Housing Built by the Japan Housing Corporation, greatly exceeding the Dōjunaki apartment projects in terms of number of units built, hectares developed, and prefectures covered.

metropolitan and urban areas was toward scalar multi-story apartment housing, which was either rented or owned. This shift began under the occupation and the trend accelerated throughout the 1950s and 1960s.

Though not reducible to it, the domestic ruination caused by war motivated a rethinking of urban space and catalyzed a fundamental change in lifestyle and living patterns throughout the archipelago. Even as many struggled to survive in the first few years after the war, housing policy that would long outlive the aftermath of war took root in the charred soil. By the mid-1950s, the wooden two-story model dwellings that had been used at Dugway Proving Ground as representative of typical Japanese houses would appear outmoded in comparison to modernized concrete apartments that proliferated in Tokyo and its suburbs. Public housing was the key to this transition. Emerging after the war in response to a crisis of shelter, public housing in Japan became integral to a politics of housing that defined what it meant to live in the postwar (sengo).

From the late 1940s to early 1950s, policy shifted from addressing a state of emergency to building housing for the postwar working class ($kinr\bar{o}kaiky\bar{u}$)—people with perceived economic potential.²⁵⁶ As observed in 1951, because the working class had concentrated in urban areas, particularly in big cities, this was the segment of the population hardest hit during the war. Especially during the first five years after the war, the availability of rental housing in urban areas was extremely limited, and in order to restore the productive potential of cities, it was

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²⁵⁶ The use of the phrase *kinrōkaikyū* (working class) does not necessarily carry with it the same critical function as *rōdōshakaikyū*, which can also be translated as working class. The latter rendering is generally opposed to the idea of *shihonkakaikyū* (owners of capital). Without denying that both words essentially indicate a person who is made available for the production of goods and services under capital, postwar planners tended to use *kinrōkaikyū* in a positive sense. Its range of meaning encompassed both wage earning and salaried employees who could be, but were not always considered, middle class (*chūryūkaikyu*). As observed in 1951, it was not just that the working class had developed in a particularly negative way in relation to the city, as documented by Friedrich Engels in *The Condition of the Working Class in England* (1845). Rather, postwar housing policy attempted to flip the relationship between worker and city on its head, developing a city premised upon a theory of an aspirational working class.

necessary to effect a structured return of the working class—broadly conceived to include wageworkers, salaried employees, and government bureaucrats—to the city by providing rental apartments.²⁵⁷ Contrary to later criticisms of concrete apartment *danchi* that portrayed them as undesirable due to their location on urban peripheries and long commute times, early postwar projects were located much closer to the urban center. As examined in the following chapter, the postwar prototypes for multistory concrete apartments, the Takanawa Apartments (2 buildings, 48 units built in 1947-1948), were located in Minato Ward, Tokyo. These were followed by the Toyama Apartments (42 buildings, 1072 units) that were built in Shinjuku Ward starting in 1948.²⁵⁸ What should be emphasized here is not just the building material, but the relationship of housing to the distribution of the economically active population. The need is for rental units, and the intended recipients are those who can work.

The set of policies that were addressed to the working population in the first five years after the war included: 1) The construction of simple dwellings and residential conversions; 2) The Emergency Housing Measures Order; 3) The Building Restriction Order; 4) The allotment of residential building materials; 5) State aid for the construction of large-scale housing; 6) The Ground Rent Control Ordinance; 7) The establishment of the Housing Finance Bank; 8) Transfer of capital for securing residential land; and 9) Advancing the construction of fireproof

²⁵⁷ *Jūtaku nenkan* 1951, ed. Kensetsushō jūtaku-kyoku, 42. See also General Headquarters, *Public Health and Welfare in Japan* (December 1948), 121. The Japanese Government began to take measures to restrict population movement to the cities on January 8, 1946. The Control of Public Movements bill was made into law on December 22, 1947. However, an ordinance issued by the Ministry of Welfare allowed a person to move to an urban area if it was "established that he had housing in the urban area and that his services were needed in the city." If a person did not obtain this formal permit to move rations were denied. Encouraging workers to return and restricting overall population movement were two sides of the same coin spent within the urban reconstruction and rehabilitation policy framework.

²⁵⁸ *Jūtaku nenpō 1959: tōkyō-to*, ed. Tōkyō-to kensetsu-kyoku sōmu-bu sōmu-ka (Tōkyō: Tōkyō-to kensetsu-kyoku sōmu-bu shomu-ka, 1960). Note that Takanawa was later expanded to 9 buildings, 188 units.

dwellings.²⁵⁹ These policies were to be put into effect by the national government in coordination with local municipalities that were responsible for building and operating the units.

While the government enacted laws in the 1940s governing population movements in an attempt to restrict the return of people from rural to urban areas, these laws did not necessarily prohibit the relocation of people with perceived economic potential. SCAP was well aware of this and permitted such activities, even as it acknowledged a crisis of shelter. As documented in GHQ's Public Health and Welfare report for 1948, the Japanese government declared that "before a person could move from a rural area it must be established that he had housing in the urban area and that his services were needed in the Japanese economy." Rations were used as an indirect means of enforcement. For those who did not receive a proper relocation permit, "no rations were made available to the individual." First as an ordinance issued by the Ministry of Welfare, the Control of Public Movements was made into law on December 22, 1947.

The goal of this legislation was to restrict *unnecessary* public movements from rural to urban areas with an eye toward preventing riots and extended dependence on emergency infrastructure. In what was likely an allusion to E.H. Norman's article "Mass Hysteria in Japan," published in the *Far Eastern Survey* on March 28, 1945, the PHW report notes that "also recalled was Japan's former experience in that rice riots would be an early incident and would lead to widespread rioting and general disorder." Further context for restrictions on population

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²⁵⁹ Jūtaku nenkan 1951, ed. Kensetsushō jūtaku-kyoku, 42.

²⁶⁰ Takemae, *Inside GHQ*, 408.

²⁶¹ General Headquarters, Public Health and Welfare Section, *Public Health and Welfare in Japan* (July 1948), 73. The PHW report notes rice riots in 1918, but also that "in the middle of the 19th century a succession of rice riots by a hungry populace brought on the restoration of the Emperors. It may be considered that the indirect cause of the collapse of the shogunate and the emergence of the Imperial family (1863-1868) was the failure of the Tokugawas to provide for the needs of those unable to care for themselves" (69). Cf. E.H. Norman, "Mass Hysteria in Japan," *Far Eastern Survey* 14, no.6 (1945), 67. Norman notes that "In the last years of Tokugawa rule the country was in turmoil. Peasant uprisings were reaching a crescendo of violence culminating in the widespread and stubbornly fought revolts of 1866

movement that efficiently sums up the entire problem created by the war and shows how *i-shoku-jū* had become politics is also provided in the report:

During the final state of the war 93 major cities in Japan were partially destroyed by air raids. Great segments of the population particularly women and children, were evacuated to rural areas. As soon as hostilities were terminated, many people began a general return to the urban centers. This posed a serious problem as housing was from 40 to 80% destroyed in these various cities, food distribution was limited, communications were meager and faulty, and sanitation was in disrepair. To allow general return to the devastated cities of some 7,000,000 or 8,000,000 persons would threaten famine, plague, and disaster to a government struggling to restore some semblance of normality.²⁶²

Hardly oblivious to the ruination caused by the firebombing, the Public Health and Welfare section adroitly linked the firebombing of cities to the postwar crisis of shelter and endeavored to show how management of and through food, clothing, and shelter was intimately related to an ability to govern. Even while purges of high-level officials and economic agents complicit in the war were being carried out, SCAP attempted to work through the existent Japanese bureaucratic apparatus to ensure that a shift from emergency to normalcy could take place. The effect of SCAP's strategic choice to work through existing bureaucracy, rather than dismantle it entirely, meant that the Japanese government was able to hatch its housing policy, as well as concrete building projects, from within the structure of the occupation. 264

which devastated some of the richest provinces of the land." See also Mikiso Hane, *Peasants, Rebels, Women and Outcasts* (New York: Rowman & Littlefield, 2003), 21.

²⁶² General Headquarters, Public Health and Welfare Section, *Public Health and Welfare in Japan* (July 1948), 73.

²⁶³ As noted by Takemae, although SCAP was told explicitly that relief and "gratuitous distribution of supplies" were part of its mission (JCS-1534), SCAP was aware of and did allow certain relief operations. In part because insecurity of the bare necessities of life, particularly food, might endanger the Occupation itself. See Takemae, *Inside GHO*, 406.

²⁶⁴ Cf. Neitzel, *The Life We Longed For*, 6-7.

Conclusion

As detailed in this chapter, the postwar crisis of shelter and subsequent government rehousing efforts were intimately related to the way in which people in Japan, primarily in urban areas, had been systematically dehoused through incendiary attacks carried out by the United States Army Airforces from March to August 1945. Dehousing, as both a strategy and practice, can be understood as a thanatopolitics of housing because of the way in which it aimed to destroy residential communities and disrupt industrial productivity with little regard for the integrity of human life. In Japan, incendiary bombs were the primary means through which dehousing was carried out. While atomic attacks on Hiroshima and Nagasaki also fell within this strategy, dehousing was not the exclusive objective of their use. Wartime dehousing was a more aggressive and often fatal form of eviction carried out with intent to kill, maim, or otherwise dislocate the resident population. In Japan, the reason for this was twofold. First, urban intelligence provided by analysts working for the United States Army Airforces framed urban residences as workshops of war that produced piece work for the imperial war machine. Second, that domestic labor was vital to maintaining ongoing productive potential. The most effective way to achieve victory was to destroy both man and machine by targeting homes rather than specific sites of industry. The extent of damage to urban domiciles in cities that ranged from Tokyo to Osaka and Kumamoto was not a side-effect of war, but the anticipated consequence. Dehousing was a deliberate activity designed to destroy homes and kill residents in service of victory in the Pacific.

Unlike the Great Kantō Earthquake of 1923, which caused mass destruction to lives and property in Tokyo and Yokohama, incendiary attacks were not confined to a particular region.

Urban area attacks caused extensive damage in more than one-hundred cities across the

archipelago. The loss of housing, as well as the need for rebuilding, was felt nationally. At the same time, what was understood as Japan—the nation—was restored as a conceptually distinct socio-spatial entity that differed from empire. When Emperor Hirohito accepted the terms of the Potsdam Declaration, *dai nippon teikoku*, the Empire of Japan, disintegrated. With the acceptance of the Declaration all colonial land was forfeit, soldiers and colonists were ordered home. The Japanese Empire had become just Japan. On notice that significant changes would be made, the Japanese government was allowed to remain active as Occupation Forces ruled through it in service of managing the repatriation of millions of people in a territory that was around forty-five percent smaller than what it was when the war began.

Because of the way in which dehousing and the terms of the Potsdam Declaration created both a crisis of shelter and arbitrary socio-spatial constraints, the postwar calculus of housing—computed according to statistical estimates of structures lost and housing units needed—cannot be separated from the events of 1945. Emergency response measures, such as overwinter housing, part of the government's response to an acute need for food, clothing, and shelter in damaged urban areas, provided a justification for government intervention into the lives, welfare, and homes of the same citizens that it had exposed to the most destructive war of the 20th century. At the same time, the Japanese government was not operating as the sole authority in the archipelago. As shown in reports provided by occupation forces to the Supreme Commander for the Allied Powers, members of the army contributed to a postmortem analysis of structural damage caused by the incendiary attacks and participated in rehousing efforts by requesting materials and clearing ground in local areas.

While Occupation Forces did not design or implement a comprehensive program for rehousing Japanese citizens, they were aware of the extent of homelessness and the need for

shelter. The initial continuity of the Housing Corporation (*jūtaku eidan*) and later the formation of the Ministry of Construction was within SCAP's policy of working through existing bureaucratic structures in an effort to avoid generalized disorder. Though SCAP purged perceived war criminals, capitalists, and bureaucrats who enabled the war effort, it allowed the basic structure of government to remain in place. As detailed in this chapter, developing an understanding of postwar housing in the occupation period necessarily involves a close look at strategic dehousing, as well as the activities of the Occupation Forces, in addition to those of the Japanese government.

If extreme precarity is the nadir of social existence, the point to which anyone can fall even if most of the time they do not, then the question that remains is what is the role of the state in normal life or in normalizing life? As Michel Foucault has pointed out, a state that remains fundamentally based on sovereign power and the police can nevertheless "take charge of life [through] continuous regulatory and corrective mechanisms." In other words, through government. As discussed in the following chapters, the construction of large-scale public housing complexes across the archipelago would become a testament to the state's long-term investment and conscious intervention into the everyday life of private citizens as it endeavored to cultivate a preferential public. The interest in solving housing problems in terms of the working population reflected the state's desire to shift from the management of death to the administration of life.

While the crises of food and clothing were judged to have abated by the early 1950s, the construction and management of dwellings remained an enduring state project. Still centered on the signifier $j\bar{u}$ (\pm), the crisis of shelter transitioned to a sustained politics of housing as it

²⁶⁵ Michel Foucault, *History of Sexuality, Volume 1* (New York: Vintage Books, 1990), 144.

evolved into the oft-cited postwar housing problem (*sengo no jūtaku mondai*). The housing problem was not so much an objective condition (though it was made to see objective) as it was a continuing justification for state intervention into the structure of residential life in Japan. Within what might be characterized as the postwar paradigm of public housing, state-aided construction and financing developed into a multifaceted set of state programs for managing the quantity and quality of domestic living environments at the level of the population. These programs addressed a set of concerns that included: quantity (number of total units), volume (floor area and height), quality (equipment, furnishings, durability), economy (lending and repayment), and image (the look of a dwelling and its inhabitants). Beginning under the occupation the postwar state in Japan endeavored to administer life through housing and rule the populace according to statistical averages and preferential modes of conduct, while presenting all of this as apolitical everyday life. The key to this would be urban apartment housing.

Chapter 2: Construction Projects: Apartments Build the City

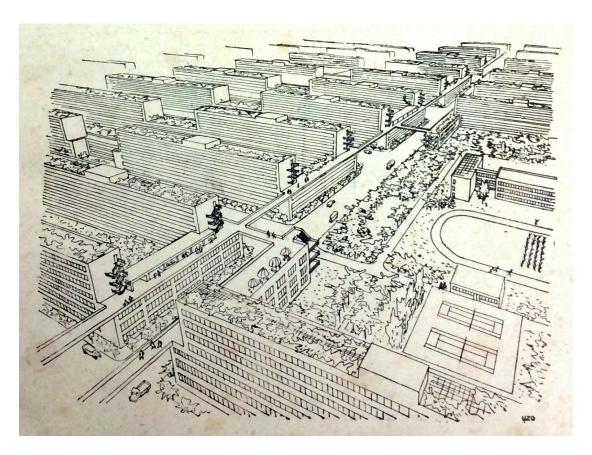


Fig. 23: Apartment buildings sketched by Nishiyama Uzō. Shinkenchiku 21, no.1, 1946.²⁶⁶

Introduction

The vision of reconstruction presented on the cover of the January 1946 issue of *Shinkenchiku*, a leading architecture journal, was as inventive as it was audacious.²⁶⁷ Row after row of rectilinear multistory buildings stretch far into the horizon, vanishing in the distance. Like skyscrapers felled as timbers, the long horizontal buildings repose as concrete barracks for life. To the lower right of the image, a park-like expanse envelopes a tennis court and exercise track,

²⁶⁶ Nishiyama Uzō's name can be seen in the lower right of the picture. He often signed his work "Uzo" using roman characters.

²⁶⁷ *Shinkenchiku* 21, no.1, 1946. See cover. *Shinkenchiku* is a leading architectural magazine in Japan. This is the first issue to be printed after the war.

providing space for fresh air and play. Despite the monotonous exterior of the buildings, they are a view to a fireproof city—the antithesis of the structural hodgepodge and abutting roofs that made such a reliable target for the B-29 bombers' incendiary attacks. The spaced repetition of rectilinear buildings presented in this idealized imagining signified planning goals for the postwar city and the restructuring of life for a renewed national public.²⁶⁸ Housing planners like Nishiyama Uzō aimed to adjust patterns of living at the scale of the city, if not the nation, focusing on housing's public dimensions as opposed to an individually marketable aesthetics of dwelling. ²⁶⁹ The goal was to employ principles of rationalization and economies of scale that could be operationalized to produce apartment blocks for the working public. For Nishiyama, success was to be found in developing a scientific approach to housing, not necessarily in authoring the modern house as a signature style contained within the built environment.²⁷⁰ Public projects subordinated the house as a work of art to the production of the dwelling as a standardized unit of space. Though not necessarily beautiful, the rectilinear buildings represented a controlled efficiency, living units that could be calculated in advance by municipal planners backed up by housing surveys and statistics.

At first glance, Nishiyama's vision of the city rebuilt seems to ignore the pressing social circumstances of the immediate postwar. With much of the country in ruins and people struggling to survive the winter, hundreds of concrete apartment blocks were hardly a realistic

²⁶⁸ This kind of quantitative urban housing can be seen in contradistinction to the recently incinerated *nagaya*-type wooden housing of the *shitamachi* and the more spaciously apportioned aristocratic dwellings of the *yamanote*.

²⁶⁹ What an individually marketable aesthetics of dwelling refers to here is a signature work, such as a custom home or client-built house. Public projects have an aesthetic component, but it is not necessarily about the authorship of an architect-artist, so much as it is about the authorship of the state. Cf. Catherine Bauer Wurster and Barbara Penner, *Modern Housing*, (Minneapolis: University of Minnesota Press, 2020), xiv.

²⁷⁰ Neitzel, *The Life We Longed For*, 9.

proposal for emergency housing. The spartan rectangular forms, which eschew ornamentation and any sense of an imagined Japanese aesthetic, are more like imports from the Westhausen siedlung, an apartment community built by Ernst May at Frankfurt am Main, Germany around 1930. They are fully decontextualized, no Mt. Fuji looms in the background and there are no obvious markers of the archipelago's geography. Rather than alluding to domestic referents like the Dōjunkai apartments, Nishiyama's sketch evokes the utilitarian urban plan of Le Corbusier's unrealized Ville contemporaine (1922).²⁷¹ Nishiyama's buildings contain about seven stories and are connected by elevated walkways that serve to separate pedestrian and vehicular traffic. The area is sketched with a relatively low building coverage ratio to allow for wide roads and open areas between the structures, as well as the provision of greenery. These design principles were similar to what Le Corbusier outlined for the Ville contemporaine, where he drew the city with an eye toward decongestion, circulation, landscape, and density.²⁷² As described by Le Corbusier, the rectangular structures were intended to represent "residential buildings with 'setbacks,' of six double stories; again with no internal [light] wells: the flats looking on either side onto immense parks."273

In the *Shinkenchiku* special issue entitled "Housing for a New Japan," Nishiyama divided his analysis into four sections: 1) The War and Our Country's Housing Economy; 2) Residential Standards; 3) The Arrangement of Residences as a Group; and 4) An Economic Plan for Housing

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²⁷¹ n.b. The towers in Le Corbusier's plan are office buildings, not dwellings. See "Ville contemporaine de trois millions d'habitants, 1922," Foundation Le Corbusier, accessed June 24, 2021, http://www.fondationlecorbusier.fr. See also Francesco Passanti, "The Skyscrapers of the Ville Contemporaine," *Assemblage* no.4 (October 1987): 52-65, https://www.jstor.org/stable/3171035. Cf. Michelle L. Hauk, "Postwar Residential New Towns in Japan: Constructing Modernism" (M.A. thesis, Washington University in St. Louis, 2015), 44-45, https://openscholarship.wustl.edu/samfox_arch_etds/1/.

²⁷² "Ville contemporaine de trois millions d'habitants, 1922," Foundation Le Corbusier.

²⁷³ Michael Larice and Elizabeth Macdonald, *The Urban Design Reader* (Abingdon, Oxon: Routledge, 2013). Note the contrast with the apartment buildings on Hashima (Gunkanjima).

Construction.²⁷⁴ As would be seen in his other writings, Nishiyama was at pains to demonstrate that the postwar housing problem was not just about what the B-29's had destroyed, but the kind of economy that houses were situated in. He began with historical background that addressed the housing situation in the decade or so before the events of 1945. Following the First World War, the Great Kantō Earthquake, and the deflationary economic policies of the Hamaguchi cabinet, the economics of housing were extremely problematic.²⁷⁵ This was a period characterized by the intensification of antagonism between landlords and tenants, with most urban workers at the time renting their living space. With the boom in procurements following the so-called Manchurian incident on September 18, 1931, housing problems worsened as the working population concentrated in areas focused on heavy and chemical industries. In recognition of this aspect of the problem, the national government for the first time instituted a housing policy for labor.²⁷⁶

In the summer of 1938, the government encouraged the construction of apartments and dormitories for single laborers (*dokushin rōmusya*), while in November of that year it also restricted the construction of nonessential wooden buildings. In March of 1939, the government developed a three year plan for the provision of worker housing, and in the following year it produced a framework for acting through local governments to compensate for losses incurred in the construction of these dwellings. With the establishment of the Housing Corporation (*jūtaku eidan*) in 1941, the government had an organization that could administer the quantitative production of houses at a national level. However, because of the way in which the Housing Corporation's activities were directed to support the war effort, the goal of this organization was

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²⁷⁴ Nishiyama Uzō, "Shin-nihon no jūtaku kensetsu," *Shinkenchiku* 21, no.1, 1946: 2.

²⁷⁵ Nishiyama, "Shin-nihon no jūtaku kensetsu," 3.

²⁷⁶ Nishiyama, "Shin-nihon no jūtaku kensetsu," 3. For a brief overview of the so-called Manchurian incident in which the Japanese army precipitated the invasion of Northeast China, see John Swift, "Mukenden Incident," Britannica (online), accessed June 24, 2021, https://www.britannica.com/event/Mukden-Incident.

not necessarily to solve for the absolute shortage of dwellings throughout the empire or to raise the standard of living. Under the pressure of war, the Housing Corporation inaugurated a turn toward the rationalization of housing construction through its development of standardized plans for the quantitative provision of basic dwellings.²⁷⁷

Taking the background Nishiyama provides into account, there are three interrelated trends that characterize the early 1920s through the early 1940s. First, there was a greater awareness for city planning in large metropolitan areas, especially the capital area, as demonstrated by Gotō Shinpei's unrealized Greater Tokyo Plan. Following this, there was a well-funded movement to introduce reinforced concrete apartments in Tokyo and Yokohama, as exemplified by the efforts of the Dōjunkai Foundation after the Great Kantō Earthquake of 1923. Lastly, with the establishment of the Housing Corporation, there was a turn toward standardization and quantitative production of basic housing on a national level. These prewar trends speak to the ways in which apartment housing, residential space design, and planned communities could be used to intervene into metropolitan space in order to address the housing conditions of workers and their families throughout the archipelago. In the immediate postwar, Nishiyama's article for *Shinkenchiku* demonstrates that a scientific approach to apartment housing was made available as a guide to direct postwar planning efforts, in many ways representing a consolidation of earlier trends in housing and city planning.

Beginning under occupation, a concerted effort was made to invest public money into planning and construction techniques that would yield multistory concrete apartments that could serve as models for future housing production. The projects were iterative and scalar. The aim was to produce standardized units that could be built by the hundreds and thousands, but which

 277 Nishiyama, "Shin-nihon no jūtaku kensetsu," $\, 3. \,$

could be improved year-over-year.²⁷⁸ The relative paucity of concrete apartments before the war meant that the spartan rectilinear form of multistory concrete apartments served as a proxy for newness or what it meant to live in the postwar. Apartments were part of a concreted multi-disciplinary attempt to modify the daily life-activities (*seikatsu*) of an assumed national public throughout the archipelago. Interventions included the discursive (articles and editorials in trade journals and major newspapers), the visual (photographs, drawings, and film), and the manufactured (built units of housing). Materials from the late 1940s and early 1950s demonstrate that planners like Nishiyama viewed everyday life, as well as the apartment unit, as a site of intervention imbued with meaning and the potential to reshape forms of national life. Changes to seemingly mundane spaces of everyday existence would become the foundation on which a renewed national public would be incorporated into a postwar domestic security apparatus. Before later apartment communities coded as *danchi* became objects of national aspiration and the markers of a postwar modern lifestyle, the foundations for these apartments were laid in prewar precursors and early postwar prototypes.

The focus here on apartment building is not to suggest the beginning of a culture war between detached homes and public apartments. The two were not mutually exclusive, but coproduced. Modifications made to kitchen and room space in public apartments were also being discussed for homes of other types.²⁷⁹ Early postwar public apartments expressed the modern minimum in home construction. They attempted to translate principles for the arrangement and use of space derived from studies of urban residences into a newly equipped living unit. Because the mortgage and lending market for private home construction was dysfunctional following the

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²⁷⁸ Standardization here refers to the setting of technical specifications employed for particular production runs and should not be taken to mean a single unchanging model.

²⁷⁹ See, for instance, "Daidokoro wo kōshite benri ni," *Shufu no tomo* (October 1959), 36-37.

war, the occupation into the 1950s was a time during which the state had an outsized influence on home and apartment construction. The construction of homes is a capital-intensive process, especially when it concerns the construction of many apartment buildings and their corresponding service infrastructure (gas, water, electricity). The state, conceived of as national, prefectural, and municipal governments, served as an institutional site for the accumulation of capital that could be used to finance housing projects that were beneficial to government objectives, including stabilizing everyday life, building fire-resistant cities, and adjusting municipal infrastructure. While possible, the production of apartments after the war was not inevitable.

This chapter is divided into two parts. Part 1—Concrete Foundations examines "precursors," trends in concrete building, apartment typology, and city planning that serve as reference points for postwar housing. It begins with building activities on Hashima (Gunkanjima), an island off the coast of Nagasaki developed by the Mitsubishi Corporation. The need to concentrate workers close to the pit head of Mitsubishi's coal mine, while combatting waves and weather, led to the construction of multistory concrete apartment buildings. As the first *de facto danchi* in Japan, Hashima evidenced the way in which multistory apartment housing for workers could develop into a functioning community organized by a corporation. Despite the successful application of concrete buildings on Hashima, a concerted effort to build concrete apartments in other urban areas throughout the archipelago did not occur until after the Great Kantō Earthquake of 1923. The primary reason for this was financial. Fires that burned Tokyo and Yokohama in the wake of the quake caused widespread destruction to municipal infrastructure, as well as homes. This destruction became an object of global charity, the writing of foreign loans, and the reallocation of national capital. Previously underfunded, Tokyo and

Yokohama were suddenly flush with cash and a foundation, the Dōjunkai, was established with a mandate to build housing. The Dōjunkai can be credited with introducing concrete public apartments in Tokyo and Yokohama, but the scope of its building operations was not national. With the turn to war in the late 1930's, the activities of the Dōjunkai slowed and its operations were folded into the Housing Corporation (*jūtaku eidan*). The Housing Corporation was intended to supply housing for workers and their families on a national level with consideration given to the strategic concerns of war. The houses were primarily wooden and the necessity of building quantitatively under the constraints of war led to the development of standardized plans. Although the Housing Corporation supplied overwinter emergency housing following the Pacific War, as discussed in the previous chapter, it was disbanded by SCAP in 1946.

Part 2—Postwar Projects examines "prototypes," the production of model concrete apartments and their attendant communities in the period between the disbanding of the Housing Corporation (*jūtaku eidan*) in 1946 and the establishment of the Japan Housing Corporation (*nihon jūtaku kōdan*) in 1955.²⁸⁰ I characterize this time as the inter-corporate period of public construction. It was a moment of technological innovation and political possibility for housing in-between the disbanding of the Housing Corporation and the establishment of the Japan Housing Corporation (JHC). Under the guidance of the Ministry of Construction (established in

²⁸⁰ I agree with Michelle Hauk that developments in home design for postwar apartments that preceded JHC apartments could be characterized as "prototypes." Here I am invoking the idea of "prototype" to mean something close to experimental projects. What I highlight is that projects in the late 1940s were innovative in their use of concrete construction and site layout. In the Takanawa experiment, there is also an ambivalence about whether to retain elements like tatami floor or shift to wooden flooring and western-style furniture. Takanawa and Toyamagahara were test sites for subsequent housing constructed under the later Public Housing Law (1951), as well as reference points for JHC *danchi* apartments. These projects were developed a few years before the drafting of the 51-C apartment floorplan, which had direct implications for the design of JHC apartment interiors. These developments can be seen as part of this continuum of experimentation in the first decade after the war. See Hauk, *Postwar Residential New Towns*, 81. See also, Neitzel, *The Life We Longed For* for a discussion of the importance of the 51C plan in JHC *danchi* apartment construction.

1948), municipalities across the archipelago began building concrete apartments for their constituencies. Standard plans for apartments were developed and the three basic building types that the JHC would construct over the next twenty years (the flat, the star house, and the terrace house) were designed and implemented. An examination of these early postwar projects evidences that the construction of concrete apartments after 1945 was not merely a reapplication of designs from the Dōjunkai projects, but aimed to set a new direction in housing construction. Design and construction work in the first decade after the war tends to receive less emphasis where *danchi* apartments are concerned because it preceded the later popularization of this term as it was applied to units built by the Japan Housing Corporation. Projects of the inter-corporate period coded as "apartments" were danchi in principle, if not in the popular imagination at that time. During this period, the work of municipalities, their private contractors, and the Ministry of Construction set the stage for the Japan Housing Corporation. When the Japan Housing Corporation was established in 1955, it acted to centralize the design, marketing, and construction of concrete apartments as a public corporation ($k\bar{o}dan$), an entity that could build and administer apartments on a national level.

Part 1 — Concrete Foundations

Hashima (Gunkanjima)

Housing and city planners, both before and after the Second World War, were not engaged in purely architectural projects, or even chiefly military projects, but aimed to consciously adjust the city on the basis of an understanding of the effects of capital concentrations and commercial circulation. In this sense, modern housing describes not just the way in which an individual dwelling is created according to a particular style, but the principled

way in which houses can be built to respond to the modern condition using the very techniques of industry to combat the ills of industrialization. Modern housing speaks to a set of techniques, forms, and ideas about dwelling which establish a planned response to perceived social and economic conditions, particularly those of the city. It can be differentiated from a modern house (singular), which describes contemporary vanguardism, opposition to an allegedly traditional structure, or the kind of Bauhaus inspired cubic form popularized by the modern movement in architecture and design.²⁸¹ The modern condition for housing describes the perceived sociospatial effects of industrialization, including the creation of a material built-environment and abstract (statistical) representations of the city to which programs for the construction of houses at scale are addressed. Opposing particular techniques of building, such as the kiwari method (a long-standing practice used to determine proportions in carpenter-built houses in Japan) to the PREMOS-type prefabrication technology developed by Maekawa Kunio, also does not fully capture what is meant by modern housing.²⁸² Modern housing is more than a sum of techniques and typologies, it is a technology of government used to organize space and the population along residential lines. Under the sign of modern housing, municipal and national governments employed engineers, architects, and academics (often straddling multiple professions) who were experts in examining patterns of living and the structure of the city. Although the grand visions of these middlemen of the modern city were often dispelled by political and economic forces, as

²⁸¹ The Bauhaus was established by Walter Gropius in 1919 in Germany. It was imagined as a site where "fine arts and design education" could be integrated with an eye toward mass production. For an overview, see Alexandra Griffith Winton, "The Bauhaus, 1919-1933," *The Met*, accessed June 24, 2021, https://www.metmuseum.org/toah/hd/bauh/hd_bauh.htm

Maekawa's PREMOS technology for prefabrication of wooden structures also attempted to harness logics of industry in home construction. As Kumagai observes, "PREMOS was based on the production of same sized wooden panels that were bolted together in the on-site construction process." See Takaaki Kumagai, "Maekawa Kunio: Prefabrication and Wooden Modernism 1945-1951," *Dearq*, no.22 (2018): 36-45, https://doi.org/10.18389/dearq22.2018.03. See also *The Japan Architect* 117 (Spring 2020). This special issue features the work of Maekawa Kunio.

much as by legal opposition and organized popular resistance, they saw the city as primordial clay in the hands of so many technocratic craftsmen, not as a hopelessly random agglomeration of people and things.²⁸³

From the perspective of structural typology (the form of the building) and material composition, concrete apartments in Japan emerged under the banner of commercial enterprise before they were absorbed into public strategies for housing construction. Although danchi as a discourse, technology, and imaginary are thought of as postwar, concrete apartments in Japan were first constructed in the second decade of the 20th century. As noted by the High-rise Housing History Research Group (kōsō jūtakushi kenkyūkai), the first domestic referent for multistory concrete apartment housing is a structure known to researchers as Building 30, a residence for coal miners constructed on Hashima off the coast of Nagasaki, Kyushu in 1916.²⁸⁴ Building 30 anchored what can now be considered Japan's first de facto danchi. It was on Hashima that the Mitsubishi combine organized a worker-community near the pit head of a coal mine, using multistory apartment buildings to concentrate labor at the site of production. Extensively documented in the Survey and Studies on Modern Buildings on Gunkan-jima Island organized and published by Tokyo Denki University in 1984, Building 30 emerged as technological innovation at the same time as it was situated in an industrial community built from scratch for the purpose of extracting coal.²⁸⁵ As described in the report, Building 30 is a

²⁸³ For the most part, these professionals were men. Notable woman architects, such as Hamaguchi Miho, participated in the planning and design of apartments in the postwar, but were fewer in number than their male colleagues.

²⁸⁴ Manshon 60-nen shi: dōjunkai apāto kara chōkōsō e, ed. Kōsō jūtaku kenkyūkai (Tōkyō: Jūtaku shinpō sha, 1989), 16.

²⁸⁵ *Gunkanjima jissoku chōsa shiryō shū*, ed. Akui Yoshitaka Shiga Hidemi (Tōkyō: Tōkyō denki daigaku, 1984). Also referred to as *Survey*. See also, Kyoichi Nakamura, "A Study on the Formation Process of the Mitsubishi Hashima Coal Pit in Meiji Era: from Hashima to Gunkanjima (Ph.D. diss., Kyushu University, Japan, 2016) [in Japanese]. See also Hiroto Inoue, "A study of life at Hashima colliery," *Social Information* 19, no.2 (2010): 211-217 [in Japanese].

seven-story reinforced concrete apartment building with a central lightwell. The ground floor contained shops, while the upper floors were apartments for coal miners. In total there were 140 apartments, with a total floor area of 2457m^2 . A typical apartment contained a six-mat living area, with an additional half-mat of closet space. The entrance area (approx. two mats) contained a sink (*nagashidai*) and cooking stove (*kamado*). The building's cubic volume and concrete composition served as a tidal defense. As the *Survey* notes, the staircase for accessing the flats was constructed adjacent to the interior lightwell, with the \Box (*ro*)-shape of the building protecting it from crashing waves.²⁸⁶ Within the apartment units, corrugated acrylic sheets were affixed to the ceilings as a means of dealing with water discharge.²⁸⁷

Continuing the theme of tidal defense, five additional buildings constructed with reinforced concrete (labeled as buildings 16-20 in the *Survey*) were built beginning in 1918.²⁸⁸ Facing northwest toward Nakadori Island, Jeju Island and the Korean peninsula, these five buildings functioned as a residential seawall, protecting the pit head and other mining facilities that were sited on the southeast facing side of the island. Including the later addition of Building 51, this complex of concrete apartments formed a $\overline{m}(ji)$ -shape. In this sense, the sobriquet *gunkanjima* (lit. battleship island) speaks to more than just a metaphorical interpretation of the island's geography, as it literalizes the way in which the built environment functioned as a guard against the sea. Though not exactly the harsh maritime life described by Kobayashi Takiji in his

²⁸⁶ Gunkanjima jissoku chōsa shiryō shū, 611.

²⁸⁷ Gunkanjima jissoku chōsa shiryō shū, 611.

²⁸⁸ The later addition of Building 48 (five stories, reinforced concrete) built in 1955 and Building 51 (eight stories, reinforced concrete) built in 1961 add to the residential seawall. Refer to diagram labeled 軍艦島インデックス (Gunkanjima Index) in the front matter of the *Gunkanjima jissoku chōsa shiryō shū*.

novel *Kani kōsen* (The Crab Cannery Ship) in 1929, daily existence on Hashima involved a life lived in constant vigilance of the sea, with labor organized around the continuous extraction of coastal coal.²⁸⁹ Over time, the apartments on Hashima formed part of an urban-industrial community, transcending a simple gloss as miner dormitories. As noted in the *Survey*, the "inhabitants of this island composed a regional community-*Gemeinschaft* under the general control of an enterprise, and formed a complete urban space, where all kinds of buildings and services necessary for human life, literally from cradle to the grave, were arranged condensedly [sic] and three-dimensionally." Families of workers and management were allowed to reside on the island, and as improvements were made in the quality and composition of apartments, transferring between units was permitted depending on one's service to the corporation.²⁹⁰

Building 2 and Building 48, built in 1950 and 1955, respectively, show how apartment floor plans were enlarged following the Building 30 experiment. Building 2 was a three-story reinforced concrete apartment complex described as staff housing (*shokuin jūtaku*), with nine units and a total floor area of 488.4m².²⁹¹ Units consisted of two six-mat rooms and one two-mat room, with three mats worth of closet space. The kitchen (*daidokoro*) and entrance area (*genkan*) occupied the equivalent of two mats, respectively, while a half mat was devoted to an in-unit toilet (ensuite baths were still relatively rare in apartments at this time and daily ablutions were performed outside the unit in shared bathing facilities or in public baths (*sentō*)). Building 48, described as miner apartments (*kōin apāto*) featured units composed of a six-mat room and a 4.5-mat room, with 2.5 mats worth of closet space, and two mats each for the kitchen and entrance

²⁸⁹ Kobayashi Takiji, *Kani kōsen* (Tōkyō: Senki sha, 1929).

²⁹⁰ Inherited Housing Research and Investigation Committee of Jusoken, *Meaning and Value of Inheriting Japanese Houses*, tr. Takayuki Ichikawa and Carole Forster-Ichikawa (Housing Research Foundation Jusoken, 2018), 50.

²⁹¹ Gunkanjima jissoku chōsa shiryō shū, 450.

area, with a half-mat for the toilet.²⁹² By 1955, the same year that the Japan Housing Corporation was established, the *Survey* shows that Hashima was already crammed full of concrete apartments and contained a movie theater, school, and market, among other community facilities.

The presence of the movie theater built in 1927, named the Shōwakan (昭和館) in reference to the imperial reign of the recently ascended Emperor Hirohito (r. December 25, 1926 - January 7, 1989), was notable not only for the eclectic nature of the building's architecture, but also for the way it functioned in the community. Similar in form to Okada Shinichirō's Osaka City Central Public Hall, completed in 1918, the two-story theater was constructed using a combination of reinforced brick, reinforced concrete, and carpentry, all assembled with an eye toward an Art Deco facade. The movie theater was modern on a number of counts, including the hybridization of construction techniques, the technology of the cinema, and its siting in the mining community. As recollected by Uchida Masayoshi, who attended elementary school and lived on Hashima between 1941-1952, the movie theater was designed to provide a space of enjoyment for the miners and their families. Because the mine operated twenty-four hours in three shifts, or what might be described as Hashima's sankin kōtai (三勤交代), the theater captured the attention of idle labor, showing films brought in from Fukuoka. Here, the reproduction of labor power and the mechanical production of the enjoyment of art through film

²⁹² Gunkanjima jissoku chōsa shiryō shū, 476.

²⁹³ Note that the name of this building appears in roman characters on the structure. *Gunkanjima jissoku chōsa shiryō shū*, 148.

²⁹⁴ Gunkanjima jissoku chōsa shiryō shū, 426.

²⁹⁵ Uchida Masayoshi, "Moto tōmin koramu 2018/11/09," Gunkanjima Digital Musuem, accessed December 7, 2020, https://www.gunkanjima-museum.jp/data/200/detail/.

²⁹⁶ Okada describes the rotation of workers as 「炭鉱では 2 4 時間の 3 交代勤務」. I adapt his phrase 3 交代勤務 as 三勤交代, alluding to the alternate attendance system 参勤交代 of the Tokugawa period (the forced circulation of the daimyo and their retinues between Edo and their respective domains). In Japanese, the *mitsu* of Mitsubishi is also the character for 3 (三).

are closely related. As Hasegawa Nyōzekan was to observe in his 1935 essay "Original Art and Reproduced Art:"²⁹⁷

The way in which the talkie remakes its subject is unlike the way in which music remakes all phenomena into notes. This is because the talkie, as a mechanical device, has a far more sophisticated capacity to copy the subject. Therefore, as long as its mechanical nature is not wasted, and as long as the device functions, the talkie remakes the original according to its own artistic concerns.

As a movie theater, the Shōwakan functioned within an architecture of consumption providing a structure for the enjoyment of surplus labor-time in a community organized around a single enterprise—coal extraction. It worked to complete a circuit of capital reproduction by operating under the principle of make work and let play, where miners could spend their wages on entertainment that distracted them from the dangerous realities of work in the mines. What Hasegawa describes as "the capacity to copy the subject," speaks to the way in which film mediated the sense impression of original art by producing a circulating facsimile. Following Hasegawa's logic, the duplication of the subject leads to declining marginal enjoyment where "the same act is repeated day after day," ultimately leading to diminished satisfaction and the need for something new.²⁹⁸ As Hasegawa notes, "once the same film circulates among the general public, it cannot avoid the fate of being put into storage without ever seeing sunlight again," meaning that once the novelty of the film has worn off it ceases to have stimulating effects.²⁹⁹ Unlike original art, which "can repeatedly give varying sensations to the same audience," the catch-22 of film is, as Hasegawa suggests, that it must reproduce novelty through the introduction of a new film, rather than produce novelty through the inherent originality of

²⁹⁷ Hasegawa Nyōzekan, "Genkei geijutsu to fukusei geijitsu [Original Art and Reproduced Art], tr. Maki Fukuoka, in *From Japan's Modernity A Reader* (Chicago: The University of Chicago Press, 2002), 148. ²⁹⁸ Hasegawa, "Original Art and Reproduced Art," 151.

²⁹⁹ Hasegawa, "Original Art and Reproduced Art," 152.

live performance.³⁰⁰ As Uchida observed, attesting to the desire for novelty, the screening of new films at the Shōwakan attracted people from off the island because premiers on Hashima often preceded those in Nagasaki.

The close relationship of the theater, apartments, and industry on Hashima is a significant counterpoint to later *danchi* communities, which assumed the spatial separation of the domicile from sites of employment and enjoyment. The Hashima community did not have the same gender dynamic as a community built by the Japan Housing Corporation, wherein apartments were often located at a distance from corporate offices in the city center, with male salarymen circulating daily between places of work and their residence, while housewives remained on-site. Male miners existed in and around the spaces of the home throughout the day and participated in the tightly formed community. ³⁰¹ This meant that Hashima was a space where husbands and wives, parents and children, brushed shoulders as the day progressed. By contrast, JHC communities, which operated on the premise of housewife in the home and husband at the office, functioned as bed towns for male workers and became islands for women and children during the day. In considering the nature of communities created through architecture and planning, it is not enough to focus exclusively on the materiality or form of the building, such as the concrete apartment. The way in which the community functioned to organize the reproduction of life

³⁰⁰ Hasegawa, "Original Art and Reproduced Art," 152. Supporting Hasegawa's observation, the Shōwakan was not strictly a movie theater, but also used for staged plays and concerts, as Uchida notes. See Uchida Masayoshi, "Moto tōmin koramu 2018/11/09."

³⁰¹ Gunkanjima jissoku chōsa shiryō shū, shogen. Refer to summary in English that follows, Akui and Shiga refer to the situation on Gunkanjima as "a regional community-Gemeinschaft under the general control of an enterprise." As base, Gemeinschaft refers to "social relations between individuals based on close personal and family ties" (Oxford Languages) and is opposed to Gesellschaft or "social relations based on impersonal ties, as duty to a society or organization" (Oxford Languages). The connotation of Gemeinschaft here relates to the concentration of life activities on the island and the close relation of places of work to spaces of the home. However, it cannot be ignored that Mitsubishi served as the organizer and steward of the island.

under capital, including the structuring of consumption and industrial work is also important. The arrangement of space and place on Hashima is evidence that the construction of multistory apartments does not lead inevitably to the distant physical separation of labor from places of employment and the diurnal gendering of community. On Hashima, concrete apartments provided a means for the daily concentration of workers and their families.³⁰²

As if a metonym for the Mitsubishi mining operation in toto, the stairway abutting Building 16 was nicknamed *jigokudan* (stairway to hell).³⁰³ The *Survey's* extensive photographs show what amounts to an escherian labyrinth of staircases that crisscross buildings as they run about the island's uneven terrain, leading to a confused sense of space and making it difficult to tell if one is on the ascent or descent. The abundance of staircases without an elevator in sight conveys visually the effort of everyday life on the island. It was the energy required for ascent that became a primary concern for JHC apartment planners. In its early models, the Japan Housing Corporation often limited the height of buildings to five stories, not only out of consideration for building height requirements then in effect, but because more than a five-floor walkup was deemed to be too burdensome for the residents. The daily toil involved in carrying supplies or even a child up and down five flights of stairs multiple times a day, everyday, created an inverse demand for upper-floor units. Without the kind of proforma master planning done by the JHC, which picked up on the work of Nishiyama and Le Corbusier and designed for adequate separation between the buildings, Gunkanjima's stairway to hell shows that modern construction techniques did not necessarily lead to rationalized site plans. Later danchi, as instant communities and machines for living, functioned as a residential technology that combined

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³⁰² The community was consciously organized around and dependent upon a single enterprise: coal. When mining stopped in the 1970s, the island was swiftly abandoned.

³⁰³ Gunkanjima jissoku chōsa shiryō shū, 12.

modern apartment building techniques with modern site planning, yielding a planned residential agglomeration that avoided the mishmash of apartments, staircases, and community facilities found on Hashima.

While it is beyond the scope of this study to present a more detailed look at the the apartment community on Hashima, recent museum exhibits as well as written histories of 20th century housing in Japan, including those by the High-rise Housing History Research Group, establish the development of concrete apartments in Japan in regard to concrete housing on Hashima. However, despite the typological similarity of multistory apartments and community attributes when compared to later projects, the liner development of form conveyed by its marking on a timeline tends to homogenize ideological shifts, making it seem as if apartments always already functioned within the kind of iterative planned development and standardized types that drove production after the Second World War. While *danchi*-like, Hashima was controlled by a single enterprise, the Mitsubishi Corporation, and was not part of a nationwide public housing program.

Urban Interventions: A View Toward Modern Housing in England

That housing could serve as both an object of government and a means for consciously intervening in the city in response to modern conditions, particularly economic concerns, was a relatively recent phenomenon, not just in Japan, but around the world. At issue were not only techniques of architecture and city planning, but also a socio-spatial awareness of urban areas refracted through the lens of political economy. The work of Frederick Engels, who documented the propagation of slums created in the wake of industrialization in *The Condition of the Working-Class in England in 1844*, is an example of a mid-19th century critique of the modern urban housing problem. Speaking of the Ancoats district of Manchester, Engels observed that:

"...chiefly since the sudden growth of manufacture, chiefly indeed within the present century, [the Ancoats] contains a vast number of ruinous houses, most of them being, in fact, in the last stages of inhabitableness... I have to deal here with the state of the houses and their inhabitants, and it must be admitted that no more injurious and demoralizing method of housing the workers has yet been discovered than precisely this."304 What has brought about these ruinous conditions? From the perspective of the working class, increased economic activity demanded more work and concentrated people near sites of manufacture in a way that was inversely proportional to habitability. As Engels suggests, industry required labor-power to function, but was not necessarily responsible for the quality of workers' residential conditions. For Engels, there was a strong socio-economic connection between the residence and the resident: without wages sufficient to invest in better living conditions, workers were forced into domestic poverty. In the Ancoats example, workers are virtually held hostage by their employer "because [they] cannot pay for [other housing], and because there are no others in the vicinity," not to mention that the employer engages the workers only if they agree to live in cottages that are also his property.³⁰⁵ The employer is unwilling to invest in better housing, doing only what is "absolutely unavoidable," which makes the dilapidated dwellings an object of attention for the sanitary police. When threatened by an epidemic, the sanitary police conduct "raids...into the workingmen's districts, [where] whole rows of cellars and cottages are closed," as was the case along Oldham Road.³⁰⁶

Into the later 19th and early 20th century, the material conditions of so-called working class housing came to be seen more clearly through the lenses of health and hygiene, not just

³⁰⁴ Friedrich Engels, *The Condition of the Working-Class in England in 1844* (London: George Allen & Unwin, 1920), 58.

³⁰⁵ Engels, *The Condition of the Working-Class in England in 1844*, 59.

³⁰⁶ Engels, The Condition of the Working-Class in England in 1844, 59.

class and capital. Whereas Engels viewed the working class as victims of poor housing, medical observers linked worker ghettos and tenement housing to concerns over public health—the biological wellbeing of a population. In 1901, Dr. John F. Sykes lectured before the Royal College of Physicians on the theme of "public health and housing." Sykes aimed to investigate the relationship between "changing styles of habitation" (read dwelling) and domestic hygiene. ³⁰⁷ He observed that the informal subdivision of houses and the concentration of the working population was an especially modern, metropolitan concern:

"The overpowering predominance of the housing question upon the health and vigour of the people is reflected in the fact that in London alone, at the census of 1891, of a population of four and a quarter millions, no less than two and a third millions, over one-half of the community, lived in small dwellings of from one to four rooms. The public health is influenced, not only by the overcrowding and misusage of houses, but also by the construction and arrangement of dwellings, and both are equally important...Increased prosperity acts as a stimulus to the growth of towns to such a degree that the crowding of the population into cubic space and of houses upon square space becomes *a danger to the public health and well-being of the community*." ³⁰⁸

As Timothy Ivison details in "Developmentality: Biopower, Planning, and the Living City," it was not just that health became another category through which urban areas could be analyzed, but that health functioned within a discourse of the city centered on domestic poverty. What a public health framework made possible was "the identification of a specific circumscribed territory of interest within [an] expanded territory of regulation: the living spaces of the city, and especially those of the poor." ³⁰⁹As noted in the Preface to the Housing of the Working Classes Act (1890), new housing legislation was considered significant "in the interests

³⁰⁷ John Frederick Joseph Sykes, *Public Health and Housing* (London: P.S. King & Son, 1901), 1.

³⁰⁸ Sykes, *Public Health and Housing*, 2-3. Italics added for emphasis.

Timothy Ivison, "Developmentality: Biopower, Planning and the Living City" (Ph.D. diss., University of London, Birkbeck College, 2016), 92.

of the public health."310 While the title of the act suggests that it is a positive initiative addressed to the supply of worker housing, this was not necessarily the case. The legislation relied on medically-guided offensive interventions that led to the destruction of houses that were deemed to be "in a state dangerous to health, so as to be unfit for human habitation." The fitness of an area was to be judged by a "medical officer of health" who was, upon receiving notice of complaints, obliged to inspect the area in question and determine whether or not the label "unhealthy area" would apply to it. What is remarkable about this legislation is that it allowed the government to act on housing through health concerns, as opposed to those of architecture and engineering. In other words, the legislation was not necessarily concerned with the structural integrity of existing buildings or how new homes might be constructed, but with the perceived effect that existing housing had on the city as a bio-social entity. This pathological approach to the city provided justification for the violent excision of ostensibly diseased areas, the euphemistically termed "territory of interest." ³¹¹ As emphasized in the preceding chapter, many unfit houses were concurrently inhabited, which resulted in dehousing—the destruction of the house along with the dislocation of the resident.

Prior to the labeling of an area as unhealthy, there was already a double identification in effect that marked people as both members of the working class and members of the population. As Ivison notes, the *Report on the Sanitary Conditions of the Labouring Population of Great Britain* (1842), by Edwin Chadwick, established the "labouring population' primarily *as* a population of city dwellers and not as labourers in the workplace." Constituting a social body or hygienic community, members of the population had reciprocal biological effects on each

³¹⁰ The Housing of the Working Classes Act, 1890 (London: Knight and Co., 1890), vii.

³¹¹ Ivison, "Developmentality: Biopower, Planning and the Living City," 93.

³¹² Ivison, "Developmentality: Biopower, Planning and the Living City," 93.

other, even though they might never know those whom they affected. Population, like nation, is a category that can function at the largest possible scale and the highest level of abstraction. Within that category subsets can be established. Seen pathologically, certain groups (sets) of people become lesions within the social body, aberrant flesh that if not treated will threaten the national person. The doubling of laborers as both members of the working class and as members of the population meant that working class named both a type of worker and a member of a hygienic community. In targeting the working class, health legislation appeared to deal with the symptoms of industrialization: the tenements, slums, and ghettos. What it was less able to deal with was the real condition, the subsumption of labor under capital, that forced people to concentrate as wage workers in urban areas.

This is not to say that urban housing for wage workers never improved, but that the nature of the improvement was loaded with a politics that increasingly seemed self-evident. If houses were to improve, they would do so in terms of the very logics of industry that had produced the slums in the first place. The home was conceived of as life's most important machine, a place for the regeneration of labor power and a factory for the family. Characterized in this way, a house was not merely a shell to be inhabited, but was understood as the primary equipment of everyday life—it too constituted fixed capital and a site of investment. As Le Corbusier described it in *Toward and Architecture* (1927), "a house is a machine for living in. Baths, sun, hot water, cold water, controlled temperature, food conservation, hygiene, beauty through proportion." Like a machine, Le Corbusier suggests that the domestic environment

³¹³ Le Corbusier, *Toward an Architecture*, trans. John Goodman (Los Angeles, Calif.: Getty Research Institute, 2007), 151. Originally published in 1927. See also Peter Tillack, "Concrete Abstractions: Gotō Meisei's Hapless Danchi Dwellers and Japan's Economic Miracle," *Positions: Asia Critique 23, no. 2* (May 2015): 237. While the Japan Housing Corporation 2DK apartment, as Tillack notes, can be considered a superlative expression of a machine for living, it was also a general tendency in home construction that applied to single family homes as well as *danchi*-type apartments. One of the key

could be designed and controlled to better support a continuous activity: living. Improved integration of services, regulation of temperature, and resource conservation had the potential to make houses into equipment that could maintain life in a more economical way. The home itself, as much as the objects within it, was framed as a labor saving device. In this way, the machinification of the home became part of a modern aesthetics of dwelling that purported to deal with the tendency for housing to turn into slums over time. If residents lived in hygienic dwellings, behaved economically, and were considered healthy, then it was less likely that they would be seen as problems in need of correction.³¹⁴

Developing an economy of dwelling by turning the house into a machine for living meant translating abstract concepts derived from the biological and social sciences into physical space. What mediated between ideas for the modernized house and the modern built environment were architectural plans, such as those presented in the British *Manual on the Preparation of State-Aided Housing Schemes* (1919).³¹⁵ What differentiated state-sponsored plans from custom homes or speculative building projects was the conceptual scaffolding that worked to link state policy to the design, construction, and administration of dwellings. Increasingly from the mid-19th century onward, housing was seen not merely as shelter—a basic necessity that individuals were compelled to find or construct—but as a residential interface between the state and the domestic population. The state began to act on the population by and through the house. Dwelling was

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differences being the nature of investment. *Danchi* were organized by the state through a public corporation, the Japan Housing Corporation, while others could achieve similar machine-like homes through custom building and private investment.

³¹⁴ Note that modern housing can also be considered as an aesthetic response to the modern urban condition. Cf. "The Housing of the Working Classes," *Charity Organization Review* 10, no.55 (July 1901): 9-19. E.D. observes that health and hygiene became a new mode of perception called the "sanitary sense." He notes that it is not just that government's responsibility to see housing and correct it, but that the residents must develop their own sanitary sense, an awareness of the healthfulness of their dwelling.

315 Local Government Board, *Manual on the Preparation of Sate-Aided Housing Schemes* (London: His Majesty's Stationary Office, 1919).

politicized and homes became a framework for everyday life that instantiated statist ideas.

As Ōtsuki Toshio has observed, Kenchiku zasshi (Architecture Magazine) published details on state-aided housing programs in England at several points in 1921.³¹⁶ The July issue of the magazine carried an article by Uchida Yoshikazu in which plans from the British Manual on the Preparation of State-Aided Housing Schemes (1919) appeared. Uchida's gloss for the plans was eikoku jūtaku keiei hyōjun kikaku (Housing Management Standards, England). The first plan is for a "Class A" urban house. It shows a two-story duplex, with living rooms and kitchens on the first floor, and bedrooms on the second floor. The second image is for a "Class B" urban duplex, slightly larger than the first, that includes the addition of a parlor on the first floor and an extra bedroom on the second floor.³¹⁷ In the article, Uchida provides additional context for the plans mentioning both the Housing of the Working Classes Act (1890) and the Housing, Town Planning, &c., Act (1909). For the August issue, Nakamura Kan translated the *Manual on the* Preparation of State-Aided Housing Schemes into Japanese and provided an expanded image set from the *Manual* that included site planning details, as well as the images that Uchida had earlier referenced (although in this version they retain their labels in English). The extended treatment given to the Manual in Kenchiku zasshi is not to suggest that architects in Japan simply set about copying the "Class A" and "Class B" urban plans, but shows that academics and professionals in Japan were keenly aware of international forms, participating publicly and concurrently in debates on urban social issues and state-sponsored housing.

Published in London in 1919, the *Manual on the Preparation of State-Aided Housing Schemes* sought to address the housing crisis in the aftermath of the First World War. The categories that the Manual discusses, such as "The Shortage of Houses" and "State Financial

³¹⁶ Ōtsuki Toshio, "Machinami zufu bunken shōyo sono ni," *Machinami* 61 (2010.3): 63–66.

³¹⁷ Ōtsuki Toshio, "Machinami zufu bunken shōyo sono ni," 64.

Assistance," anticipate the rhetorical framework that the Japanese government would use to describe the housing crisis after the Second World War.³¹⁸ This rhetorical construction of the modern housing problem was as significant as the architectural plans that Uchida would introduce because it helped to establish the rational for state intervention. Here, "the shortage of houses" (jūtaku no fusoku) indicates a deficient residential condition that the state can move in to address. By providing financial assistance the state wields its power of the purse, incentivizing local builders to follow its guidelines. Although the Manual observed that all classes suffered during the Great War, it was primarily addressed to the working class. As stated at the outset of the manual, "the shortage of working-class housing accommodation is one of the most serious problems."319 It was a deficiency of both quantity and quality. Increasing the absolute number of houses was goal, as was making good existing houses judged against the standards that the Manual itself introduced. As stated, "a large number of houses...fall far short of the desirable minimum of accommodation and amenity," meaning that what constituted good houses would be those deemed "adequate in size, equipment and amenity to afford satisfactory dwellings for a working man's family."320

As if in a one-two punch, the British Ministry of Health published the *Manual on Unfit Houses and Unhealthy Areas* in 1919. *Unfit Houses* reiterates the concept of a deficiency or lack, noting that "New houses are urgently required in large numbers," while couching the justification for intervention in terms of public health. Similar to the Housing of the Working Classes Act (1890), issues of domestic fitness and the identification of unhealthy areas feature

³¹⁸ Local Government Board, *Manual on the Preparation of Sate-Aided Housing Schemes*, Contents. In Japanese, "The Shortage of Houses" was translated as *jūtaku busoku*, while State Financial Assistance was *kuni no zaiseiteki enjo*.

³¹⁹ Local Government Board, Manual on the Preparation of Sate-Aided Housing Schemes, 3.

³²⁰ Local Government Board, Manual on the Preparation of Sate-Aided Housing Schemes, 3.

prominently. At the outset, *Unfit Houses* observes that "Insanitary property also needs attention—in some cases to be wholly removed and replaced by good houses, in other cases, to be brought into proper conditions. The Government programme provides for both necessities. Financial assistance is available, not only for the new houses but also for slum clearance."321 While *Unfit Houses* does show some sensitivity to the displacement of residents during the execution of its program, this sensitivity is ultimately a red herring. The overall goal of the program is to judge individual houses and whole areas according to standards of fitness, with the possibility that they will be "wholly removed." This is a bit like saying: we are going to check to see if you are diseased and if you are found to be diseased know that the knife is coming for you, but do not worry too much because we will try to take care of you. What should be emphasized here is that fighting the slums in terms of public health attempts to treat the symptoms of the modern condition for housing without providing an economic cure: it finds unsightly concentrations and combats them with further displacement enabled by an aesthetics of fitness. This aesthetics of fitness further exacerbates the perceived discrepancy between the good and the bad, leading to an increasingly manichean view of housing and the people being housed.³²²

Planned responses to modern housing conditions were aesthetic responses when they

³²¹ Ministry of Health, *Manual on Unfit Houses and Unhealthy Areas*, vol. 1 (London: His Majesty's Stationary Office, 1919), 5.

³²² Brindley, J.M, "The Home of the Working Classes, and the Promises of the Right Hon. Joseph Chamberlain, M.P.," National Union of Conservative and Constitutional Associations (Westminster, March 1884). Brindley writes this piece to expose Chamberlain's housing proposal as a fraud—a bait and switch scheme that made land available to speculators. It provides an example of how slums became targeted for health, residents were dehoused while promises of rehousing failed to materialize, and that much of the problem lies in economic arrangement. Chamberlain says, "We want to make these people healthier, we want to make them better, and I want to make them happier." He then goes on to say that "Well, we are going to displace 9,000 people, and the architects tell me they have not the slightest doubt that by rearrangement of the blocks of buildings and by an improved construction they will be able to build good houses for 18,000 people." Brindley observes that this never materialized because much of the land was sold off to speculators who failed to build low-cost housing for the working class. Among the displaced, those who found housing ended up in unsanitary dwellings at higher rents and with more overcrowding than before.

attempted to solve for dwelling as an activity and the dwelling as a space of residence. Especially when directed by the state, planned responses were principally concerned with how housing and the resident appeared both physically and statically within national space. For this reason, modern housing, as a cypher for state programs that addressed the living conditions of wage workers from the mid-19th century onward, is not reducible to the introduction of new materials or techniques of building, because, in this sense, modern housing is always already addressed to an aesthetics of the slum. This does not mean that modern housing necessarily succeeds in beating back the slum. When modern housing is judged to have failed it tends to be less about structural criteria, such as that the building is technically deficient according to the science of architecture and engineering (although this is certainly possible), but that it is deficient in terms of domestic hygiene: structures decay from lack of investment, residents appear "dirty," there is a higher incidence of crime, and the area is judged to be poor. For instance, the demolition of the Minoru Yamasaki-built Pruitt-Igoe apartment complex in St. Louis, Missouri (1972), cited by Charles Jencks as the death of modern architecture, and the demolition of the apartment towers at the Les Minguettes project in the suburbs of Lyon, France beginning in 1977 are two relatively recent examples.³²³ In these destructive critiques of modern housing there is a return to a now familiar tactic, dehousing—the wiping away of the residence and the resident. If houses and people can be cleared away, there is a chance to rebuild better or so the logic goes. Although Jencks blames modern architecture, the fault does not rest solely with that discipline. Putting the blame on the form of the building neglects interrelated socio-economic (e.g. wage, class, capital) and policy concerns that produce slum-like conditions. As with the working class housing that Engels describes, the form of the building gets caught up in the condition of the slum and then

³²³ For more on Les Minguettes, see Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis: University of Minnesota Press, 2014). Neitzel, The Life We Longed For, 121.

becomes the visible marker of an area of interest and a target for intervention.

Planning for Tokyo

As hygienic connections between dwelling, the availability of labor, and industrial activity became more apparent in the early 20th century, municipal and national governments in Japan began to see housing as a concern of the state and an object of administration that mattered for urban economic growth. Overcrowding, shoddy construction of houses in alleyways and backstreets, along with increased consumption, created problems for residents, as well as the city at large. Congested cities had poor circulation. Movement of people and products was inhibited by unplanned concentrations. During and after the Great War, when war procurements boosted the volume of trade through ports in Japan, the need for planning pathways for economic flows became a central concern.³²⁴ As André Sorensen has observed, comprehensive approaches to city planning that anticipated population growth and the need for coordinated municipal infrastructure essential for further national industrial development emerged around 1919 in Japan. In that year, the passage of the City Planning Law and Urban Buildings Law "created the first national city planning framework."325 Osaka, Yokohama, Nagoya, and Kobe (all major cities along the eastern seaboard of Honshū) fell under the purview of the law, but particular attention was paid to Tokyo as the capital city.

Riding a wave of bureaucratic enthusiasm for city planning, Gotō Shinpei's "Greater Tokyo Plan for 7,000,000 Population" (1921) was an example of agenda setting by city officials who aimed to further modernize Tokyo and expand its scope as a metropolitan region.³²⁶ Though

³²⁴ While procurements for the Korean War have been cited as a boon for the economy in Japan after the Second World War, procurements for the Great War also had similar effects.

³²⁵ André Sorensen, *The Making of Urban Japan: Cities and Planning from Edo to the Twenty-First Century* (London: Routledge, 2006), 108. Note similar laws in England at this time.

³²⁶ Shinpei Goto, "Greater Tokyo Plan for 7,000,000 Population," in *The Trans-Pacific 5*, no. 6 (1921). Note that this source was originally published in English. In this and other English publications, Gotō's

unrealized before the Great Kantō Earthquake of 1923, interventions that the plan proposed, such as the expansion of roads, the concrete construction of municipal buildings, and lodging houses for workers were eventually implemented between 1923-1930. In a similar vein, Mayor of Yokohama Kubota Seishu's plan entitled "A Greater Yokohama—City and Harbor" (1921) projected "great growth" and the "expansion of [Yokohama's] commerce and industries." Kubota presented Yokohama as a city that had reached its limits, arguing that "new areas for the accommodation of the increase in inhabitants" is an urgent problem. The subtitle of the plan says it all: "more people, more business." Published in *The Trans-pacific*, an international trade journal, these plans painted metropolitan improvement projects within a globally comparative frame. Municipal housing for both the working and middle classes (including members of the professionalized bureaucracy) factored in as explicit objectives in an overall scheme to modernize and expand the city.

The clearest example of new forms of housing is in Gotō's plan, where he outlines the design of a structure that anticipates both the Dōjunkai apartments and those of the Japan Housing Corporation. Similar to buildings constructed on Hashima, the apartments were to be built with reinforced concreted. According to Gotō, there was:³²⁸

...a plan for building, on city-owned land at Fukagawa, a 3-story steel and concrete building, with fire-proof floors and staircases. This structure will contain 43 [two]-room apartments, all arranged with the greatest care so as to insure privacy. The rooms will be of six mats (108 square feet) and 4.5 mats (81 square feet) in size, respectively, and will have two closets for cloths, etc., kitchen and lavatory.

Gotō went on to mention that the wellbeing of residents, as well as residential amenities

name is often rendered without the diacritic.

³²⁷ Seishu Kubota, "A Greater Yokohama—City and Harbor," in *The Trans-Pacific 5*, no. 7 (1921): 49.

³²⁸ Goto, "Greater Tokyo Plan," 47.

were also considered. These included lighting and ventilation, water tanks, and washing and drying facilities. What makes this proposal stand out in contrast to the already existing Building 30 on Hashima is that it sites the apartments on city-owned land. The project is not one circumscribed by the interests of a single enterprise, but intended to function as part of the housing infrastructure of the capital city. The concentration of the population in the city, as well as Tokyo's central position in the empire are explicitly noted. The overall goal of the Plan, of which housing is a part, was to "make the metropolis of Japan one of the greatest financial and industrial centers of the world."329 Gotō envisioned a growing Tokyo expanding out into the Kantō plain while projecting its economic power to the rest of the world. Reversing the narrative of western commerce arriving on the shores of Japan, Gotō observed that "Far Eastern trade, which radiates from [Tokyo] to Europe," would be enhanced by the plan.³³⁰

These early twentieth century proposals for managing urban residents and their spaces of residence developed in tandem with a growing global awareness of the way in which urban problems were conceptually articulated against the circulation of capital, which acted to redistribute populations and alter the environment. As discussed earlier in this chapter, the Mitsubishi Corporation's coal mining activities on Hashima off the coast of Nagasaki, Kyushu represented an attempt to use multistory concrete apartment housing to overcome spatial constraints that appeared when more labor was required for expanded industrial activity. Concrete apartment housing responded to the labor problem by producing more space vertically. As a island controlled by a single enterprise, the Mitsubishi Corporation was able to implement novel construction techniques on Hashima before other urban areas in Japan. In a more heterogenous socio-economic space like a capital city (not dominated by a single industry),

Goto, "Greater Tokyo Plan," 45.Goto, "Greater Tokyo Plan," 45.

organizing the residential environment meant operating within regulatory constraints, as well as a patchwork of property rights and fluctuating property values.³³¹ Especially for Tokyo, achieving capital-first urban development meant overcoming the decaying spatial order imposed by the earlier Tokugawa political apparatus.

Tokyo's transition from Edo, the seat of Tokugawa military authority, to an imperial capital (*teito*), which centered the Japanese state from the Meiji Restoration onward, illustrates the confrontation of competing regimes for the organization of space at the scale of the city. As Edo transitioned from military camp to modern capital, it inherited Tokugawa-era urban arrangements, with a castle at the center and streets made with an eye toward military defenses. When the leaders of the Satsuma-Chōshū Alliance succeeded in overthrowing the Tokugawa regime and brining the Meiji emperor to Tokyo in 1868, they deposited him unceremoniously in the ruins of Edo castle. Although Tokyo became an emperor-centered city, it was not initially a city designed for an emperor. Those like Gotō who attempted to redraw the urban plan of Tokyo in the 1920s with an eye toward enhancing circulation and making it function within an aesthetics of empire were often frustrated in trying to adjust a city that was essentially castle centered. The many waterways, circuitous streets, and dead-end alleys that needed adjustment were diametrically opposed to the kind of Haussmann-esque desire for grand

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³³³ Edo was a small fishing village before the arrival of Tokugawa.

³³¹ Prior examples of city planning in the archipelago, such as the Heian-era city plan for Kyoto, rely on different principles of organization. The plan for Kyoto referenced Chinese imperial models and organized the core of the city along the lines of imperial hierarchy indexed to the Emperor; the principle for urban order was about establishing people's proper place—a controlled distribution of the imperial court and their attendants. Although a conscious plan, it was not necessarily concerned with managing labor or enhancing commercial flow. See Arthur Drexler, *The Architecture of Japan* (New York: Museum of Modern Art, 1955), 96.

³³² Edo castle was founded in 1457 by Ōta Dōkan under Uesugi family, but it was Tokugawa Ieyasu, who, after 1603 began to develop Edo into a city that would center Tokugawa authority until 1868. See "Edo Castle," Jcastle: Guide to Japanese Castles, http://www.jcastle.info/view/Edo_Castle

boulevards, straight lines, and imperial ornamentation.³³⁴ The transition from military camp to modern metropolis was best illustrated by Tokyo, but reconfiguring space along economic lines was a concern for many castle-centered urban areas in Japan³³⁵.

Modernization under the reign of the Meiji Emperor (r.1867-1912) involved confrontations between regimes for the organization of people and place (military, imperial, and economic) that resulted in spatially uneven development. Here, modernization describes the conversion from spaces seen by the government in terms of domains governed by military rulers to a national-imperial space organized in terms of an internationally minded bureaucracy and military-backed economy. The so-called opening of Japan which refers to Commodore Matthew C. Perry's arrival in Edo in 1853 and the subsequent proliferation of trade ports tends to emphasize the penetration of foreign capital into Japan. However, this was also the moment when concerns over territory, industry, and economy dramatically reorganized what Japan meant. As the later Meiji Constitution (1889) would establish, sovereignty resided with the emperor and was not necessarily territorially delimited. The imperial project from 1868-1945 was largely about conquest and capital, both within the archipelago and abroad. Political elites used the emperor's personal authority to consolidate the nation and expand the bounds of the empire, while striving for international recognition.

As colonial territory and colonized populations like those in Korea were incorporated into the empire, new spaces and bodies became available for management and mobilization. Korean

³³⁴ Anke Scherer, "The Colonial Appropriation of Public Space: Architecture and City Planning in Japanese-dominated Manchuria," in *Urban Spaces in Japan*, ed. Christoph Brumann and Evelyn Schulz (London: Routledge, 2012), 37.

The Meiji state and attendant local governments appropriated the area around castles and converted them to civic uses, leaving much of the prior spatial scissions in place.

³³⁶ Note that, under the constitution and the idea of *dai nippon teikoku*, the area of "Japan" is not territorially delimited. Following surrender in 1945, Japan was explicitly defined as the home islands of Honshū, Hokkaidō, Shikoku and Kyūshū.

labor, for instance, was employed at Mitsubishi's coal mine on Hashima. Following the Russo-Japanese War (1904-1905), which extended imperial influence into Manchuria (part of presentday China), Chinese labor was made available to industrial and military interests. Nakamura Yujiro, president of the South Manchurian Railroad company (SMR), observed in 1916 that industry could "make skillful use of Chinese workers, whose strong points lie in their willingness to accept the lowest standards of living and to tolerate the extremes of the climate."337 Economic gains for the working segment of colonial populations did not necessarily follow opportunities for employment. As Mark Driscoll has discussed, on an inflation adjusted basis, real wages for Korean workers declined during the colonial period "while repressive colonizer labor management drove labor productivity up."338 Under these conditions, it cannot be assumed that a rising standard of living for workers necessarily followed specific increases in worker productivity. Nakamura points to the opposite, that certain racial others were seen as naturally predisposed to endure subhuman conditions as they labored for meager wages. As Driscoll remarks, Japanese lives were often enriched at the expense of Koreans and Chinese who toiled without the promise of improvement in their own everyday life.³³⁹

Colonial territory provided spaces for experimenting with city planning and architecture—knowledge that could be retained and repurposed as people moved about the empire. It was not that colonial spaces actually contained clean slates on which ideal forms of urban organization could be realized, but people acted as if they did.³⁴⁰ Gotō's personal

³³⁷ Mark W. Driscoll, *Absolute Erotic, Absolute Grotesque: The Living, Dead, and Undead in Japan's Imperialism, 1895-1945* (Durham: Duke University Press, 2010), 39.

³³⁸ Driscoll, *Absolute Erotic, Absolute Grotesque*, 113.

³³⁹ Driscoll, *Absolute Erotic, Absolute Grotesque*. The conditions for Japanese laborers were not necessarily much better than their colonial counterparts.

³⁴⁰ Katsuya Hirano, "Thanatopolitics in the Making of Japan's Hokkaido: Settler Colonialism and Primitive Accumulation," *Critical Historical Studies* (Fall 2015): 191-218.

trajectory, which put him on track to move throughout the colonies before returning to the metropole, shows how colonial experience could be leveraged in further modernizing Tokyo as the imperial capital. Before becoming Mayor of Tokyo in the early 1920s, Gotō worked for the South Manchurian Railway (SMR), served as head of civilian affairs in Taiwan, and was president of the Colonial Affairs Bureau (*takushoku-kyoku*). Where colonial architecture was concerned, Maekawa Kunio and Sakakura Junzo (two leading modernist architects in Japan) arrived in Manchuria in the 1930s after working with Le Corbusier in Paris. As Jonathan Reynold's notes, Maekawa's nascent architectural firm lived off of work in the colonies, taking a project designing three-story apartment blocks for the Kakō Commercial Bank in Shanghai and later working on designs for the Manchurian Aircraft Company. As detailed by Yishi Liu, Sakakura took a project working on the South Lake Housing Complex, which drew from Le Corbusier's designs for residential blocks in Antwerp, Belgium along with planning ideas taken from the Algiers project in North Africa.

Financing Reconstruction after the Great Kantō Earthquake

While the Meiji Restoration of 1868 had been a significant political turning point and marked the moment from which a drive toward nation building and an empire began in earnest, the Taishō (r. 1912-1926) and Shōwa (r. 1926-1989) emperors also presided over concerted attempts to restructure Tokyo as a technologically trendsetting and consciously modern capital city, one made of concrete and steel. From daycare centers and schools to apartment buildings and bridges, there was a pronounced shift from timber construction to the use of reinforced

³⁴¹ Yishi Liu, "Competing Visions of the Modern: Urban Transformation and Social Change of Changchun, 1932-1957" (Ph.D. diss., University of California Berkeley, 2011), 48.

³⁴² Jonathan M. Reynolds, *Maekawa Kunio and the Emergence of Japanese Modernist Architecture* (Berkeley: University of California Press, 2001), 73. See also, Liu, "Competing Visions of the Modern," 46.

³⁴³ Liu, "Competing Visions of the Modern," 43.

concrete in the municipal built environment. What ultimately made this possible was finance, not fire. The worldwide recognition of the Great Kantō Earthquake's human and structural toll provided the impetus for soliciting foreign loans and allocating national capital to the reconstruction of Tokyo and Yokohama. Although the fire reduced most of the city to ash, especially in the working class housing and commercial area adjacent to the Sumida River, it was hardly a clean slate. While buildings were destroyed, property rights and the perceived value of land was not. Reconstruction efforts, which paved the way for more concrete in the city, relied on land readjustment and capital financing, which provided the fiscal means for partitioning and redistributing people, place and space. The primary impediment to realizing the Gotō's pre-quake vision for Tokyo was funding. His Greater Tokyo Plan called for an expenditure of ¥800,000,000, an almost unfathomable sum considering that the city's "only reliable source of revenue" at the time was an income of \(\frac{\pma}{2}\),000,000 derived from a special municipal tax. \(^{344}\) After the quake, the government authorized financing for restoration and reconstruction work up to \(\frac{\pmathbf{\qmathbf{\qmandbf{\pmathbf{\qmandbf{\pmathbf{\qmandbf{\pmathbf{\qmandbf{\qmandbf{\qma the financial flow effected by the fire allowed planners to execute a historic remaking of the capital city. Almost 70 years after Perry, Tokyo and Yokohama would be redeveloped for enhanced circulation, increasing the integration of global flows of people, money, and things.

Despite rhetoric that circulated in the late 1930s and early 1940s describing Japan as a leader of Asia and the organizer of a Greater East Asia Co-prosperity Sphere (intended as a bulwark against the encroachment of Western imperialism, but in reality a framework for dominating nearby neighbors), this was not the stance taken by internationally minded political elites like Gotō in the early 1920s. Rather than trading on an imagined pan-Asian or nativist

344 Goto, "Greater Tokyo Plan," 54.

aesthetic, Gotō, as well as those who directed city planning and construction activities in the aftermath of the Great Kantō Earthquake, attempted to situate Tokyo within a globally comparative frame of imperial capital cities. They solicited foreign experts like Charles A. Beard (Director of the New York Bureau of Municipal Research) who could serve as both advisors and spectators. As a foreign expert, Beard offered technical support while having a front row seat to the grand performance known as constructing a capital. The goal of reconstruction was not just to replace what was, but to demonstrate the sure grasp of shared technology in building, bridgework, housing and sanitation that would be harnessed in further establishing Tokyo and Yokohama as essential nodes in global trade and finance. Later reports like *The Outline of the Reconstruction Work in Tokyo & Yokohama* (1929) and *Tokyo, Capital of Japan: Reconstruction Work* (1930) were intended for foreign audiences and contain details of the construction work. They also served as consolidated annual reports for foreign investors and financial institutions that had issued loans to Tokyo.

Attesting to the recognition of the Great Kantō Earthquake as a global event, background information on the quake provided in *Tokyo, Capital of Japan: Reconstruction Work* notes, "As is well known[,] at 11:58 in the morning...Tokyo and its vicinity were attacked all of a sudden by a severe earthquake and the conflagration that followed...grazed [sic] to the ground almost one half of the Metropolis of Japan."³⁴⁶ Among the parts of the city that suffered severely were lowlying commercial and residential areas abutting the Sumida River, what Edward Sidensticker has characterized as the low city or *shitamachi*. The area was crammed full of wooden structures,

³⁴⁵ Marco Pompili, "Modern Multi-unit Housing in Japan and the Dōjunkai Apartments, 1924–34," *Fabrications* 24, no.1, 30, https://doi.org/10.1080/10331867.2014.901134.

³⁴⁶ Bureau of Reconstruction and the Tokyo Institute for Municipal Research, *The Outline of The Reconstruction Work in Tokyo & Yokohama* (Tokyo: Sugitaya Press, 1929), 29. For a description of the earthquake and its effect on the city, see Edward Seidensticker, *Low City, High City: Tokyo from Edo to the Earthquake* (New York: Alfred A. Knopf, 1983), 3-8.

which were relatively resistant against the shake of the quake, but served as so much kindling for the fires that followed in its wake. As Sidensticker observes, "The traditional wooden house has great powers of resistance to wind, flood, and earthquake. It resisted well this time too, and then came the fires, leaving only scattered pockets of buildings across the Low City...built mostly of wood."³⁴⁷

Much like the situation after the firebombing in 1945, the Great Kantō Earthquake left large swaths of the city a wasteland with winter fast approaching. Having struck on September 1, 1923, there were mere weeks to begin rebuilding before temperatures dropped as the season changed. With more than a million people homeless, to say nothing of those who had perished in the fire, there was an urgent need for shelter.³⁴⁸ The government allowed rebuilding, but signaled that greater changes to the city were needed. As Charles A. Beard, expert, friend and interlocutor of Gotō observed, Tokyo after the Great Kantō Earthquake was no tabula rasa. The city proved to be a patchwork of property rights set among investments in infrastructure, such as streetcar tracks and piping for gas. He noted that prominent buildings and historic sites played a role in developing a mental map of the city for consumers, drawing them to sites of commerce. The ability to attract customers based on a sense of space and place was an invaluable intangible that might be swept away under a comprehensive city reconstruction plan. As Beard observed, the burned out area of Tokyo on either side of the Sumida River was "not a clean slate, wax in the hands of the artist." The fire had cleared away the structures, but not the imbricating property interests. Although reluctant to give ground in implementing his plan for Tokyo, by then Home Minister Gotō and his supporters in the Yamamoto cabinet were forced to compromise.³⁴⁹

³⁴⁷ Seidensticker, Low City, High City, 5.

³⁴⁸ Charles A. Beard, "Goto and the Rebuilding of Tokyo," Our World (April, 1924), 14.

³⁴⁹ Beard, "Goto and the Rebuilding of Tokyo," 14. Beard was an observer of Tokyo both before and after the earthquake. The brief biography printed in the article states that: "Charles A. Beard was formerly

As Beard saw it, Gotō was thwarted by high politics and the double bind of democracy and capitalism. Those described as capitalists with stakes elsewhere in the empire were reluctant to see to further spending in Tokyo, while landlords with interests in Tokyo held out their hands for larger government subsidies. Gotō went as far as threatening to expand manhood suffrage in order to disrupt power dynamics in the Diet (only 3,000,000 men out of 57,000,000 people in Japan could vote at that time). Beard concluded that despite Goto's awareness of the London fire of 1666 and the San Francisco fire of 1906, a "hydra-headed democracy" was not adequate to the task of seeing through a comprehensive masterplan. Whether or not there was a mandate from the masses, the cliques of the Diet held firm the purse strings. Short of a dictator that could abracadabra a new metropolis atop the burned out city, masterplans and single-authored reconstruction proposals were almost certain to be thwarted. Things did not go well for the would-be architect of a new Tokyo. Gotō resigned once out of frustration when the Diet balked at financing his plan and then was wooed back only to resign again after taking responsibility for failing to prevent an assassination attempt against the Prince Regent. The same and the same reluctant to the prince Regent.

Dōjunkai Apartments

The Dōjunkai Foundation (zaidan-hōjin dōjunkai) was a special purpose organization

Director of the New York Bureau of Municipal Research. He was invited to Japan in 1922 by Viscount Goto, who was then mayor of Toko." After the earthquake in 1923, "Mr. Beard immediately sailed for Japan again...and stayed with Viscount Goto until the latter had formulated his reconstruction programs." ³⁵⁰ Beard, "Goto and the Rebuilding of Tokyo," 21. See also "Crowd Storms Homes of Two Jap[anese] Ministers" and "Cabinet Expected to Quit," in *The Reading Eagle* (December 28, 1923). Daisuke Namba was arrested for having fired a shot that nearly killed Prince Regent Hirohito. Gotō was also accused of having "socialist tendencies." See also "Japanese Regent Fired At. Socialist Assailant Arrested. Government Resigned," in *The Observer*, Adelaide (January 5, 1924). For a discussion of Gotō's position in relation to leftist, socialist and anarchist politics, especially with regard to Soviet Foreign Deputy Adolf Ioffe, see Tatiana Linkhoeva, *Revolution Goes East: Imperial Japan and Soviet Communism* (Ithaca: Cornell University Press, 2020), 77. "Goto, in fact, knew leftist circles very well. His adopted daughter was married to the eldest brother of a top communist leader, Sano Manabu...and it was known that Goto personally funded the most famous Taishō anarchist, Ōsugi Sakae."

³⁵¹ Beard, "Goto and the Rebuilding of Tokyo," 18.

charged with building housing in Tokyo and Yokohama that emerged in the aftermath of the fire. Tokyo and Yokohama that emerged in the aftermath of the fire. Tokyo Plan (1921), Gotō had identified the need for an expansive housing program that paid attention to demands drawn along class lines. For instance, he noted that: Tokyo Plan (1921), Gotō had identified the need for an expansive housing program that paid attention to demands drawn along class lines. For instance, he noted that: Tokyo Plan (1921), Gotō had identified the need for an expansive housing program that paid attention to demands drawn along class lines. For instance, he noted that: Tokyo Plan (1921), Gotō had identified the need for an expansive housing program that paid attention to demands drawn along class lines. For instance, he noted that: Tokyo Plan (1921), Gotō had identified the need for an expansive housing program that paid attention to demands drawn along class lines. For instance, he noted that: Tokyo Plan (1921), Gotō had identified the need for an expansive housing program that paid attention to demands drawn along class lines. For instance,

The recent shortage of dwellings in Tokyo, which is being felt in increasing measure by the people of the middle class, has led the municipality to take over a site of 6,850 tsubo [22,605m²] on Tsukishima Island, Kyobashi, and one of 6,410 tsubo [21,153m²] at Ukyogahara, Hongo, for construction of suitable dwellings. Building has already begun on the lot on Tsukishima, where 423 houses will be erected, with a central bath-house. It is also proposed to construct 18 buildings, containing 120 apartments, and a reinforced concrete apartment house on a lot of about 1,400 tsubo [4,620m²] which the city owns at Furuichiba.

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355 Goto, "Greater Tokyo Plan," 51.

³⁵² Alternately referred to as the Dōjunkai Society and simply Dōjunkai. Cf. Hauk, "Postwar Residential New Towns in Japan, 71.

³⁵³ Dōjunkai, *Jikyoku to jūtaku* (Tōkyō: Dōjunkai, 1939), 35.

³⁵⁴ Dōjunkai, *Dōjunkai jūnen shi* (Tōkyō: Dōjunkai, 1934), 3. Kōsō jūtakushi kenkyūkai, ed., *Manshon rokujūnenshi: dōjunkai apāto kara chōkōsō e* (Tōkyō: Jūtaku Shinpōsha, 1989), 22.

Although much of Goto's housing plan remained unrealized, it is evident that city administrators were well aware of an urban housing crisis before the earthquake struck. Dwellings lost or damaged in the earthquake, estimated at 465,000 units, greatly exacerbated the housing crisis, but were not its only cause. The earthquake precipitated a quantitative crisis that was superimposed onto an already existing social crisis. While the magnitude of homes lost in the quake cannot be ignored, the numeric figure was radically reductive, making more complex socio-economic forces seem like less of an issue than the destructive power of a natural event—a force majeure that made no one in particular responsible for the problem. Goto's pre-quake plan reveals a more fine-grained urban social analysis that conceived of the city and housing in terms of class and dwelling space. There was a need for middle class housing, as well as lodging houses for workers, including rooms for rent and houses for sale. Alongside and on top of this, there was a need for adjacent forms of urban social infrastructure like public eating halls, day nurseries, medical facilities, and honest rental agencies. As Gotō noted, more than 96,478 people had made inquires at city managed rental agencies established in October of 1920, with several thousand people already housed by 1921.³⁵⁶

The Dōjunkai Foundation responded to the double need to supply housing quantitatively after the Great Kantō Earthquake and to cope with urban social conditions using housing as a mechanism to effect change. While the Dōjunkai was limited in its application to Tokyo and Yokohama, it was eventually absorbed into the Housing Corporation (*jūtaku eidan*) in 1941, which had a more national focus. The institutional framework of the Dōjunkai allowed for the construction, management and financing of various forms of housing. The activities of the organization included building both concrete apartments and wooden houses. Between 1925 and

356 Goto, "Greater Tokyo Plan," 51.

1941 it constructed 12,000 units of housing, including 3,400 wooden row houses (mokuzō nagaya) and 2,500 multistory apartment houses built with reinforced concrete (tekkin konkurīto sūkaidate apātomentohausu).³⁵⁷ Initially, the plan had been to build fewer apartments (approx. 1000) and more wooden type housing because concrete apartments were more capital intensive, but the amount of wooden houses was eventually reduced and funds were diverted toward the construction of apartments.³⁵⁸ Unlike postwar public housing programs which were strictly income based, the Dōjunkai's activities proceeded in terms of class and social type. ³⁵⁹ For instance, beginning in 1928, the Dojunkai constructed houses for sale that were directed toward a class of people identified as knowledge workers (kinrō chishiki kaikyū). Referred to as small houses (ko jūtaku), these residences of 25 tsubo (82.5m²) were arranged collectively (shūdanteki ni) on twenty different sites. More than 500 of these houses were built and made available for ownership based on monthly installments.³⁶⁰ The Dōjunkai also constructed 150 houses on a trial basis for industrial workers (kōjō rōdōsha), which were well received and were many times over subscribed. From 1935 to 1939, the Foundation built around 200 houses of this type per year.³⁶¹ However, by 1939 there was more demand for houses to support military efforts.

Among the Dōjunkai's signature achievements was the construction of a new category of dwelling in urban areas, the concrete apartment house. As mentioned above, while concrete apartments were constructed on Hashima beginning in 1916, they were exclusive to the operations of the Mitsubishi combine, designed to service coal miners and their dependents.

³⁵⁷ Dōjunkai, *Jikyoku to jūtaku*, 35. Kōsō jūtaku kenkyūkai, ed., *Manshon rokujūnen shi*, 23.

³⁵⁸ In 1925, the Foundation received a transfer of state funds for slum clearance and rehousing activities. On three sites in Tokyo and Yokohama the Foundation built 420 wooden type houses and 300 apartments houses. See Dōjunkai, ed., *Jikyoku to jūtaku*, 35.

³⁵⁹ Housing built under the Public Housing Law (1951) was reserved for low income earners, while Japan Housing Corporation apartments built after 1955 were intended for middle income earners

³⁶⁰ Dōjunkai, *Jikyoku to jūtaku*, 35.

³⁶¹ Dōjunkai, *Jikyoku to jūtaku*, 36.

Aside from a few experimental projects in the 1920s, it was the Dōjunkai that succeeded in producing and administering concrete apartment housing in a number of locations throughout Tokyo and Yokohama. Although wooden apartments had been constructed in Tokyo beginning around 1910, it was not until the early 1920s that definite steps were taken to construct concrete apartments. As alluded to in Gotō's plan, there were designs in place before the quake to construct apartments at Fukugawa and Furuichiba, with a portion of the Furuichiba project realized in 1923. However, the Dōjunkai was a much more expansive operation. Its apartment houses were intended to function as a form of urban infrastructure. While some projects like the Edogawa Apartments were relatively more deluxe and approached the kind of comprehensive community services that would be incorporated into postwar *danchi*, Dōjunkai apartments were also made available for bachelors and women. These apartments, as modernized dwellings, stood in contrast to the low-rise urban vernacular of wooden houses, including those built by the Dōjunkai and that cropped up during reconstruction.

The use of concrete cannot be attributed solely to the prevention of fire in congested urban areas. As on Hashima, reinforced concrete was a material suitable for structuring vertical communities. The multistory building, as an agglomeration of apartment units, allowed for households to be stacked one on top of another, while the clustering of such buildings in close proximity on a common site allowed for the sharing of services and facilities. While Dōjunkai apartment space was effectively privatized when rented, it was not as autonomous as that of later Japan Housing Corporation apartments. Bathing, for instance, had to be done outside the unit in a shared facility, while the bachelor apartments lacked kitchens, necessitating use of an eatery (shokudō). As detailed by Nishiyama, who both studied and lived in an apartment built by the

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³⁶² Privatized in the sense that the renter of the unit was not obligated to share the space with other tenants.

Dōjunkai, fourteen sites for apartment houses, including both Tokyo and Yokohama, were established in the five years between 1925 and 1930. The relatively more deluxe Edogawa Apartments were built beginning in 1932. The largest site in terms of apartment unit count, the Kiyosunadōri Apartments had 663 units, between three and four stories, housed in 16 buildings. The next largest, the Daikanyama Apartments, housed 337 units in 46 buildings between two and three stories tall. Overall, the number of buildings and apartments built per site varied considerably. For example, the smallest site identified by Nishiyama was a single three-story building that housed 18 apartment units and did not include any remarkable service facilities.

Unlike JHC apartments, all of the Dōjunkai apartments were built relatively close to the urban center and could be characterized as city, rather than suburban dwellings. The arrangement of the apartments depended on the site, but in general they were not barrack-style concrete blocks similar to what the JHC built. In 1966, the Tokyo Municipal Government (TMG) made the contrast in the two building styles readily apparent by presenting a photograph that juxtaposed the Yokogawa Apartment *danchi* (1953) with the Dōjunkai Yanagishima Apartments (1923). The Yanagishima apartments appear as a cluster of variously shaped three-story apartment houses on a rectangular parcel of land. While packing 193 units in this Tetris-like configuration, the site was dwarfed by the adjacent Yokogawa Apartments. While both of these apartment projects were considered modern, the Yokogawa Apartments evidences the postwar drive to rationalize both the apartment buildings and the site plan. While the postwar *danchi* might be criticized for being monotonous, they did not appear congested and the regular spacing between the buildings allowed for sunlight and airflow.³⁶⁴

The Edogawa Apartments, while the most deluxe among the Dōjunkai's projects,

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³⁶³ Nishiyama Uzō, *Nihon no sumai 1* (Tōkyō: Keisō shobō, 1975), 112. Refer to chart.

³⁶⁴ Tōkyō-to jūtaku-kyoku, ed., *Toei jūtaku no genjō* (Tōkyō: tōkyō-to jūtaku-kyoku, 1966), 21.

demonstrates the high standard in urban living that was achieved through public initiatives before resources began being diverted toward military activities. The Edogawa Apartments consisted of one four-story building and one six-story building that together enclosed a relatively spacious central courtyard. These apartments were the best equipped among all that the Dōjunkai built, featuring a playground for children, meeting rooms, a bath house, an eatery, a barber, an entertainment room, elevators, telephones, radiators, and a radio in every room. The Ōtsuka Women's Apartment, a six-story building built in 1929 with 158 units, had similarly well thought out amenities. It featured an eatery, bath house, sunbathing room, music room, counseling room, and an elevator. The Otsuka Spaces for children.

In *Sumikata no ki* (A Record of My Lifestyle) published in 1962, Nishiyama provided a representative sketch of life in the Dōjunaki apartments. He, along with his wife and infant child, inhabited a 2K-type second floor apartment, consisting of one six-mat room and a 4.5-mat room, with a basic kitchen. As shown in the diagram drawn by Nishiyama, to the right of the entrance was a hand-washing sink and a separate room for a toilet, while to the left was a kitchen space that opened up onto a small balcony. In the diagram, Nishiyama and his wife are shown demonstrating the principle of *shokushin-bunri*—eating in a room that is separate from their bedding. With a small child (shown sleeping in the crib) and two adult-sized *futon*, the sleeping room could be considered cramped. As Nishiyama noted, he moved into the Daikanyama Apartments directly after getting married, but before the arrival of the couple's second child, which created a demand for more dwelling space.³⁶⁸

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³⁶⁵ Nishiyama, *Nihon no sumai 1*, 112. Refer to chart.

³⁶⁶ Nishiyama, *Nihon no sumai 1*, 112. Refer to chart.

³⁶⁷ Nishiyama, *Nihon no sumai 1*, 112. Refer to chart.

³⁶⁸ Nishiyama, *Nihon no sumai 1*, 114. And Nishiyama Uzō, *Sumikata no ki*, (jikaban 1965), 68.

The Dōjunkai apartments were modernized living spaces. They were not only a materially advanced response to the devastation of the Great Kantō Earthquake of 1923, but they were also part of an urban built environment that was being increasingly modified by the circulation of ideas, culture, and capital that flowed in and out with global trade. Wartime censorship and predatory policing, in addition to propaganda and psychological warfare, reframed the relationship between Japan and the United States in the 1940s as a clash between two essential others, with life-ways that were not only incompatible, but diametrically opposed. This racist wartime rhetoric tends to obfuscate the internationalism of the 1920s and the desire on the part of planners and elites like Gotō to be a part of rather than apart from an international network of peers. Rather than cast the Dōjunkai within a strict cultural dichotomy (Western or Japanese) it is helpful to think of the Dōjunkai as representative of a turn toward internationalized dwelling practices. Although the Daikanyama apartment drawn by Nishiyama retained elements considered particular to Japan, such as tatami floor, futon beds, and low furniture, the apartment house itself was dwelling that responded to the modern condition—the tendency for capital to concentrate wage workers in urban environments.³⁶⁹ As Gotō's analysis shows, housing as a state practice proceeded according to modern categories for conceiving of people and things. Knowledge workers, industrial workers, and the middle class were modern social distinctions that have no meaning outside an economic framework that is not centered on consumption and the circulation of capital. Just because these apartments retained fixtures and furniture that could be considered Japanese, that did not remove them from the sphere of the global modern. The Dōjunkai apartments, were not derivative of, but paralleled, European movements in architecture, such as the New Frankfurt housing scheme developed by Ernst May

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 $^{^{369}}$ Nishiyama, Nihon no sumai 1, 105.

at Frankfurt am Main, Germany, which also began in 1925.

What differentiated the production of Dōjunaki apartments from JHC *danchi* of the postwar was the smaller scale of construction and the lack of consistent models between sites. The Dōjunkai was the bespoke quality of the productions compared to the ruthlessly efficient standardization techniques later employed by the Japan Housing Corporation that allowed for the serial reproduction of buildings and apartment units. The Dōjunkai were an important precursor to *danchi* of the postwar, even if Dōjunkai designs were not directly imported into later municipal and Japan Housing Corporation projects. Rather than the building types per se, it was the potential for shaping community space that inspired postwar planners to take another look at the Dōjunaki after the war. As noted at the outset of a 1949 publication edited by the Ministry of Construction entitled *Komyuniti e no michi* (The Way Toward Community), which appeared with the subheading City Planning and the Administration of Tract Housing, the editors observed that housing tracts could function to help shape urban *gemeinshchaft* communities. It was the form of the housing community, its arrangement as a group, that allowed it to function as a *komyuniti* (*shakai kyōdōtai*) within an overall city plan.³⁷⁰

Looking back twenty years, the editors of *Komyuniti e no michi* singled out a Dōjunaki site that was in principle constructed as a *danchi* (*ichi danchi ni kensetsushita*).³⁷¹ The group of fifty owner occupied houses was said to be inhabited by average, ordinary salarymen (*heibon na shisei no sararīman*) that could not really be considered progressive intellectuals (*senshinteki interi gun*). Nevertheless, within the site a central space of 300 *tsubo* (990m²) or the equivalent of three houses had been left vacant as a community commons.³⁷² Within that space the residents

³⁷⁰ Kensetsudaijin kanbō kōhō-ka, *Komyuniti e no michi* (Tōkyō: Kensetsu daijin kanbō kōhō-ka, 1949),

³⁷¹ Kensetsudaijin kanbō kōhō-ka, *Komyuniti e no michi*, 1.

³⁷² Kensetsudaijin kanbō kōhō-ka, *Komyuniti e no michi*, 2.

constructed a tennis courts and a play space for children. Similar to the kind of urban environment that Jane Jacobs described in New York City, the Dōjunkai commons became incorporated into the local community as a semi-public space in which people who worked around the Dōjunaki passed through and at times were mobilized to keep an eye on the children.³⁷³ At other times during the year the space was activated by various events and festivals, a further indication that it was not made exclusive to the residents and served a broader social function.³⁷⁴ While the 1949 report retrospectively describes the Dōjunkai houses located in Suginami Ward, Tokyo as a danchi (団地) the emphasis is on the group form, the way in which the houses form a distinctive group within the larger urban environment, rather than the materiality of the buildings themselves. Said differently, the linguistic coding of the group form of the residences as danchi demonstrates that before the sensationalization of concrete-block type housing beginning in the late 1950s, danchi was understood primarily as an urban planning concept that spoke to the group form of a residential community. From the perspective of the editors at the Ministry of Construction, the kind of danchi arrangement instantiated by the apartments at Suginami, which facilitated the interaction between residents of the Dōjunkai and the surrounding community, could serve as a referent point for a truly public form of housing. Because it sought to integrate, rather than separate, the residential community from the local vernacular and neighboring social groups, this particular group of residences built by the Dojunkai was even more socially forward in the 1920s than later concrete type apartments built by the Japan Housing Corporation in the 1950s that intended the use of shared space in between the residences primarily for those who resided within the danchi.³⁷⁵

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³⁷³ Cf. Jane Jacobs, *The Death and Life of Great American Cities* (New York: Vintage Books, 1992).

³⁷⁴ Kensetsudaijin kanbō kōhō-ka, *Komyuniti e no michi*, 3.

³⁷⁵ The reader is here referred to Chapter 4 for a discussion of the way in which JHC danchi sought to

The Housing Corporation (jūtaku eidan): Standard Plans for Housing Construction

As noted by Satō Shigeru, the Housing Corporation, as the institutional successor to the Dōjunaki, was capitalized as a special legal entity (eidan) in 1941 through legislative action. Its starting capital was one-hundred million yen, with the ability to lend up to ten times that amount in government guaranteed loans.³⁷⁶ This large capital base and a mandate to produce dwellings quantitatively meant that the Housing Corporation was already operating with a billion-yen balance sheet from the moment of its inception. In 1941, the Housing Corporation planned to build 30,000 units, with around 25,000 actually completed in that year. As stated in Article 1 of the housing law, the intended recipients were workers (*rōmusha*) and other ordinary people (shomin).³⁷⁷ The Housing Corporation was instructed to build and manage the houses, as well as the housing site. As noted in Article 16, where possible, the Corporation was instructed to manage the development of the entire housing tract (ichi danchi). Here the tract or danchi implied more than just the houses themselves. It was a grouping of houses along with the provision of facilities and equipment for that group. The law specified that the Housing Corporation should provision and administer things like plumbing for water delivery, busses, a marketplace, a food hall, bath, childcare center, and meeting hall, among others.³⁷⁸ In principle, these were features that would be included in postwar danchi built by municipalities and the Japan Housing Corporation.

The need to build rapidly and quantitatively meant that Housing Corporation dwellings were in some ways a step back from the Dōjunkai projects. Housing Corporation dwellings were

impose a preferential form of community that was not necessarily compatible with neighboring vernacular arrangements.

³⁷⁶ Satō Shigeru, *Shūgō jūtaku hensen: tōkyō kōkyō jūtaku to machitsukuri* (Tōkyō: Kajima shuppan kai, 1989), 121.

³⁷⁷ Satō, *Shūgō jūtaku hensen*, 121.

³⁷⁸ Satō, *Shūgō jūtaku hensen*, 121.

basic wooden-type residences and nothing the Corporation built approached the richness of the Edogawa Apartments. In terms of site planning, however, the Housing Corporation did advance the logic of group form (ichi danchi) thinking of the ways in which the residential tract could serve as a prefabricated community. In addition, the Corporation developed standardized unit plans that allowed for the efficient constructions of dwellings at scale. The combination of group form (ichi danchi) with standardized unit design meant that activities of the Housing Corporation served as key reference point for postwar planners. As described by Ichiura Ken and Nishiyama Uzō in 1942, the most basic of the standardized plans developed was a 30m² wooden dwelling intended for three people, while the largest house at 84m² was intended for a family of eight. One representative community (Natsumi-cho, located in Chiba prefecture) photographed in 1946 by the United States Army shows the rationalized housing tract in contrast to adjacent farmland. Although the site resembles a suburban danchi built by the Japan Housing Corporation after 1955, these were single story wooden dwellings, not concrete apartments. The way in which the photograph centers the houses, which are juxtaposed to the surrounding agricultural area, stages the confrontation between two schemes for the production and partitioning of space. As the photograph shows, the houses were not built on empty land, but among hundreds of tiny enclosures—plots of farmland. Housing development, which involved constructing houses as much as modifying the land on which the houses were built, acted to (re)enclose and overwrite previous spatial partitions.

Enclosed space can be understood as rights of ownership to a particular plot of land or as an occupied territory. This space can be marked physically (as with a fence) or abstractly (as with a line on a map). In *Capital*, Marx provided a glimpse of the historical origins of the enclosure movement, the process by which people (particularly those in England) had been forced from

their land by the conversion of arable land into pastureland. Common spaces for gathering resources were closed off and the consolidation of many smaller farms into fewer, but lager entities, made it possible to achieve economies of scale while simultaneously dispossessing former inhabitants.³⁷⁹ Observing this trend, a certain Dr. Price had noted that "the ruins of former dwelling-houses, barns, stables, &c., are the sole traces of former inhabitants....Upon the whole, the circumstances of the lower ranks of men are altered in almost every respect for the worse.

From little occupiers of land, they are reduced to the state of day-laborers and hirelings."³⁸⁰ Enclosures caused populations to flow along a spatio-demographic gradient—bodies were dumped into cities and places of industry where they were made available for capital in the form of wage workers. The concentration of the population in the cities revealed that economies of space did not necessarily effect an equal distribution of the population across the land. The opposite is at work. Enclosures somewhere contribute to unevenness and the amassing of population elsewhere.

With the activities of the Housing Corporation, this demographic trend in Japan began to reverse. The state pushed the working population toward the periphery of metropolitan areas and outlying industrial sites. Agricultural enclosures became the targets of residential enclosures—settlements—that overcoded space. To say that agricultural space was equal to rural space would be a mischaracterization, because it overlooks the nature of the enclosure. When Gotō had earlier spoken of an expanded Tokyo that extended out into the Kantō plains, he did not mean sending people to live in rural villages, but the expansion of metropolitan infrastructure, roadways, services, industry and housing into agricultural and forest land. While rural to urban migration is

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³⁷⁹ Karl Marx, *Capital: A Critique of Political Economy*, trans. Ben Fowkes, vol. 1 (London: Penguin Books, 1990); refer to Chapter 27.

³⁸⁰ Marx, *Capital*. Chapter 27; see also footnotes 20 and 23.

generally seen as characteristic of modernization and industrial practices that intensified in Japan from the mid 19th through the 20th century, what this trend often fails to capture is that urbanism is both centralizing and centrifugal. Space that was urban and suburban expanded, pushing back out into the hinterlands and so-called rural communities. Said differently, it is not just that people from rural areas were compelled to migrate to the city, but that the physical size of the urban area (the metropolis) expanded as well. Housing tracts (jūtaku danchi), such as those produced by the Housing Corporation, were residential enclosures that competed with other forms of enclosed space. They replaced the cultivation of farmland with the cultivation of workers. The Natsumicho housing development was not just tens families all settling on spaces of the agriculture in a piecemeal way, but a housing community that was built and administered logically according to modern economic principles. According to Marx's analytical framework, this was housing designed and built under conditions where labor is fully subsumed under capitalist social relations. It assumes that people will continue to work for wages and not revert back to being independent producers. While material shortages were certainly a factor in the Housing Corporation's considerations of what to build, those alone did not explain the way in which the housing community was structured and administered. Despite the war, the Housing Corporation did not operate through extra-economic means, such as conscripting entire families or utilizing corvee labor, but continued on as if decisions would be made according to the principle of income and expenditure.

Nishiyama, like Ichiura, was both a student and practitioner of housing who facilitated the transfer of housing technology from prewar and wartime developments to the postwar projects. Rather than leaving the residential built environment up to the whims of the market, Nishiyama had directed his attention to the national economy of bodies and things. During the

prewar years he had documented living conditions by walking the city, empirically recording the interiors of common dwellings. He was infrequently impressed by what he saw, with people often crammed together in low quality houses. Most dwellings did not have functional separations of rooms (such as dedicated spaces for eating and sleeping) or considerations for routine behaviors, which led to people stepping over one another during the night and disturbing the sleep of their fellow family members. The more crowded a house became, the more these problems intensified. If it is somewhat surprising that Nishiyama was able to produce such a detailed report for the January 1946 issue, it was supported by statistically rich and intellectually rigorous work during the prewar and wartime years. Nishiyama's doctoral dissertation, submitted on November 25, 1944, entitled *Shomin jūtaku no kenkyū* (A Study of the Homes of Ordinary People), aimed to understand the dwelling conditions of commoners throughout the archipelago. It proceeded with a similar level of detail as the 1946 article, spanning three volumes and more than 600 hand-written pages. Nishiyama's approach to urban planning was bottom-up, grasping national space by way of the dwelling. He was concerned primarily with how people lived in the home—the physical space where people were likely to spend most of their lives. Although many people lived in objectively bad conditions, these could be mitigated by more effective planning that improved the quality of the building and interior layout, as well as the behavior of the residents. If things were to improve at the scale of the city, they would first have to improve in the spaces of the home. Developing standards for ordinary dwellings was conceived across a spectrum of space from the unit to the apartment block, to housing sites, to the city.

While epoch making events such as the Great Kantō Earthquake and the Second World War spurred housing development, scholars like Nishiyama argued that housing difficulties and the need for government intervention were not solely the result of emergency situations or states

of exception, but were endemic to the modern condition. His studies of housing in Japan were informed by a Marxian reading of the relationship between people and capital, which in turn influenced Nishiyama's approach to space design and community planning. Nishiyama's work spoke to the governmentality of housing, the way in which housing could be used as a mechanism for organizing people and conditioning their behaviors within national space. The type of housing that Nishiyama worked to implement was part of a statist practice for residential development that viewed people as subjects of government, as much as they were made available to capital. The image on the cover of the January 1946 Shinkenchiku issue was not just a visual expression of architectural design, but symbolic of the way in which practices of government were translated into the space of housing. For his part, Nishiyama hoped that this kind of residential built environment would use industrial logics to combat the ills of industrialization and that the state could play a role in offsetting the deleterious effects of capital on the human condition. The quantitative production of standardized housing arranged in a community form was an attempt to ensure a respectable standard of living for those who were seen to be living in materially inferior domestic arrangements.³⁸¹ The type of housing for the masses that Nishiyama proposed, which relied on the provision of multistory apartment blocks, was intended to prepare the built environment with living space that would allow for labor to concentrate in cities and near sites of industry without falling into the condition of the cottages along Oldham road, which, as mentioned above, became the target of the sanitary police. While Nishiyama himself would later note that multistory concrete apartments arranged barrack-like on large sites were essentially an industrial arrangement of people, it was better than the alternative—unchecked urban overcrowding and the slumification of the built environment through lack of humane

³⁸¹ Discussion continues in Chapter 3.

investment.

This chapter has characterized the construction of concrete apartments on Hashima, projects developed by the Dōjunkai Foundation, and those of the Housing Corporation as precursors in order to show that they were part of a complex early history of apartments and public housing in Japan. While it cannot be ignored that the construction and arrangement of wartime dwellings, their site designs and techniques for standardization were intimately related to postwar residential *danchi*, it would be reductive to say that later *danchi* built by municipalities and the Japan Housing Corporation had merely imported models developed by the *jūtaku eidan*. As detailed in the next chapter, experimental housing projects built in the late 1940s and early 1950s provided more direct models for subsequent *danchi* site design and unit construction.

Part 2—Early Postwar Projects

Introduction: Apartment Housing and the Postwar City

In postwar apartment housing concrete was king. Beginning with experimental buildings at Takanawa in what is now part of Minato-ward, Tokyo, rectilinear apartment blocks resembling Nishiyama's visionary illustration began to materialize in the urban landscape. The Takanawa experiment represented the first significant postwar attempt to construct prototypical multistory dwellings that could serve as models for serial reproduction.³⁸² The use of reinforced concrete for load-bearing wall construction (kabeshiki kōzō) enabled relatively open interior unit space and was considered economical for mid-rise structures between three to five stories.³⁸³ While structuring unit density along the vertical axis, buildings could be set within a site (the horizontal axis) with wide gaps that allowed for greenspace and roads in-between the buildings. That Takanawa, in retrospect, resembles many of the later built danchi apartments belies the ambitious attempt to create a new model for everyday life while under occupation. As Oyaizu Junichi has noted, the first residents of Takanawa included technocrats with various professional backgrounds, including those in architecture, medicine, and communications, who were charged with recording their daily life in the apartments and making recommendations for future improvement.³⁸⁴

While innovative, early postwar public apartments cannot be reduced to formal qualities or canons of technique because the development of public apartments was invested with a sense of historicity or what it meant to be part of the postwar. Takanawa's spartan slabs and the living

³⁸² Oyaizu Junichi, "Toei takanawa apāto," in *Sumairon* 46 (Spring 1998), 66.

³⁸³ Although rooms had partitions (e.g. *shōji* doors), these were not necessarily load bearing. Concrete structures had the added advantage that they were fire and weather resistant.

³⁸⁴ Oyaizu Junichi, "Toei takanawa apāto," 66.

environments they contained were the manifestation of a perceived break between the war and postwar.³⁸⁵ The serial reproduction of apartment buildings on large-scale sites connoted a temporality in Japan as it served to symbolize a new population. These apartments were a means for restructuring everyday life. They mattered for how people lived in the home, commuted to work, and were incorporated as members of the national community.³⁸⁶ In grounding life, public apartments became the bedrock of a government project to reconstitute the nation after the war. Concrete apartments were homes provided by a state forced to renegotiate the relationship between the government the people under its purview. For this reason, the history of apartments after the Second World War is more than the continuation of prewar trends or the story of a material shift from wood to concrete in home construction. As a form of public housing, largescale concrete apartments (danchi) would serve as a domestic interface between the resident population and the state. In the late 1940s and early 1950s, municipal governments, particularly those in Tokyo and Osaka, took the lead in developing public housing that realized Nishiyama's vision. They combined the standardization of buildings and the apartment units they housed with a view toward the administration of large sites and quantitative production. Concrete apartments constituted equipment for the postwar city. Like water works and electric grids, rental apartments were envisioned as a kind of public utility that would supply citizens with structured residential space. The hope was that these apartments would mediate between the crisis of shelter and a more prosperous postwar future.

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³⁸⁵ "Moenai asu no jūtaku kensetsu yon kai date apāto," *Yomiuri Shinbun*, chōkan (1947.10.24), 2. ³⁸⁶ See *Kōgei nyūsu* 16, no.10 (1948). Articles in this issue are addressed to new ways of living after the war. For instance, an article by Nishiyama Uzō is titled "Utsuriyuku kikyo yōshiki" [Changing mode of life]. While another reprinted from the Tōkyō Asahi Shinbun is titled "Nihon ni yurusareru seikatsu suijun hitori atari ga san jō" [Living standard of the Japanese people]. This article also features the article on Takanawa by Matsuki Sadako titled "Takanawa apāto ni okeru saishōgen no seikatsu" [Minimum standard of life in Takanawa Apartment house].

The Takanawa experiment was launched by Abe Mikishi, the second president of the War Damage Reconstruction Board, who had studied in the United States at the University of Illinois before the war. Abe was a proponent of implementing load-bearing wall construction techniques and advocated for the further development of fireproof housing production in Japan that relied on reinforced concrete.³⁸⁷ Though building conditions were extremely adverse in the immediate aftermath of the war, Abe took it upon himself to lobby for materials and funding, including asking General Headquarters (GHQ) for permission to use cement for construction projects.³⁸⁸ While he was not the only one advocating for the construction of multistory apartments, Abe's position as president of the War Damage Reconstruction Board provided leverage in cutting through bureaucratic red tape. Unlike Gotō, whose Greater Tokyo Plan failed to materialize when it encountered stiff fiscal and government resistance, Abe proved more adept in steering his relatively more limited imagining toward actual implementation.³⁸⁹ The Occupation presented opportunities for site acquisition that were unavailable before the war. GHQ's goals, which included disbanding the Imperial Japanese Army and dismantling the Empire of Japan, allowed for the conversion of imperial assets to public use. Although the emperor and the emperor system survived the war, imperial property was up for grabs. For the project at Takanawa, land from the Takanawa Imperial Residence was partitioned into two subdivisions, one for the Takanawa Apartments and the other for the Takanatsu Middle School.³⁹⁰ Securing large parcels of land for development was a crucial component of constructing postwar danchi. Takanawa was an early example of this accomplished through the appropriation of imperial assets. After Takanawa, strategies for site acquisition varied, but

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³⁸⁷ Oyaizu Junichi, "Toei takanawa apāto," 66.

³⁸⁸ Oyaizu Junichi, "Toei takanawa apāto," 66.

³⁸⁹ Cf. Shimpei Goto, "Greater Tokyo Plan for 7,000,000 Population," *The Trans Pacific 5*, no. 6 (1921).

³⁹⁰ Oyaizu Junichi, "Toei takanawa apāto," 66.

generally favored converting formerly non-residential land to residential use.³⁹¹ Municipal and later JHC *danchi* opened up forest land on the periphery of cities and paved over farmland, while repurposing imperial and base land allowed for the acquisition of building sites that were not fractured by imbricating property interests.

Discussed in more detail below, land acquisition and land development activities help explain the distribution of danchi throughout the archipelago. In the early postwar, municipal danchi were built closer to the city center. As land and labor costs rose, public housing construction was pushed further outside the city where costs were cheaper. These peripheral danchi were not simply relegated to the suburbs, but became a vehicle for expanding the metropolis. From the perspective of residents, apartment complexes located at the fringes of the city presented certain challenges—they necessitated long commute times to the city center and places of work, while adjacent municipal services were less developed. From the perspective of city planners, danchi on the periphery helped advance urban development because, as comprehensively planned sites, they allowed for housing to be built in a controlled, rationalized way that was anti-slum by design. The hope was that as the city filled in around residential danchi it too would be similarly well ordered. As mentioned by Kubota in his plan for Yokohama, expanding the metropolis was not just an effect of modernization, but part of a conscious strategy: "more people, more business." From the start, danchi apartments, Takanawa included, were situated squarely in-between the designs of planners and the desires of residents. This is not to suggest that the designs of city planners necessarily overrode the wants

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³⁹¹ For instance, the JHC Akabanedai Danchi formerly "belonged to the Imperial Japanese Army before the end of World War II and was occupied by the United States Army after the war. Upon being released by the U.S. Army in March 1960…used as [a] site for the construction of rent housings [sic]." See Japan Housing Corporation, "JHC's Akabanedai Danchi: Biggest Ever Housing Estate in Tokyo," (Tokyo: Japan Housing Corporation, 1966).

³⁹² Seishu Kubota, "A Greater Yokohama—City and Harbor," *The Trans Pacific 5*, no. 7 (1921): 49-55.

of residents, but that these were not always in harmony. What was good for the city did not necessarily translate into a positive experience for residents.

In the late 1940s and early 1950s, the word danchi was not closely associated with concrete apartment buildings because there were relatively few projects of this type. Many of the early postwar danchi were wood-frame houses. Located in Osaka Prefecture, the expansive Suminodō Danchi, for instance, was home to scores of low-rise dwellings built with wood. The Suminodo Danchi was progressive in terms of site design, as it rationalized the placement of houses and community services within the tract allowing for the swift construction of a residential community.³⁹³ As concrete apartment technology rapidly advanced during the Occupation, concrete apartment danchi began to proliferate. By 1955, when the Japan Housing Corporation was founded, the stage was set for the corporatization and quantitative production of concrete apartments using tracts (danchi) to construct many buildings simultaneously, rather than building in a patchwork fashion as smaller parcels of land became available in the city. Because nearly all of the Japan Housing Corporation's production was concrete apartments arranged on danchi, the word began to acquire the connotation of a concrete apartment community. Looking at the few years before the JHC shows how plans for the ordering of residences as a group involved the quantitative construction of wooden homes that quickly gave way to concrete apartments as the favored type of building for public housing.

Takanawa: The Postwar Existenzminimum

Takanawa can be understood as a proof-of-concept for the postwar *existenzminimum* apartment in Japan.³⁹⁴ It was a project of achieving economy in living and building while

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³⁹³ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō* 1951 [Osaka Prefecture Annual Housing Report] *1951* (Ōsaka: Ōsaka-fu kenchiku-bu jūtaku-ka, 1951), 22-23.

³⁹⁴ Translations of *existenzminimum* include subsistence minimum. Here it refers to the minimum dwelling or minimum house. *Existenzminimum* could be understood as a biopolitics of housing. It

Residential New Towns in Japan: Constructing Modernism," *existenzminimum* can be a useful category of analysis for understanding apartment construction in Japan that has both pre and postwar applications.³⁹⁵ What I emphasize below is the way in which *existenzminimum* (*seikatsu saishōgen*) was explicitly invoked in the context of the Takanawa Apartments and tested through lived experience. While the idea was introduced in the prewar, postwar planners like Abe Mikishi supported projects that attempted to realize it within the material constraints of the Occupation. While Takanawa was composed of modern (*kindaiteki na*) apartments, these represented a minimal expression of the domestic interior that was developed with an eye toward construction cost, rent burden, and everyday life.

The idea of minimal living or *existenzminimum* as a principle for housing development was popularized in the late 1920s and early 1930s in Germany. As Walter Gropius described it in 1930, *existenzminimum* referred to the "the elementary minimum of air, light, [and] space required by a human being, in order not to experience any impediment through his dwelling in fully developing the functions of his life." Serving a vital function, housing would be a vehicle to maintain the "health and vigour" of the working population, as Dr. John F. Sykes had

captures how, at base, dwelling is both an economic and biological problem. Solutions involve adapting interior design of the apartment unit and building techniques to industrial production processes so as to achieve a higher standard of living with reduced cost through standardization.

³⁹⁵ See Michelle L. Hauk, "Postwar Residential New Towns in Japan: Constructing Modernism" (M.A. thesis, Washington University in St. Louis, 2015), 45, https://openscholarship.wustl.edu/samfox_arch_etds/1/. My thanks also to Dana Cuff (University of California, Los Angeles) for pointing out the connections between the concept of *existenzminimum* and apartment housing in Japan.

³⁹⁶ Die Wohnung für das Existenzminimum, ed. Internationale Kongresse für Neues Bauen und Staedtisches Hochbauamt in Frankfurt am Main (Frankfurt am Main: Englert & Schlosser, 1930), 15 [English Summaries]. See also: Marco Giorgio Bevilacqua, "Alexander Klein and the Existenzminimum: A 'Scientific' Approach to Design Techniques," Nexus Network Journal 13, no. 2, 2011: 303. As Walter Gropius would later describe it in 1959, existenzminimum referred to the "minimum of space, air, light and heat necessary to men for developing their own vital functions without restrictions due to the lodging."

mentioned almost thirty years earlier while responding to the sub-human urban living environment that Engels had observed in The Condition of the Working Class in England in 1844. 397 The house for existenzminimum incorporated Le Corbusier's formulation of a house as a machine for living. The minimal dwelling was to be a scientifically designed space that was conducive to human biological existence, particularly that of waged labor. While it might seem that existenzminimum was a highly reductive form of dwelling that was the anthesis of a quaint cottage or elegant manner house, such a comparison tends to ignore the economy of space that urban apartment housing was situated in. The alarm being sounded by Sykes and Engels was that, for many, urban living conditions were deplorable and that the ideal home was nothing more than an empty desire. The minimum dwelling responded to conditions endemic to modern society in which people were made to work and let live. It responded to overcrowding and nonstandardized living arrangements by designing an apartment in such a way that the dwelling unit would support biological existence rather than threaten it. Existenzminimum was therefore not a strategy of reducing people to subsistence living, but about ensuring that the threshold for life was met through the structure of the domicile. At the time, there was no such principle governing the creation of housing on the private market. As Hans Schmid noted, "with the introduction of freedom of trade and commerce and capitalist methods of production...the building owner, the builder, and the inhabitant may be persons independent from one another."³⁹⁸ What Schmid pointed to was that freedom of commerce meant that owners of capital were not responsible for ensuring the living conditions of residents. The minimum dwelling described an attempt to construct housing that was, by design, capable of counteracting the necrosocial tendencies of

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³⁹⁷ See John Frederick Joseph Sykes, *Public Health and Housing* (London: P.S. King & Son, 1901). See also Friedrich Engels, *The Condition of the Working-Class in England in 1844* (London: George Allen & Unwin, 1920). Note this edition with additional preface was first published in 1892.

³⁹⁸ Die Wohnung für das Existenzminimum, 12 [English Summaries].

capitalist social formations. 399

The concept achieved broad international recognition at the second meeting of the International Congress for Modern Architecture in 1929 (CIAM 2) and through the subsequent publication of *Die Wohnung für das Existenzminimum* in 1930.⁴⁰⁰ Despite its German title, the publication is trilingual, with explanations in French, English, and German. It was translated into Japanese that same year, with the title rendered as 『生活最小限の住宅』(seikatsu saishōgen no *jūtaku*). 401 As described by Le Corbusier and Pierre Jeanneret, the minimum dwelling was at base a bioeconomic problem. 402 In their essay titled "Analysis of the Fundamental Elements of the 'Minimum House' Problem," Le Corbusier and Jeanneret assert that "dwelling is a biological phenomenon." They critique current building methods in which "there is no economy of material nor of effort" as being "unable to solve the actual economic problem, that of the 'Minimum House." Without the proper alignment of space design, construction techniques, and industrial production in service of humans as biological entities, the Minimum House would remain out of reach. In this sense, the Minimum House was not an inevitable feature of modern society, but the name of a solution to the problem of decent dwelling for labor under capital. The solution would harness logics of industry in producing cost efficient units at scale. As described by Le Corbusier and Jeanneret, "the task is to find and apply new and clear methods, enabling the making of useful dwelling plans, lending themselves, for execution, in a natural way to standardization, industrialization, and taylorization."404 In this way, aligning the design and production of housing

³⁹⁹ Cf. Achille Mbembe, *Necropolitics*, trans. Steve Corcoran (Durham: Duke University Press, 2019).

⁴⁰⁰ See Eric Paul Mumford, *The CIAM Discourse on Urbanism*, 1928-1960 (Cambridge, Mass: MIT Press, 2002).

⁴⁰¹ Tsuge Yoshio, *Seikatsu saishōgen no jūtaku* (Tōkyō: Kōseisha shobō, 1930).

⁴⁰² Jeanneret is Le Corbuiser's cousin.

⁴⁰³ Die Wohnung für das Existenzminimum, 2 [English Summaries].

⁴⁰⁴ Die Wohnung für das Existenzminimum, 2 [English Summaries].

to industrial organization would usher in a "new stage in the history of architecture." The Minimum House would be both the sign of the solution and the name of a new historical epoch.

As Ernst May described in his essay, "The Dwelling for the Living Income Earner," the Minimum House was not a utopian vision, but was carefully indexed to the contemporaneous financial landscape. 406 Designs for the Minimum House needed to take into consideration the "average rate of interest for mortgage loans" and endeavor to produce a dwelling that could be within reach of "the family with just a living income." According to May, what was then considered a minimum living space of 50 square meters was still unaffordable for those on a living income. Looking at housing from the perspective of those who would be forced to live in substandard rooms or dilapidated dwellings, he said that these are people "yearning for shelter to become human beings."408 Dignity in work meant dignity in dwelling. The request was simple, even if realizing affordable housing was not: "Give us dwellings, however small, but healthy and habitable, and, before all, make the rent bearable." Taken together, the essays in *Die Wohnung* für das Existenzminimum speak to the need to adjust the production of dwellings to contemporaneous socioeconomic and industrial conditions. The Minimum House was not a transhistorical solution to problems of human habitation, but one grounded in the present. Formal design solutions were derived from economic reality, using the living income earner as a model resident.

Economic conditions in Japan immediately following World War II greatly exacerbated domestic poverty. The war had run a wreaking ball through supply chains, housing, and the

⁴⁰⁵ Die Wohnung für das Existenzminimum, 3 [English Summaries].

⁴⁰⁶ Cf. Hauk, "Postwar Residential New Towns," 74.

⁴⁰⁷ Die Wohnung für das Existenzminimum, 6 [English Summaries].

⁴⁰⁸ Die Wohnung für das Existenzminimum, 5 [English Summaries].

⁴⁰⁹ Die Wohnung für das Existenzminimum, 5 [English Summaries].

working population. All of this demanded a radical solution: a minimum dwelling for the postwar era. As a corollary, it precluded a convenient return to the Dōjunkai apartments, which were built on post-quake financial arrangements. 410 New calculations were needed that took into account the altered financial reality, but there was a fidelity to the spirit of CIAM 2 that undergirded the development of postwar concrete apartments built through public programs in Japan. Takanawa represented a doubling down on the principles for the minimum dwelling proposed by CIAM 2, solving for unit design and construction techniques with an eye toward habitability and economies of scale. As described by the press, Takanawa was a new beginning for housing. It instantiated a postwar everyday centered on the modernized, if minimal, multistory apartment unit. Industrial Art News characterized the Takanawa apartments in 1948 as "the first postwar reinforced concrete apartments for the urban public." ⁴¹¹ A resident went even further saying that Takanawa represented "the first step in the start of a new lifestyle for Japan." This sense of historicity—a point of origin for postwar housing—mattered for the kind of politics that Takanawa was situated in: stabilizing the everyday life of a national, working public. The symbolic value of the Takanawa Apartments far exceeded the relatively small number of units (forty-eight) that were built in the initial experiment.

⁴¹⁰ The economic framework for the Dōjunkai apartments was developed based on financial arrangements following the Great Kantō Earthquake of 1923. As discussed earlier, apartment building was limited to Tokyo and Yokohama, and was not national.

⁴¹¹ Kōgei nyūsu 16, no.10 (1948). In Japanese the issue begins, 「戦後初の鉄筋コンクリート庶民アパート高輪共同住宅」. The connotation of *shomin* here is urban public.



Fig. 24: Takanawa Apartment. (Clockwise from upper left) Apartment building exterior. Japanese 8-mat room, Japanese 6-mat room, Western room, Western-style toilet, kitchen, entrance area, floor plan for Japanese-style apartment. *Kōgei nyūsu* 16, no.10 (1948).

Photographs published by *Industrial Art News* show the Takanawa apartments in detail.⁴¹² The exterior building is a crenelated four-story reinforced concrete (RC) block with apartment units accessible by a double-loaded staircase. Photographs of the interior show views of rooms labeled as Japanese-style and Western-style. A representative floor plan for the Japanese-style apartment shows an 8-mat room and a 6-mat room with separate kitchen and toilet. Built in closets take up 1.5-mats, with 0.5-mats of space devoted to an alcove (tokonoma). Additional equipment included a sink for hand washing located in-between the front door and toilet, as well as a waste chute adjacent to the toilet. Details of the Western-style room reprinted in Oyaizu's Sumairon article "Toei takanawa apāto" demonstrate attempts to create units that were determined by specific room function.⁴¹³ For instance, in the 1947-type Version 1 plan, there is a clear separation between the married couple's bedroom (fūfu shinshitsu) and the bedroom for other family members (kazoku shinshitsu). The couple's bedroom was 3-mats with one mat of closet space, while the family bedroom was 4-mats, with a one mat closet. Dispensing with the more typical arrangement of tatami mats allowed for the introduction of a living room (ima) and another general-purpose room (hiroma) that doubled as a hallway. This plan also included a small kitchen, toilet, and hand sink. In the 1947-type Version 2 plan, the family bedroom was eliminated and a dining room (more than two times the size of the couple's bedroom) was included. Both the so-called Western and Japanese-style room arrangements here are modern. 414

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⁴¹² *Kōgei nyūsu* 16, no.10 (1948). See feature page.

⁴¹³ Oyaizu Junichi, "Toei takanawa apāto," 67.

⁴¹⁴ The so-called Western-style room was not the first attempt at reconfiguring interior space according to ostensibly Western ideas. See Jordan Sand, *House and Home in Modern Japan: Architecture, Domestic Space, and Bourgeois Culture, 1880-1930* (Cambridge, Mass.: Harvard University Press, 2003). In literature, Tanizaki Junichirō's novel *Naomi* [Chijin no ai] (1924), for instance, takes place in a *bunka jūtaku* or culture house, which was an attempt to simulate ostensibly western style architecture and domesticity. As the title of the novel seems to imply, it was a failed experiment for the protagonist of the novel.

The primary difference between the two is that one unit is determined by *tatami*-matted rooms that can serve a triple function of living, sleeping, and dining, while the other has a more determined floorplan in which the room function is specified. This attempt to determine the floorplan according to functional use was not simply an attempt to "Westernize" perceived "Japanese" elements, but reflected the prevalence of hygienic-moral concepts that Nishiyama Uzō and others were promoting at the time. These included *shokushin-bunri* (separation of eating and sleeping) and *shūshin-bunri* (separation of bedrooms). By defining the rooms architecturally and naming their preferred use, the design of the dwelling unit reinforced certain behaviors of the resident. *Shokushin-bunri* was seen as a hygienic measure designed to separate the space where food was consumed from sleeping space. *Shūshin-bunri* was seen as morally hygienic, separating the bedroom of the married couple from other family members or lodgers, and if possible also separating adults from children and individuals based on gender.

Matsuki Sadako who was among the residents participating in the Takanawa experiment offered suggestions for further improvement in the article "Minimum Standard of Life in Takanawa Apartment House." A returnee from Beijing, Sadako, her husband, and their two young children arrived in Japan with nothing but the clothes on their backs. Although they were starting over from scratch, Sadako considered it good fortune that her family was selected to live in Takanawa. This sense of gratitude, however, did not prevent Sadako from dishing out incisive critiques in what is a pointed evaluation of the apartment's layout and equipment. The Matsuki family lived in the Japanese-style room described above. Sadako considered the overall layout suitable for her family of four, noting that the large north and south windows provided

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⁴¹⁵ Kōgei nyūsu 16, no.10 (1948), 12. 『高輪アパートに於ける最小限の生活』

⁴¹⁶ I use Sadako's first name here to distinguish between her and other family members having the surname Matsuki.

splendid sunlight and good ventilation. She was ambivalent toward more traditional design elements like the tokonoma (alcove), noting that it would have been better if the space had been a closet, but admitting that it was eventually used for displaying a flower arrangement (inline with its intended function).⁴¹⁷ She is less kind when it comes to the kitchen, which she faults for being inconsiderately designed. Her chief criticism is that it did not have sufficient counter space, forcing her to use the gas range as a surface for kitchen work and the floor for sorting utensils. When it came to the hand washing sink (different than the kitchen sink), there was insufficient adjacent storage space. This forced the family to use the top of a shoebox as a place for setting toiletries. Sadako did not stop at criticism, but offered her hand in making suggestions for further improvement, demonstrating her agency in the planning process. Included in the article were diagrams that illustrated Sadako's designs for properly equipping the hand washing sink and designing the kitchen. 418 The diagram of the hand washing sink captures the problem and solution by showing a before and after picture. One image shows the top of the shoebox being used to hold the toothbrushes (the problem), while the other image shows the improved sink area with a shelf for holding the toiletries (the solution).

⁴¹⁷ Kōgei nyūsu 16, no.10 (1948), 14.

⁴¹⁸ Kōgei nyūsu 16, no.10 (1948), 14. Diagrams on this page.

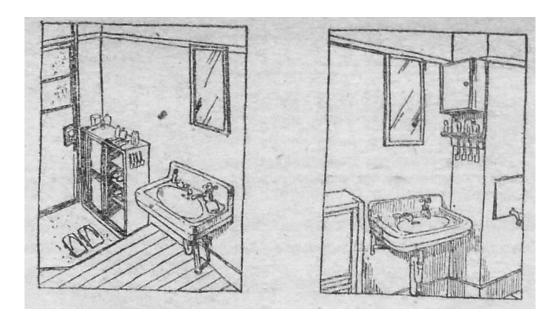


Fig. 25: Sadako's redesigned hand sink, before (left) and after (right). Kōgei nyūsu 16, no.10 (1948)

Published in 1948, Sadako's report-in-critique of the Takanawa experiment shows that while grateful for a place to live and conscious of the novelty of the unit, Sadako was not oblivious to the fact that she was a beta-tester of multistory concrete apartments. Given the experimental nature of the undertaking, the Takanawa apartments were not pitched as ideal dwellings, but as novel—a new way of living. As the title suggests, the Takanawa apartment was organized according to the "minimum standard," which meant that it aimed to follow the kinds of principles outlined at CIAM 2. As Sadako's critique demonstrates, it failed to live up to the modest standards it was trying to set on a number of counts. Failure in this case was less an absolute condition and more a feature of the development process itself. The Minimum House was a concept, an abstract idea that encountered reality as the site of verification. The house could not be properly tested until it was manifested in physical space where life in all its complexity could take place in and around it. The dialectic between planning and home-life was mediated by the resident as user. Sadako's sense of futurity, much like that of Le Corbusier and

Jeanneret, was guided by the belief that these apartments would be improved in time. Her design contributions demonstrate implicitly the aspirational nature of iterative technological development.

Shibuya Ward Reconstruction Plan

The vertical future for postwar housing instantiated by Takanawa was not limited to peripheral sites, but was imagined as relevant to the center of city. In between Nishiyama's Shinkenchiku article and the Takanawa experiment, Ikebe Kiyoshi imagined the area around Shibuya Station, a key transportation node for the Tokyo metropolitan area, filled with apartments. The Shibuya Ward Reconstruction Plan (shibuya-ku fukkō keikaku an), drawn up in 1946, pointed toward the possibility of integrating multistory housing with commercial thoroughfares. 419 Ikebe's plans developed while he was a lecturer at Tokyo Imperial University and while working with Takayama Eika and Tange Kenzo at the War Damage Reconstruction Board (sensai fukkō-in). 420 The choice of Shibuya station was not completely arbitrary. Ikebe's father, Ikebe Inao, worked for the Tokyu Corporation whose Tamagawa train line terminated at Shibuya station. 421 As detailed in the National Archives of Modern Architecture (Japan), the Shibuya Ward Plan "features collective housing blocks dispersed around the green spaces of Meiji Shrine and Yoyogi Park...the housing blocks...and population densities, and their layouts and designs are clearly modeled on Le Corbusier's Ville Radieuse."422 A bird's eye view of Ikebe's plan centered on the station shows apartments clustered around the station in four distinct groups. Contextual notes written into the plan describes the buildings labeled "#9: housing area"

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⁴¹⁹ This plan was unrealized. However, the blueprints for the plan are preserved at the National Archives of Modern Architecture in Tokyo.

⁴²⁰ Kokuritsu kingendai kenchiku shiryōkan, "Kenchiku kara machi e 1945-1970: sengo no toshi e no manazashi," National Archives of Modern Architecture (Tōkyō, 2018).

^{421 &}quot;Kenchiku kara machi e" (Tōkyō, 2018).

^{422 &}quot;Kenchiku kara machi e" (Tōkyō, 2018).

(jūkyo chiiki) as medium and high rise apartments.

In contradistinction to later *danchi*, Ikebe's plan does not imagine the apartment complex as functionally separate from the surrounding urban fabric. Rather, both the apartment buildings and community services are artfully distributed around the station. It is the train station, as a hub for commuter-consumers, that centers the community. From the perspective of town planning, Ikebe's proposal incorporates a meeting hall, gardens, a tennis court, reading room and other cultural facilities in order to bring a home-style (kateiteki na) everyday life to the urban center. It is conceived of as a consciously planned social unit. The spacing in between the apartments reduces the feeling of congestion by providing green space, while the vertical structuring of unit space allows for efficient concentration of the residential population. In this model, the ward itself functions like a danchi—it is a planned area within a larger urban agglomeration, the design of which is not fractured by imbricating property interests. While some might see Ikebe's plan as nepotistic, marrying his architectural vision with the commercial interests of his father, the implications of Ikebe's plan are significant. They demonstrate that at a relatively early date (1946) placing a danchi at the center of Tokyo was possible. It was not for lack of imagination, then, that many *danchi* were eventually located at a distance from the city center.

Unlike municipal planners and those of the Japan Housing Corporation, Ikebe had the luxury of envisioning a plan for housing and community space that took advantage of the authority granted to reconstruction agencies in the state of emergency following the war. At this relatively early stage in the postwar there was still a hope that sections of Tokyo, like Shibuya ward, could be reconstructed according to a master plan. All Rather than looking at Ikebe's plan as a mere utopian fantasy, it possible to see it as a plan of the moment—one which anticipated the fusion of

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⁴²³ See *Nijūnengo no Tōkyō*. Nihon kankō eiga sha (Tōkyō, 1952).

town planning and modern housing, along with the authority to realize it. Ikebe's plan combined dwelling, commerce, community, and transportation with mid and high-rise concrete apartment buildings. It was a window into a possible future, existing alongside actually built projects like the Takanawa Apartments. That the government tended toward the principle of the Minimum House (existenzminimum) and more limited imaginings like Takanawa had less to do with a poverty of imagination and more with economic constraints.⁴²⁴ It was not that government architects could not think of a better kind of arrangement for apartment communities, but that the constraints of property and economy, including the provision of financing and materials, often prevented such visions from being realized. While the power of the Japanese state apparatus to govern the population transcended the war, propped up by GHQ and General Douglas MacArthur (Supreme Commander for the Allied Powers/SCAP), it fell short of technocratic absolutism. 425 Despite Ikebe's rosy vision, the entirety of Shibuya ward was not made available for single authorship and a concrete apartment community did not emerge as a dominant feature of the station's built environment. Danchi that were realized after Ikebe's plan were often a compromise between the availability of land and the shifting national economy in which housing was situated. Despite criticism that the quantitative production of concrete slabs as housing smacked of a socialist utopia, actually built danchi were part of a calculus of housing and not irrational impositions on the postwar landscape. Rather than being detached from reality, concrete apartments were the product of a hyperawareness of postwar economic conditions.

Toyamagahara: Toward Large-scale Apartment Danchi

Following Ikebe's plan and the Takanawa experiment, the Toyamagahara apartment complex,

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⁴²⁴ Limited imagining in the sense that the Takanawa Apartments did propose the wholesale reconstruction of an entire ward.

⁴²⁵ See Takemae Eiji, *Inside GHQ: The Allied Occupation of Japan and Its Legacy* (New York: Continuum, 2002).

completed in 1949, emerged as the first large-scale housing complex with more than onethousand units of housing. 426 Toyamagahara more fully demonstrated the way in which the apartment blocks prototyped at Takanawa could be replicated on a large site. An internal report done by the Japan Housing Corporation in 1956 describes Takanawa as significant from an urban planning perspective, but more importantly that it is a key reference point for the construction of large-scale danchi (dai danchi). 427 Toyamagahara was a curiosity for Japan Housing Corporation planners because of the way in which small shops developed organically on the site, instead of as a result of formal planning. On the site, forty-six shops sold foodstuffs, clothing, household items, stationary, and included restaurants and bars. As shown on the site sketch provided in the report, the shops effectively became a service corridor for the surrounding apartment buildings. The mushrooming up of the service corridor and its close proximity to the concrete apartment buildings highlights the way in which apartment residents were fully dependent consumers. As a living unit, the multistory apartment was effectively alienated from the land. Residents were not able or expected to bring land under cultivation to support their daily calorie needs. 428 Living in an apartment required buying food that arrived from elsewhere and preparing it privately in the apartment's designated kitchen space. The service corridor was not only a matter of convince, but was a manifestation of this dependency of the residents of the apartment complex on provisions and supply chains that supported the housing of people at scale. Later *danchi* sites developed by the Japan Housing Corporation, such as the Akabanedai Danchi and Hanamigawa Danchi, integrated planned service corridors into the site design in order to better manage the

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⁴²⁶ By comparison the Takanawa apartments had 48 units when completed in 1948. Takanawa was further expanded after the Toyamagahara project.

⁴²⁷ Nihon jūtaku kōdan, "Toyamagahara jūtaku danchi no shōhi seikatsu jitai chōsa hōkoku sho" (Nihon jūtaku kōdan, 1956), jobun.

⁴²⁸ This is an important counterpoint to "land reform" in rural areas. The *de facto* land reform in urban areas was the "apartmentification" of living units; vertical stacking of space.

situational dependency of the residents. By incorporating the service corridor into the site design, the housing complex did not leave the development of supporting service infrastructure up to the vagaries of the private market.

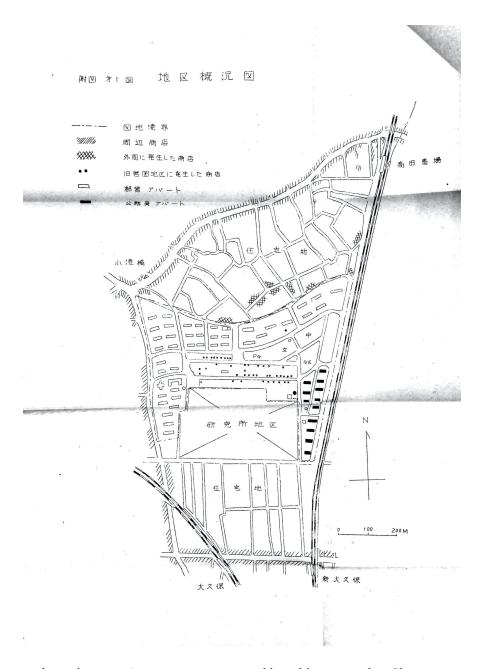


Fig. 26: Toyamagahara site map. Apartments represented by white rectangles. Shops represented by black dots. Nihon jūtaku kōdan, 1956. 429

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 $^{^{429}}$ Nihon jūtaku kōdan, "Toyamagahara jūtaku danchi." See foldout at end of document.

Toyamagahara was located in Tokyo's Shinjuku ward, a relatively more central location than Takanawa, and was, like Shibuya station, a central node in the city's transportation network. The land repurposed for the Toyamagahara project had formerly been used by the Imperial Japanese Army as a space for practicing military maneuvers. In the immediate aftermath of the war, a portion of the land had been used to build emergency housing (\(\bar{o}ky\bar{u}\) j\(\bar{u}taku\)) under the auspices of the Housing Corporation (now defunct), but from 1949 it was given over to apartment buildings. \(^{430}\) Toyamagahara's conversion from military land to a civilian housing program was an early example of the swords to plowshares mentality pushed by Occupation authorities. While SCAP did not draw up detailed land use plans, it indirectly made land available for housing by dismantling the military apparatus. Large parcels of land that passed from military to civilian hands like the site at Toyamagahara avoided the difficulties of cobbling together a parcel from individual properties. \(^{431}\) As described in the Japan Housing Corporation report, Toyamagahara was to have 1016 public apartments (\(k\bar{o}ei j\bar{u}taku\)) and 264 apartments for public servants (\(k\bar{o}muin j\bar{u}taku\)) managed by the Tokyo Municipal Government.

The triple conversion of Toyamagahara, from military base to emergency housing to apartment complex, demonstrates the continuity of the state and the state's ability to engage in large scale housing projects while under occupation. While destroying the imperial war machine's potential was a stated goal of the Occupation, destroying the state apparatus writ large was not.⁴³³ What kind of public housing was Toyamagahara? It was the realization of a concrete

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⁴³⁰ Nihon jūtaku kōdan, "Toyamagahara jūtaku danchi," jobun.

⁴³¹ In some cases, like at Akabanedai, base land was already partially developed with roads and other service infrastructure.

⁴³² Nihon jūtaku kōdan, "Tovamagahara jūtaku danchi," jobun.

⁴³³ The occupation was indirect operating through the person of the Emperor and the surviving state apparatus.

domestic interface between the state and the resident population. Toyamagahara was the sign of a constructed relationship between the state and the population under its purview. Here "public housing" its not just a categorical distinction that identifies an administrative framework that is opposed to the private market, but the very mechanism by which people as subjects are formed. This can be seen through both land rights and the design of housing. Land in the public domain does not necessarily mean the same thing as land for public housing. What "land in the public domain" refers to is space that is made available for individual or collective use. What "land for public housing" refers to is land administered by a state or municipality that is converted to housing and then let to qualified individuals. While public housing sounds more benign compared to a military base, the naming of the category should not obfuscate the way in which the state maintained control of the land and the way people were managed on that land. In other words, public housing relates to how people are governed or made governable by and through homes. With the drive toward the stabilization of life after the war, particularly in urban areas, preventing disorder meant that the state was encouraged to develop new technologies for managing the population. Providing "the people" with quality residences, and proving that it could be a custodian of life in the postwar rather than committing people to death, was a key development in moving from a state of extreme precarity to a domestic security state. 434 Taken together, Takanawa and Toyamagahara evidence that the experimental development of concrete apartment danchi housing proceeded in tandem with the occupation of Japan. While SCAP did not impose a housing program on Japan, it let one develop under its watch. 435

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⁴³⁴ It is no coincidence that the logo adopted by the Japan Housing Corporation in 1955 was 住 (jū; house). The state coopted the sign of crisis, housing, and turned it into the symbol of a domestic security apparatus centered on the home.

⁴³⁵ In the late 1940s, the basic form of the rectilinear multistory apartment building prototyped at Takanawa was deployed at scale at Toyamagahara though the spaced repetition of serially reproduced apartment blocks.

The Osaka Housing Report

The development of concrete apartments was not limited to Tokyo. Osaka Prefecture (osakafu) and Osaka City (osaka-shi) also participated in the development of residential technology with the aim of providing domestic security through the structuring of residential communities. As mentioned in Chapter 1, Osaka prefecture was a target for incendiary bombing and suffered extensive dehousing during the war. Several hundred thousand homes were destroyed and more than one million people residing in the prefecture were dehoused throughout 1945. As in Tokyo, there was an urgent need for rebuilding domestic infrastructure in Osaka after the war. By 1951, Osaka Prefecture produced a housing report that looked back on the previous six years of development, from year-end 1945 through 1951. This report provided information that revealed the following three trends: 1) public housing was enabled by government subsidy (kokko hojokin); 2) building housing quantitatively using danchi was the preferred mode of development; 3) concrete apartment construction in Osaka paralleled that of Tokyo. 436 What the Osaka projects make evident is that technology for building multistory apartments and danchitype models for housing tracts were widely developed during the Occupation, which remains to be addressed more fully in both English and Japanese language scholarship. Japan Housing Corporation apartment production that began in the mid-1950s was an outgrowth of these postwar prototypes. As seen in the 1955 publication, Kyōdō jūtaku: hyōjun sekkei zushū, the JHC leveraged prior models developed under the Public Housing Law (1951) and selected three primary types: the flat, the star house, and the terrace house. 437 In producing apartment

⁴³⁶ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951* [Osaka Prefecture Annual Housing Report, 1951] (Ōsaka: Ōsaka-fu kenchiku-bu jūtaku-ka, 1951).

⁴³⁷ Nihon jūtaku kōdan kenchiku-bu sekkei-ka, *Kyōdō jūtaku hyōjun sekkei zushū* (Nihon jūtaku kōdan, 1955). My thanks to Ōtsuki Toshio (University of Tokyo) for pointing out the significance of this document.

communities across the archipelago, the JHC used these concrete dwellings to craft the state's preferred type of citizens, productive wage-workers, efficient homemakers, and educated children.⁴³⁸

The strong association of the word *danchi* with concrete apartment complexes in the later 1950s tends to obfuscate the technical use of *danchi* by state housing planners in this early period. For instance, when the word danchi (団地) is employed in the Osaka housing report it refers to a housing tract—an administered parcel of land—and is not reserved for a particular type of building. 439 Said differently, in this early period danchi signified a site (an enclosure) in which wooden-type homes (mokuzō senyō jūtaku) and reinforced concrete apartments (tekkin konkurītozō kyōdō jūtaku) were built. The first postwar danchi established through the Osaka Prefecture Public Housing (Ōsaka-fu kenei jūtaku) framework was the Neyagawa Danchi located in Kitakawachi-gun. It included 200 units of *nagaya*-type housing repurposed from the Housing Corporation's Maizuru site. Looking back from 1951, the report notes that this kind of housing was deficient on a number of counts, but was used out of necessity. 440 About forty-percent of the construction funds were obtained though state subsidy (kokko hojo). The following year in 1947 prefectural public housing activities expanded considerably. Five danchi sites with a total of 500 units were developed as state supported rental housing (kokko hojo chintai jūtaku). All of these were wooden houses in 2-unit and 4-unit configurations. As the name suggests, about half of the funding was provided from state subsidy (9 million of 20 million yen). The Residential Emergency Measures Order (jūtaku kinkyū sochi rei) also allowed for the conversion of existing buildings and the retrofitting of existing houses. Under this framework 500 units of dormitory

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⁴³⁸ Refer to Chapter 4 for a detailed exposition.

⁴³⁹ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*.

⁴⁴⁰ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 14.

housing were constructed. Other housing projects included a *danchi* with 130 rental units built using proceeds from a lottery, and three more *danchi* with a total of 60 units that were described as built for sale.⁴⁴¹

In 1948, spending on state supported wooden-type housing increased more than tenfold to 265 million yen, when compared to the previous year's total of 20 million yen. This enabled the construction of more than 2,050 units across eleven danchi. 442 Konohana Danchi, the largest, was located in Osaka City's Konohana Ward and contained over 520 dwelling units. In the same year, 135 units of reinforced concrete housing were built across two state-supported danchi located in the Tennoji Ward, containing 96 apartment units and 39 apartment units, respectively. The total cost for both projects was nearly 60 million yen, with half of the funds provided by the state.⁴⁴³ While the Takanawa and Toyamagahara apartments tend to stand out in developing a history of early postwar concrete apartment complexes, public projects in Osaka were contemporaneous and similarly innovative. The projects in Osaka attest to the state's attempt to incentivize the rapid construction of public apartments throughout the archipelago focusing on war damaged cities. Visual detail and explanation of the Matsugahana Danchi provided in the Osaka report shows two buildings and 39 units that are similar in form and arrangement to Takanawa's two buildings and 48 units mentioned above. 444 The buildings at Matsugahana were rectilinear fourstory crenelated structures with apartment units accessible by a double loaded staircase. The buildings appear spartan, lacking any facade or ornamentation in an effort to keep costs down. The unit plan, described as a 1948-type, is a relatively spacious 8-mat, 6-mat configuration with two mats worth of closets. The equivalent of 6-mats was dedicated to a kitchen and bathroom.

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⁴⁴¹ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 15.

⁴⁴² Ōsaka-fu kenchiku-bu iūtaku-ka. *Ōsaka-fu iūtaku nenpō 1951*. 16.

⁴⁴³ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 16.

⁴⁴⁴ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 19.



Fig. 27: Matsugahana Danchi apartment buildings. Ōsaka-fu jūtaku nenpō 1951. 445

The clearest examples of the simultaneous development of wooden-type and concrete-type *danchi* in the early postwar appear in reference to the Suminodō Danchi and the Fudegasaki Danchi, both managed by Osaka Prefecture. Suminodō Danchi is described as representative of state-supported wooden-type rental housing. The site was 55,396 *tsubo* (182,086m²) which at the time was the prefecture's largest *danchi*. The expansive site area was acquired by repurposing land from an aircraft manufacturing corporation. Before that, the site was a space of agriculture, mostly paddy fields. Changing uses necessitated the implementation of *danchi* planning (*ichi danchi keikaku*) in order to transform the site into a place suitable for housing. The

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⁴⁴⁵ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 19.

⁴⁴⁶ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 22-23.

⁴⁴⁷ 一団地計画 (ichi danchi keikaku)

conversation of paddy fields into a site for aircraft manufacturing, and then again into a residential danchi, demonstrates successive instances of spatial overcoding and spatial recoding—a process in which a tract of land is restructured according to a new type of use and named according to the new use. In this example, the 55,396 tsubo site was categorized (or coded) in three different ways over time: as agricultural land (paddy fields), as a site of industrial manufacturing (aircraft production), and as residential site (public housing). The nominal change in use can be considered recoding, while the successive changes in use can be considered overcoding since the new use predominates over the prior use, which is relegated to the past. It is important to note that the result of overcoding and recoding is not merely a literal change. The new use permits material changes and new social configurations. The reterritorialization or (re)enclosing of land allowed for new types of community to form on the site. In this case, the danchi can be considered a large-scale settlement in which dwellings occupy the site according to a duration that is in part determined by the materiality of the buildings, the life cycle of the residents, and the financial arrangements on which the site was developed. Danchi planning (ichi danchi keikaku) was the tool used to effect the change. Ichi danchi keikaku, along with its topographic blade tochi kukaku seiri (land readjustment), names the framework in which overcoding and recoding took place. New divisions were drawn and the site was primed for human settlement. Here, ichi danchi keikaku can be viewed as the technical tool used by the state to build an instant community.

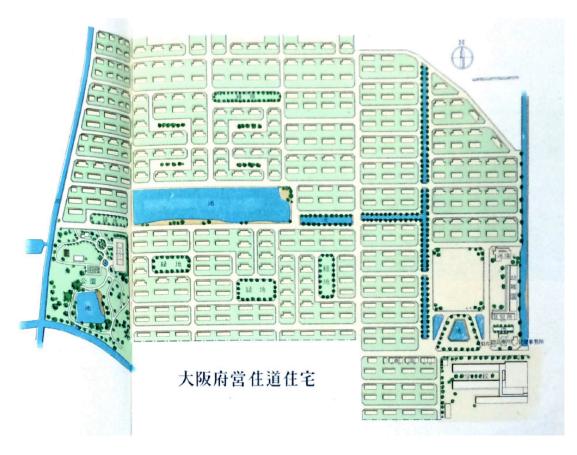


Fig. 28: Suminodō Danchi site map. Ōsaka-fu jūtaku nenpō 1951. 448

Along with the houses to be built and roads to be cut, the Osaka report notes that part of turning the aircraft manufacturing facility into a *danchi* entailed partitioning the site and building service infrastructure. The site plan, printed in color for emphasis, shows the rationalized distribution of houses and community facilities, emphasizing that the settlement proceeds according to a definite plan. Roads are used to cut the site into blocks that appear as units of space containing between 4-10 buildings. Water and greenery have been integrated into the site to break up the monotony of the houses and to provide places for relaxation. In the middle of the tract, space is given over to a large pond with adjacent streams forming a sideways T. In the

 $^{^{448}}$ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 23.

lower left of the plan there is a large park with another pond and recreation facilities. The overall plan includes comprehensive community service facilities: a bath house, a school, a kindergarten, a daycare center, parking, administrative offices, and shops. The houses within the site were built according to standardized plans. In 1949, for instance, the houses were duplexes configured according to four types of floor plans (B,C,D,E) that ranged from 66m² to 78.5m². All the floor plans include a kitchen area of at least 2-mats and space for a toilet and hand sink, each a half mat. The main living and sleeping rooms in the B and C-type plans are *tatami*, while the D and E plans have at least one large room that has wooden flooring.

In the example of the Suminodō Danchi, the word *danchi* connotes a meaning similar to a "housing tract." However, it is important to emphasize the ways in which large-scale *danchi* went beyond the mere provision of housing. What the *danchi* names is the entire site: the housing, the park, the shops, the schools, and the administrative buildings. It attempts to plan for residential life, recreational life, and scholastic life. It assumes that many of the residents will be young families with infants and school aged children. Here, *danchi* frames a community whose object is the production of family and the education of children. It structures a site in which there is a close spatial relation between the space of the home and the space of educational infrastructure. While composed of wooden houses, the Suminodō Danchi is an enclosure for the cultivation of everyday life within the metropolis. In its seemingly pleasant environs, housewives would be expected to produce the family while husbands were away at their places of work earning the means to fund this domestic situation. At the relatively early date of 1951, the Suminodō Danchi best illustrates the way in which a residential tract (*danchi*) could form an instant community.

Concrete-type *danchi* were not far behind in terms of site development. The same logic that

was used in Suminodō, with the rationalized site plan and standardized unit floor plans, was applied to constructing apartment complexes. The Fudegasaki Danchi is described in the report as concrete multi-unit housing (*tekkin konkurīto kyōdō jūtaku*), which can be understood as an apartment complex. The total site area was 3,005 *tsubo* (9,917m²), a small fraction of the Suminodō tract.⁴⁴⁹ The apartment buildings at Fudegasaki were crenelated rectilinear four-story structures. In 1948 there were twenty four units per building accessible by double loaded staircases.



Fig. 29: Fudegasaki Danchi apartment buildings. Ōsaka-fu jūtaku nenpō 1951. 450

The unit plans in 1948 included a relatively spacious 8-mat room and a 6-mat room, plus

⁴⁴⁹ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 30.

⁴⁵⁰ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 31.

kitchen, toilet, wash area, and hallway. In the 1949 C-type unit plans, the rooms were reduced to 6-mats and 4.5-mats respectively, while the hallway was eliminated. Residents entered into the genkan (small entrance area where shoes are removed), which led to the toilet and kitchen. The color diagram representing the concrete apartment danchi shows slight variations in form between 1948 and 1950, made visible by differences in crenelation, balcony space, and window configuration. Similar to the report on Takanawa in *Industrial Art News*, interior photographs of the apartments show the modernized space of the kitchen and toilet area. The view from the window is of the neighboring apartment building, a mirror of the resident's own life. Here, the presence of ostensibly traditional elements like tatami and washiki toilet do not necessarily indicate a lingering pastness or a concession to native culture, but reflect the paucity of fitted furnishings for the apartment. 451 For instance, the lack of mass produced bed frames meant that residents would have to purchase custom furniture, which would be prohibitively expensive for many. The *tatami* floor is not simply traditional, but provides a semi-pliant surface for *futon* bedding. Similarly, the toilet manufacturing industry was far less developed at this point in the postwar and cost effective western-style toilets were not as readily available. After 1955, the JHC overcame many of these cost barriers by arranging for mass production of equipment and furnishings for its apartments and in doing so helped to set standards for other types of public apartments.452

While described as a *danchi*, the Fudegasaki apartment complex is not as comprehensively developed as the Suminodō Danchi. In the diagram, apartment buildings are sited within small islands of green space with roads and pathways creating borders between the blocks. The specter-like apartment buildings situated in the background suggest that more units will be

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⁴⁵¹ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 34.

⁴⁵² See Nihon jūtaku kōdan, *Nihon jūtaku kōdan nenpō '57* (Tōkyō: Nihon jūtaku kōdan, 1957), 4-6.

constructed in the future and arranged in a similar way as the buildings that can be seen in the foreground. The site has the potential to expand, but it is a controlled expansion. The entire enclosure is rationalized. Floor plans, buildings, site layout, and environment have all been calculated in advance by government planners.



Fig. 30: Fudegasaki site design. Ōsaka-fu jūtaku nenpō 1951. 453

The diagram does not indicate that the same range of community and recreational services, as in the Suminodō Danchi, were integrated into the site. Part of the reason for this was that the Fudegasaki Danchi was strategically located next to a hospital and maternity clinic. The biopolitical implications of the housing tract are thinly veiled here and it is clear that planners were aware of the close relationship between housing and medical infrastructure in the

⁴⁵³ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 32-33.

reproduction and maintenance of the family. The *danchi* apartment and the surrounding environment were part of a bio-industrial apparatus in which apartment buildings became factories for the production of the family. While residents were not forced to reproduce, the deliberate placement of *danchi* next to child care and educational facilities implicitly reduced transaction costs by cutting down on commuting times and integrating medical care as part of community design. In the section titled Various Danchi Plans (*danchi keikaku no iroiro*) the Osaka report presents different layouts, which indicate that by 1951 *danchi* were already considered a preferential mode of development from the perspective of housing planners and state officials. As the size and topography of sites varied, in addition to the number of houses and community features, there was a considerable need to think about the arrangement of dwellings for each individual project. In the examples presented, there are five sites ranging between 2,408 *tusbo* (7,946m²) and 9,578 *tsubo* (31,607m²).

The report also acknowledges building activities by the Osaka Prefecture Housing

Association, which was also involved in constructing concrete apartments. Two sites are

presented, the Sumiyoshi Danchi and the Doi Danchi. While there was a close connection

between the Osaka Prefecture Housing Division and the Housing Association, here the Housing

that remain today. Schools have been shuttered or operate at a fraction of their capacity, shopping corridors have more shuttered shops than open stalls, and on-site medical care facilities are ill-equipped to cope with high numbers of elderly residents. While both the *danchi* sites and the *danchi* residents have aged, the community infrastructure has not been adequately adjusted to compensate for the inverted demographics and extended lifecycles. The frontloading of *danchi*, their focus on youth and the reproduction of the family, led to the ossification of this environment over time. As Norimitsu Onishi observed in a recent article for the New York Times entitled "A Generation in Japan Faces a Lonely Death," the solitary passing of elderly residents in their *danchi* apartment units was "the natural and frightening conclusion of Japan's journey since the 1960s." See Norimitsu Onishi, "A Generation in Japan Faces a Lonely Death," *The New York Times*, November 30, 2017, sec. World, accessed October 23, 2019, https://www.nytimes.com/2017/11/30/world/asia/japan-lonely-deaths-the-end.html. While Onishi uses the word "natural," I argue that this is a structural outcome; *danchi* were not designed for elderly or infirm persons, but young able-bodied couples and their able-bodied children.

⁴⁵⁵ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 40.

Association had responsibility for planning and directing the sites. The Sumiyoshi Danchi was a 1338 *tsubo* (4,415m²) site with 99 units housing in three buildings. The report notes that the unit floorplans were based on the Ministry of Construction standardized plans labeled 1949-A and 1950-D, but that the A plan had been modified to include a bathroom (*yokushitsu*). This was a luxury at a time when most apartments did not have a bathroom integrated into the unit.⁴⁵⁶

The activities of the Housing Association demonstrate that even at the municipal level there were multiple pathways for development and a complex picture emerges between various funding sources, municipal organizations, and site layouts. In terms of *danchi* planning in the late 1940s and early 1950s, the development of standard plans for wooden-type housing continued to be developed along with those for concrete-type apartment housing. In both cases there was considerable year-over-year development in site plans and unit designs. This exemplifies the iterative nature of planned development. Although standards existed for particular production runs, there was no single, timeless model. The 1949 standard was stamped around the archipelago in that year, but was updated in the following year. Moreover, establishing standards did not preclude further experimentation, as was the case with Sumiyoshi Danchi where efforts were made to modify the design by adding a bathroom (*yokushitsu*). As with the Takanawa Apartments, a certain number of *danchi* residents continued to be beta-testers, living in experimental units that might be selected for quantitative production in the future.

Overall, the Osaka report shows how wooden-type and concrete-type *danchi* were simultaneously developed under the Occupation utilizing government funds directed by parts of the bureaucratic-state apparatus that remained in place after the war. That SCAP had a relatively light touch on housing activities intended for Japanese citizens is indicated by the paucity of

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⁴⁵⁶ Ōsaka-fu kenchiku-bu jūtaku-ka, *Ōsaka-fu jūtaku nenpō 1951*, 58-59. As in a room with a bathtub inside of it. The toilet and bathtub were in separate rooms.

references to GHQ-directed interventions. While the dismantling of the Housing Corporation in 1946 makes it seem as if SCAP attempted to kill off housing programs, the opposite was the case. Before the establishment of the Japan Housing Corporation in 1955 (after the Occupation ended), state-backed municipalities were allowed to operate with relative freedom in constructing models for residential communities after the war. Especially for housing, the late 1940s witnessed a concerted drive toward mass rehousing and a shift to the use of concrete in apartment construction. If GHQ was busy building dependent housing for service members, the Japanese government was equally busy crafting *danchi* throughout the archipelago. The Osaka report demonstrates that, like the Great Kantō Earthquake, the war effected the transfer of funds from state coffers to rehousing efforts, spurring innovation and engendering new ways of living.

Conclusion

While Tokyo and Osaka serve as representative examples, production of *danchi* and experimentation with both wooden-type and concrete-type housing existed throughout the archipelago. Funding flowed from the state, and after 1948 the Ministry of Construction had considerable influence over setting design standards. It operated much in the way that the British housing manuals proposes, but without the explicit objective of health and sanitation. In 1953, the Ministry of Construction published the *Housing Construction Handbook* or what could be considered the definitive *danchi* manual. The subtitle for book reads "materials for the construction of public housing *danchi*," indicating that it is not just about housing in general, but directed toward the production of *danchi* housing in particular.

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⁴⁵⁷ For instance, a document labeled *Shie jūtaku ichiran hyō* (Public Housing at a Glance) produced in 1954 lists figures for units produced in Tottori Prefecture on the southwestern side of Japan.

⁴⁵⁸ The discourse of health and sanitation is not as overt in documents related to *danchi* production. However, health and sanitation principles were, in a sense, baked in to the design. Concrete apartment *danchi* were anti-slum, even if they were not always calling attention to this fact.

⁴⁵⁹ Kensetsu-sho jūtaku kyoku, *Jūtaku kensetsu yōran: kōei jūtaku no ichi danchi kensetsu no tame no*

Handbook represents the Ministry of Construction's accumulation of information regarding danchi activities that had proceeded to-date, but also was developed as an instruction manual, something that would guide the efforts of future production. The considerable effort that went into producing the text can be taken as a proxy for the state's belief that danchi would continue to be a viable model for urban development into the later 1950s and 1960s.

The foreword of the *Housing Construction Handbook* was penned by then Minister of Construction Totsuka Kuichirō. In similar terms as the Osaka report, mentioned above, the presentation of the technical details in the *Handbook* is framed by an understanding of the historic nature of housing development since the war. Said differently, the *Housing Construction* Handbook did not just present technical details, but located these efforts within the development of housing since the war. Looking at housing reports and housing manuals since the war, reveals that the state continuously attempted to situate and narrate its own activities with attention to the advancement of planning technology, as much as actually built projects. These sources not only speak to the current state of *danchi* planning that time, but also convey the sense of how these were being thought in an unfolding history of Japan after the war. The state harnessed time as an asset, with successive years providing distance from the war and temporal "space" that can be filled with content. For instance, Totsuka says "Public housing has been improving year after year since the end of the war, beginning with overwinter emergency housing, then basic housing, until our present [stage] of public housing, fulfilling our one and only mission of supplying low-[cost] rental housing to those citizens who desire homes." With each passing year, the government was able to demonstrate that it was doing something (i.e. building houses). Photographic images and site plans, such as those presented above in the Osaka report, provide

sekkei shiryō, (Tōkyō: Nihon kenchiku gakkai, 1953). n.b. This manual was published two years before the inception of the Japan Housing Corporation.

proof of what has been accomplished. Totsuka went on to say that "While promoting the stabilization of national life and social welfare, from the agglomerated construction of fireproof housing, to the fireproof cities and the rationalization of land use, we have made many contributions." By 1953, the year in which the *Housing Construction Handbook* was published, the state was no longer healing its wounds from the war, but actually boasting of progress induced by the war. Driving a narrative of "stabilization" and "construction," Totsuka participated in shifting people's attention from a state apparatus that had contributed to the ruination of Japan to a postwar government that was seen as a capable steward of the national domestic future.

One reason why reports from the late 1940s and early 1950s are underrepresented in housing histories is due to the reliance on legislation as a convenient way to map time and progress during this period. Looking at national legislation makes it seem as if housing development happens mostly in the 1950s, with the creation of the Housing Finance Bank in 1950, the Public Housing Law in 1951, and the Japan Housing Corporation of 1955 (the so-called three pillars of postwar housing). These laws cannot be ignored because they gave legal structure to housing finance and administration, but they overlook the financing and administration of housing by other mechanisms that occurred immediately after the war and in the late 1940s. Housing (kokko hojo jūtaku) and the efforts of municipal governments led to the tremendous production of public housing before it was organized under the framework of the 1951 Public Housing Law. Much of the groundwork for the production of danchi was therefore already in place before 1951 and certainly before 1955.

⁴⁶⁰ Reliance on legislation also overlooks the construction of postwar housing and *danchi* as a visiorhetorical or discursive practice that evolved in the technical documentation, administrative documents, and marketing materials.

Chapter 3: Everyday Life as Practice and Pedagogy

"Although concrete apartment houses, which were part of the social housing reforms of 1948, were unpopular at first, they are now readily accepted...at present the size of these projects has reached such a scale that they are considered a symbol of the postwar period." -Nishiyama Uzō, *The Japan Architect* (1963)

Introduction

Reflecting on the evolution of domestic space in Japan for the Czechoslovakian Academy of Science in 1962, urban planner and housing scholar Nishiyama Uzō observed that the construction of concrete apartments had fundamentally reshaped the contours of everyday life after World War II. 461 Exceptional prior to 1945, these apartments emerged as a generalized form of urban and suburban dwelling in Japan by the early 1960s. There was nothing natural or inevitable about this change. Concrete apartments, noted Nishiyama, had largely been imposed on the people and "the construction was forcibly done…because of the housing shortage." He went on to say that "since the Japanese used to live in [wooden houses,] the multistory reinforced concrete apartment…somehow gave a feeling of anger." How was it that these apartments which no one particularly wanted became symbols of the postwar?

Treated with relative amity by The Supreme Commander for the Allied Powers (SCAP), the planning and construction of apartment buildings became an avenue though which state bureaucrats, municipal governments, academics, and industry professionals imagined, and in many ways achieved, a reordering of postwar space. 464 Beginning under the Occupation, visions

⁴⁶¹ This lecture was republished in the September 1963 issue of *The Japan Architect*. Due to discrepancies between the lecture manuscript and the published article, both are cited here. Nishiyama notes in *The Japan Architect* that he used 130 slides (pictures and diagrams) when delivering the lecture in 1962 of which 30 were selected for reproduction in the article.

⁴⁶² Nishiyama Uzō, Japanese Houses, 1963, Box 294, Folder 002370, Uzō Nishiyama Memorial Library, Kyoto, Japan, 14. Note: This folder is labeled 1963, but the lecture was given in summer of 1962.

⁴⁶³ Nishiyama, Japanese Houses, 14.

⁴⁶⁴ SCAP disbanded the *jūtaku eidan* (Housing Corporation) in 1946 due to its perceived role in the war.

for rebuilding urban areas merged with housing reforms and were deployed in service of reconstituting the nation. With the establishment of the Ministry of Construction in 1948, public housing and public financing programs were increasingly directed to help translate expert imaginings of fireproof cities and multistory concrete blocks into viable built environments. As SCAP proceeded to dismantle the domestic military apparatus, former base land was made available to municipalities across the archipelago for large-scale housing projects. 465

The dissolution of the wartime Housing Corporation (*jūtaku eidan*) in 1946 by order of General Headquarters (GHQ) created the conditions in which experimental housing reforms could take effect. He Housing Corporation, as a centralized state institution, had focused on the quantitative production of standardized wooden housing in strategically important areas during the war. Now, municipalities were given space, money, and a mandate to begin implementing reforms. In the period of municipal experimentation between 1946 and 1955, plans were established for the production of three major types of concrete apartments: the flat, the star house, and the terrace house. After 1955, the Japan Housing Corporation (a special type of public corporation) used its trans-municipal building authority and large capital base to build these three basic types of apartments on the expanding peripheries of metropolitan areas from Hokkaidō to Kyūshū. He was the material presence of thousands of these concrete apartment buildings that Nishiyama referred to in his 1962 address.

In the discussion below, I argue that this forcible reordering of national space and

Rehousing continued through municipal initiative and after 1948 with guidance from the *kensetsushō* (Ministry of Construction).

⁴⁶⁵ Converting base land into housing tracts was in-line with SCAP policy of dismantling the Japanese military apparatus after the war. Practically, it provided a large single parcel of land so that housing could be built economically at scale.

⁴⁶⁶ n.b. The Housing Corporation (*jūtaku eidan*) was the institutional predecessor to the Japan Housing Corporation (*nihon jūtaku kōdan*).

⁴⁶⁷ Neitzel, The Life We Longed For, 44.

everyday life in postwar Japan relied on the physical construction of apartment buildings as much as attendant pedagogical activities. The process of acculturation which played out in the gap between the forced introduction and a ready acceptance involved the production of knowledge about housing, as well as its dissemination through public lectures, print and visual media. Expert led initiatives like the *Houses and Cities of Tomorrow* lecture series attempted to sell the public on a vision of the future in which concrete buildings and lifestyle changes were essential. Ale Later publications like the Japan Housing Association's *Reader for How to Live in Concrete Apartments* (konkurīto apāto sumaikata dokuhon) and the Japan Housing Corporation's *New Living Guide* (sumai no shiori) gave residents practical instruction on how to conduct themselves in their new homes.

These pedagogical activities were incorporated into and depended upon an aesthetics of housing. What an aesthetics of housing refers to here is not simply the built form of a house, but a politics of representation in which the house figured as an object that could properly organize domestic space and everyday life or bring about its ruin when improperly managed. Films such as *Tokyo: Twenty Years Later* (1947) and *A Plan for Youth* (1952) exemplify early postwar efforts to fuse pedagogical activities and an aesthetics of housing: concrete apartments are made visible within urban space and appear as desirable human habitats.⁴⁷⁰ In *A Plan for Youth*,

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⁴⁶⁸ See Kensetsushō, *Asu no jūtaku to toshi* (Tōkyō: Shōkokusha, 1949).

⁴⁶⁹ See *Konkurīto apāto sumaikata dokuhon*, ed. Nihon jūtaku kyōkai (Tōkyō: Shinkenchiku sha, 1958). See also Nihon jūtaku kōdan, *Sumai no shiori* [New Living Guide]. (Tokyo: Nihon jūtaku kōdan, 1958). ⁴⁷⁰ See *Seishun no sekkei*. Nihon jūtaku kyōkai (Tōkyō: 1952). My thanks to Toba Kōji (Waseda University) and Murayama Hideyo (Documentary Film Preservation Center) for their help in locating and screening the original 16mm reel of this film. The plot summary, character names, and general context for the film were developed from a corresponding article in *Jūtaku* magazine written near the time of release. See: "Seishun no sekkei," *Jūtaku* 2, no. 1 (1953): 36-38. See *Nijūnengo no Tōkyō*, Nihon kankō eiga sha (Tōkyō, 1947). This film was sponsored by the Tokyo Municipal Government (*tōkyō-to*) and designed by the City Planning Section (*toshi keikaku-ka*). See also, Sakasai Akito, "Sensai fukkō to yamiichi: 'nijūnen go no tōkyō' to 'nora inu' ni miru yamiichi no yakuwari," *Gengo jōhō kagaku*, no. 13 (2015): 85–101.

instruction (or how to think about housing) is enacted as a drama: people without their own residences express joy and happiness upon arriving to newly built public projects and playfully simulate the use of the novel features and functions of an apartment. More than an enlightened advertisement, A Plan for Youth stages public housing at the intersection of the postwar housing shortage and the promise of a bright future for young families. As later reporting would demonstrate, this image of the ideal house was itself a construct that remained perpetually in excess of the everyday that it supposedly made visible.

Houses and Cities of Tomorrow

In December of 1948, the recently established Ministry of Construction in collaboration with General Headquarters (GHQ) and the Civil Information and Education Section (CIE) assembled architects, urban planners, and technical experts to deliver lectures on the theme "The Housing and City Problem" (jūtaku to toshi mondai) in four major metropolitan areas: Sendai, Tokyo, Kyoto and Fukuoka. 471 These lectures ran alongside the Houses and Cities of Tomorrow exhibition, which made educational texts available in heavily trafficked public areas like department stores. Republished the following year under the title *Houses and Cities of Tomorrow* (asu no jūtaku to toshi) the collected set of lectures featured talks by Hamaguchi Miho, Nishiyama Uzō, Tange Kenzō, Takayama Eika, Hamada Minori, as well as occupation personnel. The purpose of the lectures and exhibition was to "effect a new direction in the Japanese people's way of thinking by providing enlightened instruction (keimo shidō) to public and private educators as well as the people in general (*ippan shimin*)."472

⁴⁷¹ Kensetsushō, *Asu no jūtaku to toshi* (Tōkyō: Shōkokusha, 1949), 3.

⁴⁷² Asu no jūtaku to toshi, 3.

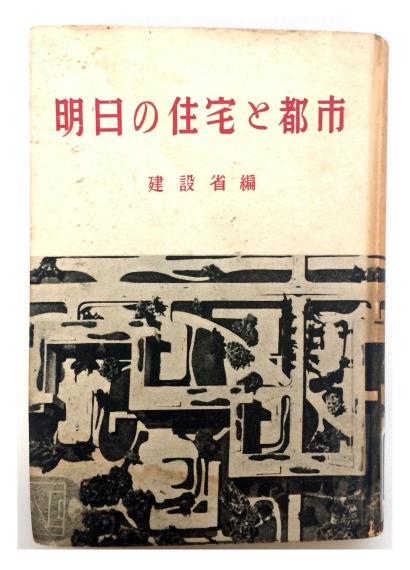


Fig. 31: Cover of Asu no jūtaku to toshi (Houses and Cities of Tomorrow). Kensetsushō, 1949.

What motivated these lectures was a belief that public support was necessary to solve the housing problem and rebuild Japan. The implication was that if people understood the problem by way of enlightened instruction then they would be less likely to resist a top-down reconstitution of domestic space. What the public was being asked to understand was not just the present scope of the problem, but the way in which cities and homes would be remade. Tange Kenzō, who was scheduled to speak on the topic "The Situation of Today's Houses," lamented in

his opening remarks that what he really wanted to talk about was "the dream of tomorrow." He tried to reframe present activities in terms of the future by saying, "I want to try thinking about what must be done today in order to build tomorrow." Emphasizing that housing problems such as overcrowding transcended wartime damage, Tange noted that in about forty-percent of houses in Sendai before the war (and fifty-percent after) people were basically "living like animals" (dobutsuteki na seikatsu wo shiteiru). 475

He observed that those living in Sendai were still considered people of Miyagi prefecture (miyagiken jin). They were similar to people from Fukushima and Iwate in having little human contact with other prefectures and continued to reside in feudalistic cities (hōkenteki na toshi). Industrial productivity in the area was thought to be so low that although electric power generation in the Northeast was advancing, this electricity was actually being redirected to Tokyo and Yokohama. Not just housing, but an entire way of life was at issue. Tange emphasized that what the people of the Northeast needed to overcome was fundamentally a problem of spirit. What the people of the Northeast needed to realize was that they "lacked the willpower for development" (hattensuru chikara wo jiko no naka ni wa motteinakatta). 476 He closed by saying that prior to addressing housing and urban issues, it was imperative that a revolution of spirit (seishin no nai kara no kakumei) take place. 477

It was not the war then, but regional difference that best explained the sub-human living

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⁴⁷³ Asu no jūtaku to toshi, 78.

⁴⁷⁴ Asu no jūtaku to toshi, 79.

⁴⁷⁵ Asu no jūtaku to toshi, 83.

⁴⁷⁶ Asu no jūtaku to toshi, 84-85.

⁴⁷⁷ Asu no jūtaku to toshi, 94. See also, Neitzel, *The Life We Longed For*, 3-5; 15. As Neitzel points out, architects like Nishiyama and Tange were central to discussions of the direction of postwar housing, particularly in reference to housing's temporality and the opposition of a perceived feudalistic past to a present quest for democracy and postwar recovery. What I am emphasizing here is that this was part of a state-backed pedagogical agenda that attempted to instill the general public with a new way of thinking. In other words, to force a shift in consciousness centered on housing.

conditions of people in Sendai. From Tange's vantage point, poor housing conditions were a reflection of a weak democratic political consciousness and the failure of people in the Northeast to bring about a proper modernization of that area. Couched in the logic of progressive historical development, the people of Sendai appeared as something of an anachronism: remainders of a feudal past that stubbornly persisted in the present. Other parts of Japan were achieving the kind of worker productivity that mattered for postwar economic development. If the people of Sendai wanted to improve their conditions, they needed to reform themselves and catch-up with the more advanced parts of Japan. By understanding and confronting their backwardness, Tange hoped that the people of Sendai would find the proper motivation within themselves to become economically active citizens.

Delivered in Kyoto, Nishiyama's lecture entitled "The Housing Problem at Present" was organized by three central questions: 1) What is the concern over housing? 2) How did these housing difficulties arise? 3) What is the path to a solution? He began by asking the audience rhetorically, "do you feel the housing difficulties?" (anata wa jūtakunan wo kanjiteimasuka). 479 What Nishiyama found through his survey work was a difference in the structure of feeling between those from urban and rural areas. 480 In rural areas, people did not perceive housing problems to be very bad and were even able to find desirable houses on occasion. But that did not mean people should be complacent. The appearance of unproblematic rural dwelling was actually a symptom of the problem, rather than evidence of solution. Even before the war, noted

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⁴⁷⁸ Cf. Neitzel, *The Life We Longed For*, 15.

^{**}Asu no jūtaku to toshi*, 94. This phrase might also be translated as "do you sense the difficulties of housing" or "are you aware of the housing problem," however the verb *kanjiru* (感じる)* emphasizes what is felt. So it is not just an intellectual awareness, but the lived reality that Nishiyama is pointing toward.
**Of. Structure of feeling as grounding the sensible connection/comparison between the seemingly dichotomous conceptual categories: country and city. See Raymond Williams, *The Country and the City* (New York: Oxford Univ. Press, 1975), 58, 158, 270, et al.

Nishiyama, Japanese people had grown accustomed to living in dangerously unhygienic conditions.⁴⁸¹ There was a need for reform.

Nishiyama emphasized that housing problems should not be reduced to war damage, even though many people thought that the present difficulty was a result of the war. ⁴⁸² What best explained present conditions was the historical development and logic of capitalism. ⁴⁸³ Alluding to the work of Karl Marx, Nishiyama said that it was during the period of the primitive accumulation (*genshi chikuseki*) of capital when the industrial labor force (working class) was brought into existence and urban housing conditions deteriorated precipitously. ⁴⁸⁴ Because capitalism functioned according to the principle of make work and let live, the extraction of profit was not dependent on the construction of decent dwellings. Moreover, houses existed not just for shelter, but were themselves incorporated into a marketplace. Held as an asset, a house could be rented out for a profit over a long period of time. This meant that the supply of dwellings was not purely based on current need, but framed within a rental market. ⁴⁸⁵ It was precisely during times of excessive demand that the greatest rents could be received.

Nishiyama observed that the extreme depravation of living conditions caused by capitalist society had forced people to participate in economic and military incursions abroad as "cheap labor and human bullets." At home, people had been subjected to such a low standard

⁴⁸¹ Asu no jūtaku to toshi, 96.

⁴⁸² Asu no jūtaku to toshi, 97-98. Nishiyama notes that "there was a shortage of 4.2 million dwellings that resulted from aerial bombardment, insufficient building, and the great number of people that were being repatriated from the colonies." Cf. Hiroshi Ono, "Housing Reconstruction in War-Damaged Cities: The Creation and Distribution of Living Spaces in the Late 1940s Under Postwar Governmental Controls," in *Economic History of Cities and Housing*, ed. Satoshi Baba (Singapore: Springer, 2017), 37.

⁴⁸³ Cf. Neitzel, *The Life We Longed For*, 15. As Neitzel notes, Nishiyama made a similar argument in *Kore kara no sumai*.

⁴⁸⁴ Asu no jūtaku to toshi, 100.

⁴⁸⁵ See also Ono, "Housing Reconstruction in War-Damaged Cities," 37.

⁴⁸⁶ Asu no jūtaku to toshi, 101.

of living that they appeared no better off than people in the colonies. The war had certainly intensified housing difficulties, but Nishiyama encouraged his audience to look beyond this superficial explanation. In Osaka, for instance, one third of the people were living in informal arrangements and multiple families were crammed together in small rooms. It was not uncommon to find situations in which "a married couple and their grown children were cohabiting with other lodgers," and where men and women were forced to share the same intimate spaces. In other cases, "families were being broken up and people couldn't get married because they didn't have a [proper] house."⁴⁸⁷ The difficulty then was not one of spirit, but of space and capitalist social relations.

This topsy-turvy domestic social situation would not necessarily be self-correcting. Nishiyama pointed out that current trends included an expanding discrepancy between wage levels and rents, in addition to material problems, such as the flammability of wooden structures and poor durability, which caused houses to become slums in less than two years. One of the solutions being discussed at the time of Nishiyama's lecture was the extension of capital to homeowners and housing co-ops through loans issued by the Housing Finance Corporation (jūtaku kinyu kōsha). Another solution was the quantitative supply of low-cost rental dwellings. Versions of these ideas were legally codified a few years later as the Housing Finance Bank Law (1950) and the Public Housing Law (1951).⁴⁸⁸

Even if other speakers in the Houses and Cities of Tomorrow lecture series did not share Nishiyama's reasoning that fundamental driver of poor housing conditions and unevenness between country and city was caused by capitalism, or Tange's assertion that it was a problem of

⁴⁸⁷ Asu no jūtaku to toshi, 96. Note that this is, in a nutshell, the dilemma that organizes the drama in the film A Plan for Youth (1952).

⁴⁸⁸ Ann Waswo, *Housing in Postwar Japan* (London: RoutledgeCurzon, 2002), 50-51.

developmental will, they did share the sentiment that meaningful interventions into housing and urban space at a national level could be made. Other lecturers discussed the potential for new community forms of housing that were premised upon the rationalization of living space and economic optimization, the necessity of fireproofing cities, and the potential for high-rise structures. What is remarkable about this lecture series is that many of the ideas mentioned were implemented over the next twenty years. Nishiyama, Tange, Hamaguchi, and Takayama all went on to plan and build structures from individual residences to apartments and civic buildings, including the iconic 1964 Olympic Gymnasium. Ocncrete was used extensively as a building material throughout the 1950s and 1960s, and interior floor plans for residences architecturally reinforced partitioning rooms according to function and hygiene.

Tokyo: Twenty Years Later

Film provided another avenue for instructing public audiences by modeling domestic behavior and simulating images of future domestic environments. For a Bright Home Life (1950), a film produced by the CIE, centered on the theme of kitchen improvement. Following two Japanese women, the film emphasized that efforts to "make kitchens...more efficient, sanitary, and modern" applied as much to urban areas as they did to the countryside. ⁴⁹¹ A Plan for Youth (1952), produced by the Japan Housing Association, similarly incorporated images of a bright, modernized, and ready-made kitchen space as it showcased homes that municipal governments were building throughout Japan. ⁴⁹² The focus in A Plan for Youth shifted from

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⁴⁸⁹ See table of contents, *Asu no jūtaku to toshi*, 1-2. Many of the other lecturers including Takayama Eika and Hamaguchi Miho were also heavily involved in housing reform in the postwar period. All of the lectures in this book show that even under occupation housing, as both a form of architecture and social policy, was being actively developed.

⁴⁹⁰ Cf. Neitzel, *The Life We Longed For*, 22.

⁴⁹¹ My thanks to Alisa Freedman at the University of Oregon for brining this film to my attention.
⁴⁹² n.b. Not to be confused with the Japan Housing Corporation (*nihon jūtaku kōdan*) the Japan Housing Association (*nihon jūtaku kyōkai*) was a separate entity that produced information and literature about

wooden houses to apartment buildings—fireproof structures that could be quantitatively supplied and made available to the general public in metropolitan areas. In contrast to the discombobulated domestic space that Nishiyama and Tange alluded to, low-rent municipal apartments were presented as well-ordered spaces in which young families could keep their own homes and live well. This convivial domestic image—the union of the conjugal couple and the modernized home—became central to telegraphing the politics of the projects. It invested concrete apartment blocks with an image of an idealized domestic life, vitalizing what was otherwise a lifeless space.

The type of reinforced concrete apartments on display in A Plan for Youth (discussed below) were foreshadowed in the film Tokyo: Twenty Years Later (1947). Sponsored by the Tokyo Metropolitan Government, arranged by the City Planning Section, and shot by Miki Shigeru, *Tokyo: Twenty Years Later* aimed at garnering support for reconstruction planning.⁴⁹³ The film made evident that apartment buildings would play a leading role in efforts to bring order to postwar space. Rather than recasting the Dojunkai apartments, which had been built in Tokyo and Yokohama following the extensive fire damage caused by the 1923 Great Kantō Earthquake, the film opted to return to the drawing board.⁴⁹⁴ It imagined postwar and future urban space in Tokyo by bringing together mixed media: drawings, maps, and live action shots. In the film, a narrator guides the viewer through sequences of images and provides instruction on how to understand order and disorder in the city. The film makes the case for arresting haphazard growth and crowded streets by employing planning techniques to make the city beautiful, livable, and productive. Reconstruction is interpreted not as a return to the real space of the city

housing, particularly public housing.

⁴⁹³ My thanks to David Ambaras at North Carolina State University for bringing this film to my attention.

⁴⁹⁴ For more context on the Dōjunkai apartments, see Chapter 2, Part 1.

that had existed before the war, but as a chance to make an ideal city of the future (the kind of city that Tange wanted to discuss in his lecture).



Fig. 32: The Paper City, chaotic and unplanned. Tokyo: Twenty Years Later (1947).

Flipping the script on war damage, *Tokyo: Twenty Years Later* reframes the implied firebombing of Tokyo as a tremendous opportunity. Images of a literal paper city drawn to look chaotic with imbricating high-rise buildings, hanging laundry, and billowing smokestacks, are juxtaposed to a near tabula rasa of scorched earth. Filmed with an aerial tracking shot eerily reminiscent of the bombing runs themselves, the camera offers a broad look at a landscape that appears as if it is patiently waiting for the hand of a planner who can remake it for the postwar

era. Even the British Minister of Health would be envious of the situation Tokyo now found itself in, the film's voiceover announces. ⁴⁹⁵ The *carpe diem* optimism that the film projects can be seen as a backhanded gesture of rallying support by way of scolding people for not grasping the once in a lifetime opportunity to remake Tokyo into a world-class postwar city: people have endured destruction, but they must now be prepared to participate in planned reconstruction.

Visions of the real and the possible are displayed in an attempt to intervene into the viewer's sense of the city. By reframing elements of postwar everyday life as disorderly, the film rationalizes reconstruction efforts that will rely on government-directed planning. For instance, after the scorched earth flyover, the camera sweeps across a hodgepodge of barrack-style wooden structures encroaching onto adjacent alleyways. The narrator opines that if things are left to be as they are Tokyo will return as a patchwork of dank slums. Photorealism is employed to promote the idea that undesirable structures are already mushrooming up throughout the city. As this introductory sequence concludes, the narrator tells the audience that "the first step in city planning begins with the organization of industrial, commercial, and residential areas." After touring busy shopping districts like Shinjuku, Asakusa, and Ginza, where American GIs, women in kimono, and businessmen in suits can be seen walking side by side, the film returns to housing.

A utopian vision of high-rise buildings stands in opposition to the earlier rag-tag homes of the immediate postwar. The drawing (similar to that pictured on the cover of *Houses and Cities of Tomorrow*) recalls Swiss-French planner and architect Le Corbusier's proposals for *A City for 3 Million Inhabitants* (1922) and the *Plan Voisin* (1925) in which wide boulevards,

⁴⁹⁵ As discussed in previous chapters, housing policy in England that centered on health concerns was a reference point for postwar planners in Japan. Firebombing and dehousing functioned like slum clearance, but the ruins were not the *tabula rasa* they appeared to be.

⁴⁹⁶ Nijūnengo no Tōkyō, Nihon kankō eiga sha (Tōkyō, 1947)

manicured green space, and cruciform towers brought order to metropolitan space in Paris. ⁴⁹⁷ For Le Corbusier, these apartments were to be more than discrete domiciles. They were part of a plan to modify urban space with an eye toward the reformation of everyday life. Speaking of *A City for 3 Million Inhabitants*, Le Corbusier said that "the home rules over the city. There are no more pariahs deprived of sun and of space. Equipment worthy of a machine-age civilization." ⁴⁹⁸ The film extends this idea of homes as machines for living by imagining children playing in greenspace created in-between the apartment buildings. In another sketch, a woman at leisure reclines outdoors while attending to an adjacent pram. The voice-over intones that the community space of the apartment complex can be utilized by women who want to liberate themselves from the kitchen. ⁴⁹⁹ Apartment buildings and their attendant community space figure here as a constructive solution to postwar housing problems. This is the *danchi* model in a nutshell—apartment units plus planned community space.

While the union between domestic architecture and urban planning that Le Corbusier represents has been subsequently criticized as top-down urbanism that centers on creating monolithic concrete slabs from which homes are cut, these were the very ideas that appealed to postwar reformers in Japan. Apartment complexes could function as both residential space and urban infrastructure. While ostensibly responding to the postwar housing shortage, apartments were employed as a tool for partitioning the city, bringing order through spaced repetition of form. The imposition of concrete buildings then was not just a tactical tool in slum clearance, but a way of controlling future growth. The apartments imagined in *Tokyo: Twenty Years Later* were

⁴⁹⁷ Refer to cover art of *Asu no jūtaku to toshi*. The snake-like rectilinear object that forms right angles as it meanders over green space and recreational areas is meant to be apartment buildings. This design is different than Nishiyama's *Shinkenchiku* sketch referenced in the previous chapter in that the apartment building is a continuous structure. Compare with the barrack-like configuration in Nishiyama's drawing. ⁴⁹⁸ Le Corbusier, *The Radiant City* (New York: Orion Press, 1967), 204.

⁴⁹⁹ In this sense, the apartment-machine properly managed by the housewife produces leisure time.

cast as a positive form of urban expansion. They preempt the slums by organizing space according to planning principles which preference light, air, and the right angle.⁵⁰⁰

In Japan after the war, the continuity of the postwar state was far from a forgone conclusion. Municipalities, as well as the national government, looked at housing as a way to reassert their authority and intervene into the production of urban space for the purpose of fostering economic development and administering the people under their purview. As later government sponsored films like *A Plan for Youth* (1952) showed, public apartments were envisioned as a means of promoting homemaking as a form of civic and economic conduct in which aspirational young couples maintained hygienic living spaces and raised the next generation of educated workers. ⁵⁰¹ In this sense, the production of postwar public apartments in Japan was concerned with youth (young couples and their children) who could actively contributed to postwar development. The aesthetic operation of *A Plan for Youth* is to supply people with images of an idealized modern home instantiated in the space of the apartment, while also simulating the anticipated behavior of the occupants. ⁵⁰² Apartment life is shown to be a space of bonhomie, an analgesic to the problems of overcrowding and informal dwelling.

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⁵⁰⁰ In other words, the apartments are not just a form of housing but an urban planning tool that helps to structure metropolitan space.

This film portrays the overlay of economic forms of conduct onto a biopolitics of housing. The biopolitical dimension is that, properly structured, housing can intervene into the birth rate, marriage rate, and influence morbidity and mortality by creating more hygienic environments. Economic conduct refers to behaviors or everyday life as a continuous practice that is governed by rational decision making. See Michel Foucault, "Society Must Be Defended:" Lectures at the Collège de France, 1975-76, trans. David Macey (New York: Picador, 2003). Lecture for 17 March 1976 discusses "Biopower's fields of application." See also Michel Foucault, The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979, ed. Michel Senellart, François Ewald, and Alessandro Fontana (New York: Picador, 2008). This work discusses economic conduct by shifting from an overt focus on biopolitics to neoliberalism—the economic order in which biopolitics operates.

The discussion of the aesthetics of housing continues in Chapter 4 in the context of JHC-built *danchi*. While JHC marketing schemes targeted the middle-income segment of the working population, one can here observe that a similar aesthetics of housing was operative in apartments built under the Public Housing Law (1951).

A Plan for Youth

In December of 1952, the Japan Housing Association in cooperation with the Ministry of Construction, prefectural governments, and the National Public Housing Mutual Aid Society released a motion picture entitled *A Plan for Youth* (*seishun no sekkei*). The purpose of the film was to make visible the types of public housing being constructed by municipal governments throughout the archipelago. Staged as a drama, the film portrayed the dilemma faced by families living in an overcrowded private residence and presented newly built public housing as a solution to the problem. Two types of housing were advertised: 1) concrete multistory apartment buildings; and 2) wooden single-family detached houses. The film demonstrated how to apply for public housing, showed applicants what their options were, and simulated the arrival of a family to an apartment complex.

A Plan for Youth stages both housing and the people being housed in a twenty-two minute performance. The drama of the film enacts a reading of the postwar housing problem (jūtaku mondai) interpreting it as overcrowding due to lack of supply that is in turn causing an impediment to marriage.⁵⁰⁵ This nuanced framing of the housing problem does not reduce it to purely quantitative terms as it seeks to reveal dependent social relations. The film advertises public apartments as well-equipped homes available for young citizens looking to build their

⁵⁰³ To my knowledge, this film has not received treatment in English language scholarship. In Japanese, the most significant prior mention was reporting done by *Jūtaku* magazine in 1953.

⁵⁰⁴ Cf. Waswo, *Housing in Postwar Japan*, 52. Waswo notes that the Public Housing Law (1951) provides for Type 1 and Type 2 houses that are determined by income thresholds. However, the emphasis in the film is on the form of the houses. The message is that the government is constructing both wooden houses and concrete apartments that are available for public subscription.

be understood as the provision of shelter necessary for the preservation of life, to the supply of dwellings that could support the development of families. It is a concern for the social reproduction and growth of the family that is at issue here. The focus is less overtly on health and more on householding and social development. Cf. Neitzel, *The Life We Longed For*, 12. As Neitzel notes, Nishiyama and others also argued for the spatial separation of young married couples as part of a project to "circumscribe the power of the household head" (read extended family) and promote democracy.

families in a community of shared economic and material aspirations, and juxtaposes them to public detached houses and a private residence. The words *koei jūtaku* (public housing) and *apāto* (apartment) are used to describe the apartment complexes rather than the word *danchi* (although in a technical sense these are *danchi*).



Fig. 33: Sangorō (center) meeting with his (male) tenants. A Plan for Youth (1952).

The film begins by showing four separate families who rent rooms within a private residence. The house contains a microcosm of postwar society with each of the characters standing in for their respective social type: 1) Sangorō, the owner of the property, and 2) his son Ichirō, who is planning to get married; 3) Akiko and Kataoka, a relatively older upper-middle-class couple; 4) Takeda and Hatsue, a younger lower-middle-class couple; 5) and Yoshitsuan, a middle-aged

working-class bachelor.⁵⁰⁶ Rather than evict a family outright, Sangorō asks the renters to envision their own solutions. Yoshitsuan proposes building an additional room, Kataoka seeks a loan to build his own home, and Hatsue applies for public housing without telling her husband. Comically, the film shows Takeda (Hatsue's husband) seeking the advice of a fortune teller, while Hatsue takes the practical, if not fateful, step of entering the housing lottery. At this point, the film introduces the two types of public housing: multistory reinforced concrete apartments and single-story detached wooden houses. ⁵⁰⁷

Through the device of a mock interview performed by Ichirō, Yoshie assumes the character of a housewife and introduces the cutting-edge features of the public-law concrete apartments from the hygienic kitchen space to the exterior waste chute. Three people are shown sitting at a dining table, while an urban landscape is visible through an open window. Following this scene, a tract of single-story detached wooden houses is shown with a wide-angle shot, before zooming into one of the houses to provide interior detail. Beginning with the kitchen space, the camera pans to show a child's desk and *chabudai* (low table) set on tatami floor and then cuts to an exterior shot highlighting the floor-to-ceiling carpentry. The film does not dwell on the explanation of the detached wooden house, because it was the relatively more familiar type.

⁵⁰⁶ While the characters all appear sanguine in their outward relations, the film implicitly criticizes this arrangement; the families cohabiting are not consanguineous and are all of different social classes. The arrangements are expedient, but not preferable. Yoshie, a young woman, cannot marry Ichirō until at least one of the renters vacates the premises of Sangorō's house and frees up space.

⁵⁰⁷ The film's internal sequencing makes it seem as if it should be Takeda and Hatsue who arrive at the apartments after just having applied for housing, but it is Ichirō and Yoshie who simulate the arrival of a young couple to the new apartment as they help Yoshie's older brother with the move. The reason that it cannot be Hatsue and Takeda is because they have not yet won the housing lottery.



Fig. 34: Ichirō's mock interview of Yoshie on the apartment balcony. A Plan for Youth (1952).

At the film's conclusion, the scene of arrival to the public apartment complex first portrayed by Ichirō and Yoshie is reenacted by Takeda and Hatsue who have just won the housing lottery. 508 Ichirō explains by way of monologue that the marriage problem lurks behind the housing problem, saying that it is difficult to get married and start a family if residential space is unavailable. This scene closes the loop on the opening dialogue between Ichirō and Jō (a truck driver), establishing that a lack of alternative housing for those renting space in Sangorō's residence is the primary impediment to Ichirō and Yoshie's marriage. The present happiness of

⁵⁰⁸ The lottery selection format was necessary because demand exceeded supply. It was a tool to ensure fairness not a form of betting.

the young couple is juxtaposed in the final scene to a homeless drunk (intended as a caricature of a non-productive citizen) who was earlier seen making do with a sewer-pipe for shelter. ⁵⁰⁹

A Plan for Youth is an important reference point in the study of postwar housing because it showcases public apartment communities from the perspective of state in its attempt to solve the postwar housing problem (sengo no jūtaku mondai) before the creation of the Japan Housing Corporation. The goal of government policy at this time was to introduce low-cost fireproof housing and to ensure the continued reproduction of the most basic family unit—the married couple. The film effectively links a chain of associations that lead from a private residence to public housing with an emphasis on conjugal relations and house-holding practices. Seen in this light, public housing projects created dwelling space, both directly and indirectly, that allowed for the growth and maintenance of postwar families: a family that moved into the projects found a ready-made home and allowed another family to begin elsewhere.

⁵⁰⁹ Cf. Dower, *Embracing Defeat*, 61. "In Tokyo, such outcast figures [like disabled veterans] haunted public places until the late 1950s. Others simply gave up the struggle for survival after returning home…" To underscore the point, the phrase *sengo no jūtaku mondai* operated within the biopolitical agenda of postwar planners. The film reveals that solutions to the housing crisis extended far beyond the mere quantitative reconstruction of homes damaged in the war, but was part of a future oriented social agenda that aimed to grow the nation and prevent disorder through the structuring of the residential population.



Fig. 35: A view of the apartment complex (danchi). A Plan for Youth (1952).

Beyond relieving residential occlusions that stymied marriages, the ready-made apartment encouraged house-holding without requiring the presentation of accumulated capital in the form of a downpayment as a criteria for residency.⁵¹¹ The film suggests that the young families moving into the apartment complex desire a home of their own but lack savings that would allow them to purchase property and build a house.⁵¹² The film highlights the productive potential of

⁵¹¹ In the early 1950s, the mortgage lending market was dysfunctional and the war and inflation left many without savings. The government provided rental apartments in order to encourage family formation and alleviate overcrowding. The provision of rental apartments is not necessarily anti-ownership, but part of a support measure given the socio-economic conditions of the early postwar. Cf. Waswo, *Housing in Postwar Japan*. See Chapter 2, "Experiencing the Housing Crisis," by Kyōko Sasaki.

⁵¹² Inefficiencies in capital markets as well as strict lending requirements made it extremely difficult for those without large savings to buy land and built a house in the early 1950s. The film portrays this through Kataoka's unsuccessful attempt to get a loan which forces him to remain in Sangoro's house.

these young couples by simulating their arrival to the apartment complex while using the homeless man as a foil; he is shown to be biologically and financially unproductive and therefore unworthy of public housing. By removing the initial burden of a down payment necessary for establishing a residence, public apartment complexes allowed for affordable residential space that could then serve as a container for the family just beginning. No longer sharing a room in a residence, the family is able to secure a more private household space and manage their own household economy.

While the apartments featured in the film were rentals, this did not necessarily mean that the government was trying to discourage home ownership. Quite the contrary. Both municipalities and the national government deployed a range of countermeasures to combat the housing problem. The aim of the Housing Loan Corporation, which Kataoka attempts to access in the film, was to help citizens build their own residences. When Kataoka is shown to be unsuccessful in obtaining a loan, he appears glum. His goal is a detached house not an apartment. As suggested by the title of the film, public apartment rentals were aimed at young citizens who were building families, not the elderly. Here, there is a distinction to be made between home ownership and a household. Takeda and Hatsue constitute a household, but they do not own their own home. They are crammed into a single rented room in Sangorō's house. Alternating between the rented room and the rented apartment, the film contrasts these two types of rentals. The bright, ordered, and happy space of the apartment is portrayed as preferential; it shows up as a gift from the government bestowed on Hatsue and Takeda by way of the housing lottery. Suddenly the postwar doesn't seem so bad.

⁵¹³ The *jūtaku kinyū kōko* or Housing Loan Corporation (also referred to as the Housing Finance Bank) was the so-called first pillar of postwar housing policy, enacted in 1950. The activities and results of this organization to 1960 are recorded in its ten-year history. See *Jūtaku kinyū kōko jūnen shi*. ed. Jūtaku kinyū kōko (Tōkyō: Jūtaku kinyū kōko, 1960).

The repetition of the scene of arrival in the film demonstrates that it is possible and relatively easy for young families to transfer their households from a rented room to a rented apartment. The act of moving is central to the film, as this is the behavior encouraged by the government. The first scene of arrival, which was also the cover art for the January 1953 issue of *Jūtaku* (Housing) magazine, pictures Yoshie and Ichirō sitting among household possessions in the back of a cart, while a multistory concrete apartment building looms large in the background. Laundry hanging from the balconies and the utility wires just above the rooftop suggest that these apartments are already lived in and electrified. While it is actually Yoshie's brother who is moving into the apartment, the film intimates that Yoshie and Ichirō are also arriving; they are excited to help with the move, they playfully engage with the apartment space, and seem as if they could easily be the ones who are making their home there.

Takeda and Hatsue's reenactment of this initial scene of arrival at the end of the film drives home the anticipated repetition of this event by the general public. Again, a young couple approaches the apartment complex on the back of a truck with all of their possessions. Hatsue and Takeda admire the apartment buildings as an up-beat melody plays. They observe balconies festooned with the material goods of household life and the apartment complex seems full of other families just like them. They witness a child's desk being loaded into an apartment though a balcony, and see other families busily walking about the apartments. This ebullient arrival reinforces the notion that concrete apartments are coveted treasures—prizes to be won—rather than housing of last resort.



Fig. 36: Takeda and Hatsue arrive at the apartment complex. A Plan for Youth (1952).

A Plan for Youth develops both the emotional and instructional agenda of public housing as it conveys affect and models behavior. It is not only concerned with how the apartment is to be used, or the steps necessary to apply for the lottery that are shown, but also the way people feel toward the apartment. As Nishiyama had earlier mentioned in his Houses and Cities of Tomorrow lecture, a structure of feeling was an important consideration in maintaining a proper attitude toward housing reform. Rather than view the apartments begrudgingly as concrete containers opposed to the more spacious and familiar wooden house, the apartments are met with excitement. The film shows that if a person is willing to participate in the bureaucratic process of applying for housing and sitting through the housing lottery, they will experience a similar joy. The performance of joy is integral to the government and housing industry's attempt to reframe

the apartment as a desirable object. As *A Plan for Youth* brings concrete apartments into view, it tactfully shifts from a condition of need to a structure of desire, where arrival appears as a moment of gratification.⁵¹⁴ What happens after arrival is only hinted at in the film. For more detail on the mechanics of everyday apartment life, residents were encouraged to turn to new living guides.

How to Live in Concrete Apartments

Published in 1958, the Japan Housing Association's *Reader for How to Live in Concrete Apartments* functioned as a comprehensive guide to using and maintaining an apartment like the one featured in *A Plan for Youth*. The Reader disclosed material changes in appliance-rich living that were occurring more broadly in postwar society, but which were being consolidated in the planned and programmed spaces of concrete apartments. Although the book centered on units financed by the Housing Loan Corporation (a public lending facility), it was applicable to a wide range of institutionally and privately managed apartment buildings. The prodigiously expanding category "concrete apartment" included by 1958: public apartments, housing association apartments, Japan Housing Corporation apartments, corporate employee apartments, and owner-operated apartments, among others. The Reader assumes, as much as it helps to construct, a commensurability between these various types of apartment buildings.

⁵¹⁴ Later films like the Japan Housing Corporation's *An Invitation to the Danchi (danchi e no shōtai, 1960)* offered a day-in-the-life view of similar type apartments, but dispenses with the drama of the postwar housing problem or the application procedure.

Konkurīto apāto sumaikata dokuhon, ed. Nihon jūtaku kyōkai (Tōkyō: Shinkenchiku sha, 1958). Silo Cf. Simon Partner, Assembled in Japan: Electrical Goods and the Making of the Japanese Consumer (Berkeley: University of California Press, 1999). Partner details the 20th century trend toward increasing use of electrical appliances in the home. Although Partner notes that danchi apartments were only a fraction of total housing units in Japan, I argue that their significance far outpaces what statistics alone would seem to signify. As presented in this chapter, concrete apartments (danchi) were part of a new direction for postwar housing. They were a new category of housing and the symbol of a new way of living.

⁵¹⁷ Konkurīto apāto sumaikata dokuhon, 9.

The contents of the Reader were organized into three main sections: 1) Living in an Apartment Unit; 2) Apartment Community Living; and 3) Various Notes on Apartment Life. 518 In its presentation of information, the Reader strikes a balance between cartoons, technical diagrams, and photographic images, while providing short-form explanations. Similar in style to consumer magazines like Living Handbook (kurashi no techō) and Housewife's Friend (shufu no tomo), the Reader was geared toward a literate audience and aimed to familiarize the domestic built environment.⁵¹⁹ Its attention to the minutiae of daily life is well captured by the front and back cover of the volume, which uses line drawings to portray material objects (e.g. furniture, appliances, fixtures) and behaviors within an apartment building. As if a wall has suddenly vanished, the viewer-voyeur observes the intimate details of apartment life: a person in an easy chair, a rationalized kitchen, a western-style toilet and bathtub, a television and flower arrangement, a couple's bedroom, and a student studying at a desk.⁵²⁰ Laundry hanging between a chimney and a television antenna on top of the building draws the viewer's attention from the front to back cover where more lived-in units and the material detritus of consumer life are shown.

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⁵¹⁸ Refer to table of contents in *Konkurīto apāto sumaikata dokuhon* for an overview of the organizational structure of the Reader.

⁵¹⁹ Shufu no tomo (Housewife's Friend) and Kurashi no techō (Living Handbook) were middlebrow magazines with nation-wide readership that focused on everyday life and domestic issues. In the 1950s, the quality of articles was relatively high. Reporting pertaining to the organization of household space and appliances may be compared to the Reader. I note these magazines here to indicate that home reform was broader than just concrete apartments. However, as emphasized in this section, concrete apartments were a new type of housing and except for those who had lived in the prewar Dōjunkai apartments like Nishiyama Uzō, they would have been unfamiliar structures. Hence, necessitating the Reader as a guide.

520 Note that this style of graphic representation, which shows behaviors in domestic space, is similar to Homes for Today and Tomorrow discussed in Chapter 5.

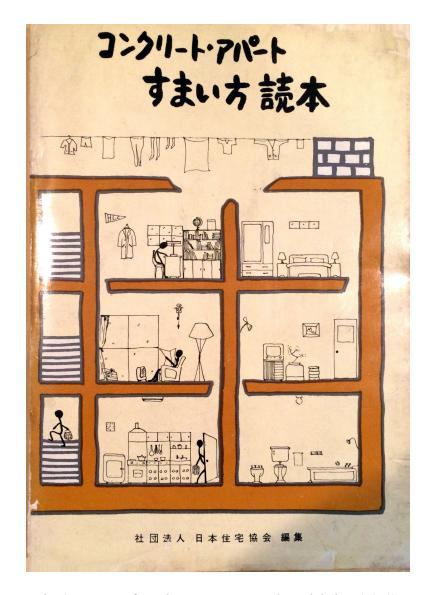


Fig. 37: Cover of Konkurīto apāto sumaikata dokuhon (1958).

Everyday life in the space of the apartment appears as an object of curiosity that demands further explanation and interrogation. Everydayness—the sense of the routines, practices, and materiality of lived experience—of the apartment is grasped through an understanding of how the unit space was planned and intended to function. The section on meter reading, for instance, evidences how the apartment unit exists at the intersection of flows which are being constantly

calculated and which correspond to established rate tables.⁵²¹ Diagrams show how electricity is measured by the kilowatt hour, and gas and water by the cubic meter, making it possible to quantify consumption. The Reader notes that what follows from the "rationalization of apartment life" (*apāto seikatsu no gōrika*) is the "necessity of knowing about the usage fees and charges" associated with resource expenditures.⁵²² In this context, rationalization means calculated and measured according to a scientific system. Rather than assume the resident-user is incapable of understanding such a system and the seemingly complicated equipment derived from it, the Reader seeks to co-opt residents as knowledgeable participants in the efficient management of everyday home-life.

A section on kitchens opens by saying "the kitchen is the culinary factory of the home." As if a blend between Gulliver's arrival in Lilliput and a Toyota Motor plant, the lead drawing of the section shows counter space converted into a factory floor operated by miniature workers. Food is loaded onto a conveyer belt that ends up in a boiling pot. Vegetables are being dumped into the sink for washing and scrubbing; below, a worker monitors the flow of gas to the stove, while above a dismembered hand tends to what is cooking from a sliding track on the ceiling. The top and bottom registers of the image show normally hidden infrastructure: piping and ducts carry gas, water, and air in and out of the kitchen. The image communicates that the kitchen is a factory-like space of domestic industry that is activated by human labor; it is a space where various discrete tasks are combined to produce a meal for immediate consumption. The section on storage space, which follows, shows how kitchen cabinetry has been arranged according to height in meters and details the appropriate placement of pots, pans, serving-ware and utensils.

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⁵²¹ Konkurīto apāto sumaikata dokuhon, 115.

⁵²² Konkurīto apāto sumaikata dokuhon, 115.

⁵²³ Konkurīto apāto sumaikata dokuhon, 46.

The Reader encourages residents to be aware of these principles of organization and to use the kitchen properly so that work can be carried out efficiently.⁵²⁴ The irony, of course, is that all of these little tasks are performed solely by the housewife.

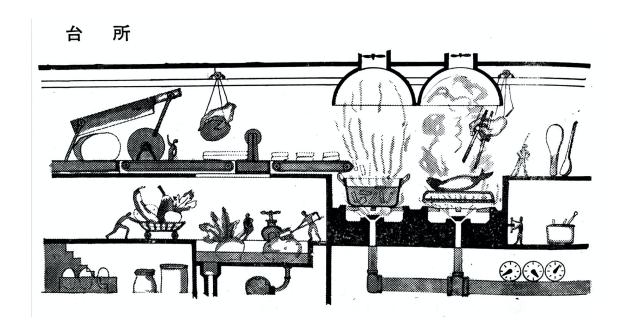


Fig. 38: Daidokoro (kitchen). Konkurīto apāto sumaikata dokuhon (1958).

The sections on kitchen space and meter reading are representative of the way in which postwar concrete apartments in Japan were comprehensively planned accordingly to a set of logics (economic, scientific, and industrial) that preceded the arrival of residents.⁵²⁵ Yet, the details of this systematic ordering of apartment space were not withheld from the resident-user. Rather than mystification, a politics of knowledge is at work. In educating residents, the Reader aimed to forge a stronger bond between head and hand with the goal of rationalizing everyday

⁵²⁴ Konkurīto apāto sumaikata dokuhon, 48-49. Note photographs and diagrams on pages that show how kitchen space was configured.

⁵²⁵ Note the attention to metering in the kitchen, indicated by the small dials in the lower right of the image measuring the flow of gas to the burners.

life. Implicit is the notion that residents are capable of understanding the principles on which space was arranged and the reasons for particular arrangements. With this in mind, conservation of movement and cost could be put into effect and daily household labor could proceed according to design. The participation of residents was deemed necessary, but it was not fully determined by the construction of space alone. It was through explanatory text that the residents, now made aware of the systematic ordering of space, could conduct themselves in rational ways.

Rationalization of space and behavior, which led to an overdetermined everyday life in apartments, occurred as much in city planning offices as it did in the kitchen. The gendered work of women in the apartment and men in the office seem to place people and their labor in separate spheres. However, when viewed through the lens of rationalization, which recoded formerly nonrationalized spaces, the separation between home and work began to collapse. While husbands were at factories producing gas and pumping it to the house, it was the housewife who was measuring its output and calculating its expenditure. The apartment, factory, and office, usually organized as opposing spheres of activity because of their perceived distance from each other, operated according to similar logics of space and economy. They were all points along a circuit of consumption from extraction to end-use. The direct monetary compensation of the husband's labor (which valued it in a materially quantifiable way), as opposed to the unmarked labor of the housewife, represented iniquities in the measure of value and distribution of financial rewards. However, read through the logic of rationalization—understood as a process by which space and behavior are optimized according to science and statistics—differences in pecuniary compensation engendered a false dichotomy. Rationalization, as a way of thinking and mode of conduct, was common to both the salaryman and the housewife. 526

⁵²⁶ Said differently, while spaces of production and rewards were gendered, the modification of behavior according to principles of rationalization was common to both men and women.

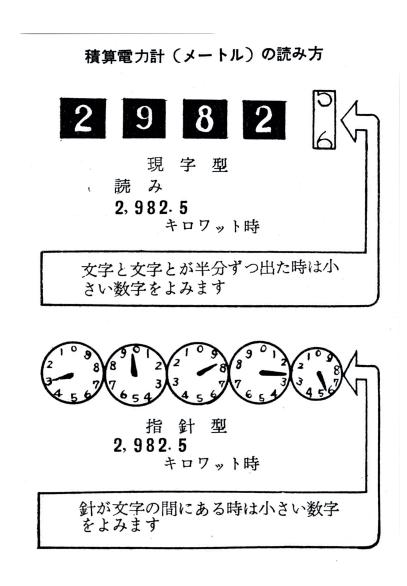


Fig. 39: Meter diagram. Konkurīto apāto sumai dokuhon (1958).

The Reader's nearly three-hundred pages are a testament to the way in which the everyday space of the apartment was made intelligible through principles of industry that positioned the resident midway between worker and manager. As alluded to in the introduction to the Reader, the text aimed to familiarize everyday life in the apartment unit through rationalization *as a way*

of thinking (seikatsu gōrika no kangaekata ni najinde kimasu).⁵²⁷ The inculcation of this rationalized way of thinking was the bridge between the pedagogic and the aesthetic. Once conditioned to perceive space differently, residents were able to appreciate order rather than resist it—formerly alien arrangements were rendered familiar. To what degree this process of acculturation through self-education was successful in individual cases was secondary to its possibility. What is significant is that in addition to popular images of concrete apartments supplied by movies and advertisements, which portrayed them as joyous, bright, and modernized spaces, the very sensibility of apartment space, its perceptibility, was subject to modification through resident education initiatives.

The instruction that the Reader provides was possible because everyday life in the apartment was not thought of as fundamentally random. It was not a meaningless aggregate of a thousand and one small movements and mundane choices, even when it appeared to be. 528 As Jordan Sand has observed, house and home as objects of modernizing reforms had been on the agenda of the government and middle class activists for almost a century. 529 Rationalization of kitchen space and the education of women as household managers were incorporated into these reform movements beginning in the late 19th and early 20th centuries, particularly within bourgeois households and schools. Design proposals, such as Mrs. Irizawa's 1.5-mat model kitchen from 1915, showed how a kitchen could be constructed according to Taylorist principles intended to conserve movement and promote efficiency in expenditures. 530 Textbooks like *Kaji kyōkasho* served as primers for young women who were expected to manage the house and perform

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⁵²⁷ Konkurīto apāto sumaikata dokuhon, 10.

⁵²⁸ See Forward to Henri Lefebvre, *Critique of Everyday Life Vol. 1*, trans. John Moore (London: Verso, 2008).

⁵²⁹ Jordan Sand, *House and Home in Modern Japan: Architecture, Domestic Space, and Bourgeois Culture, 1880-1930* (Cambridge, Mass.: Harvard University Press, 2003).

⁵³⁰ Sand, House and Home in Modern Japan, 88.

domestic chores.⁵³¹ Further, popular women's magazines of the time extended discussions of household practices, while brining into being a domestic imaginary and discourse centered on the category of the housewife. Taking a long view of domestic education and knowledge production in Japan that preceded postwar apartments, it is evident that the principles of so-called modern living were being tested and implemented since at least the Meiji period.

What is different in the postwar is that the production of domestic space, as well as knowledge about that space, is directed toward multistory concrete apartments as new homes for metropolitan publics. The quantitative production of these apartments was conceived of as a state project and superintended by career architects, academics, and bureaucrats, rather than left solely to private industry. Municipal governments took the lead during the Occupation, and in the few years after the Occupation ended the Japan Housing Corporation (JHC) emerged as a standard-bearer in the construction of public apartment complexes. The JHC more than any other single builder or municipal entity helped shape the ideology of concrete apartments and the image of modern living in Japan during the 1960s.⁵³² Whereas prewar concrete apartments constructed by the Dōjunkai had been limited to Tokyo and Yokohama, postwar concrete apartments built at scale on expansive parcels of land (*danchi*) proliferated throughout the archipelago.

The apartment as an object of pedagogy is indicative of the postwar consolidation of earlier reform movements and their transposition into standardized unit space that could be produced at scale throughout Japan. As noted in the foreword to the Reader, by 1958 the yearly production of public-type concrete apartments was around 80,000 units.⁵³³ This included low-rent concrete

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⁵³¹ Sand, *House and Home in Modern Japan*, 60.

⁵³² A discussion of how the JHC worked to craft an ideology of dwelling in concrete apartment *danchi* continues in the next chapter. For more on the way in which *danchi* apartments built by the Japan Housing Corporation contributed to ideas of modern living and the structure of middle-class life, see Neitzel, *The Life We Longed For* (Portland: MerwinAsia, 2015).

⁵³³ See Forward [hakkan ni saishite] in Konkurīto apāto sumaikata dokuhon.

apartments, as well as publicly financed owner-operated units. The category that the Reader trades on, the concrete apartment, is shown to be a container of rationalized objects and spaces that are understood by residents through the very logics that architects and engineers used to create them. The Reader does not suppose that residents are incapable of understanding the ways in which their life is made modern through rationalization. Rather, it assumes that literate resident-users across a spectrum of class and income are capable of making sense of the explanations and diagrams. While a resident could certainly inhabit an apartment without the Reader as a guide, the Reader allowed residents to understand the planned and programmed space of the apartment. It enabled the user to fully activate the machine they inhabited.

Danchi-zoku: The New Urban Public

On July 20th 1958, two months after the Reader was published, Murakami Sachiko's report on public apartment complexes for the *Shūkan Asahi* (Weekly Asahi) magazine shifted the terms of analysis and the object of investigation from concrete apartments to *danchi*.⁵³⁴ The conceptual cleft effected by this categorization altered the sensible space of the city. Residents of large-scale apartment complexes could now be identified and counted as a part of the population who participated in a new way of life—apartment community living. What does *danchi* mean? Who were the *danchi-zoku*? How do these people live? Murakami asked these questions as she interrogated everyday life in the projects.⁵³⁵ Danchi dwellers, by now arrived and acculturating, were framed in the report as the postwar residential vanguard and as a social curio. Murakami revealed the condition of this public-within-a-public to be the lived contradiction between the domestic ideal and the experience of the real mediated by a desire for the new.

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⁵³⁴ Murakami, Sachiko. "Atarashiki shomin 'danchi-zoku': apāto sumai no kurashi no techō." *Shūkan Asahi*, 20 July 1958. See also Neitzel, *The Life We Longed For*, 59.

⁵³⁵ Murakami, "Atarashiki shomin 'danchi-zoku," 4.

Turning past the image of tens of swimming mackerel on the front cover, readers were met with the bold headline: "Danchi-zoku the new urban public: a diary of apartment living." This announcement of the apartment dwelling public was paired with a reportage-style photograph offering readers a glimpse of the projects. The photograph makes visible a group of children climbing on bars that are walled in by four-story blocks of apartments looming large in the background. An adjoining caption reads, "Second generation danchi dwellers playing energetically." Featuring youth, exercise, and apartment buildings, the image suggests that there is space outside of the apartments and within the larger complex for children to use. However, the play of associations in the photograph does not lead to a straightforward conclusion about what the danchi are. Is it the form of the buildings? The social composition of the residents? The layout of the site?

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⁵³⁶ Murakami, "Atarashiki shomin 'danchi-zoku," 3.



Fig. 40: "Atarashiki shomin danchi-zoku." Shūkan Asahi (1958).

The text of the article that follows acts to disrupt superficial views of *danchi*, even as it helps to bring this category into being. By exposing the lived reality of project housing to public view and by balancing first-hand accounts of *danchi* residents with a broader historical and cultural analysis, Murakami achieves a multivalent definition of the *danchi* that exceeds what might be found in architectural and planning handbooks. She creates tension between the professional denotation of *danchi* and its popular connotation without deciding in favor of one or the other.

The denotational instability of *danchi* (their novelty in 1958 and the way they evaded a simple gloss) was for Murakami the substance of inquiry. What is at issue in her article is *danchi* apartment living and its immanent contradictions. As the community form of public apartments, *danchi* created an environment in which financially privatized households confronted shared spaces and economies of living.⁵³⁷

From the start there were problems. Despite the shiny new playgrounds provisioned within the *danchi*, the children were not to be consoled. "I absolutely hate the apartments," wrote a child who submitted an essay responding to the theme 'My House and My Future.' "After all, it's not even my own house. When I grow up, I'm going to buy mom and dad a television, and a piano for my big sister." Men I grow up, I don't want to live in the kind of apartment I'm living in now. I want to build a room that can sleep ten people." Adults faced similar disappointments. "At the time when I got married and got an apartment I was so happy," reported a young wife. "I thought that apartments were some kind of seventh-heaven for making a life together [tomokasegi]. But I never thought I would know the shame of not being able to administer the cleaning of a waste-chute." Residents of another municipal danchi who faced similar challenges in adjusting to apartment community life engaged in collective finger pointing when a clogged drainpipe caused sewage water to flood through a drain cover. "Since the culprit can't be determined," judged the manager, "it's best if the residents of both floors together

⁵³⁷ The nuance here is that families have separate household finances, while the apartment complex and its associated facilities are managed by the JHC or municipalities. In other words, these are private households imbedded within a public structure.

⁵³⁸ Murakami, "Atarashiki shomin 'danchi-zoku," 7.

⁵³⁹ Murakami, "Atarashiki shomin 'danchi-zoku," 7.

⁵⁴⁰ Murakami, "Atarashiki shomin 'danchi-zoku," 4.

shoulder the burden of the repair costs."⁵⁴¹ The common solution was flatly rejected by one of the more senior residents. "I never ever use that kind of rag," she retorted, "so there's no reason for me to share [the cost.]" ⁵⁴²

Friction between residents was not attributable solely to deficiencies in design, but reflected the way in which danchi complexes constituted instant communities. The danchi-zoku were residents from elsewhere and along with their children came to have the space of these largescale apartment complexes in common. Danchi-zoku does not indicate residents of any one particular *danchi*, but names the social admixture imagined to be present in *danchi* everywhere. This term overcodes the diversity of places left behind by *danchi* dwellers and recodes residents as members of newly built public apartment communities. Using resident surveys, Murakami was able to reveal the way in which the danchi instantly created translocal communities by drawing in huge numbers of people from other known locations in the city. For instance, the JHC Midoricho danchi was composed of people from Suginami-ku, Setagaya-ku, and Nakano-ku, while the Aoto danchi housed people from Katsushika-ku, Kita-ku, and Adachi-ku. 543 As she tried to make sense of this bizarre social mix, Murakami described Midoricho as a yamanote danchi and Aoto as a shitamachi danchi. 544 Murakami's use of yamanote and shitamachi was an attempt to render the danchi familiar and comprehensible using earlier socio-spatial referents for communities in Tokyo, while showing that the danchi were also socially disruptive—breaking up previous senses of space and place, remixing the population, and forming a community from

⁵⁴¹ Murakami, "Atarashiki shomin 'danchi-zoku," 4.

⁵⁴² Murakami, "Atarashiki shomin 'danchi-zoku,"" 4.

⁵⁴³ Murakami, "Atarashiki shomin 'danchi-zoku," 7-8.

The terms *yamanote* and *shitamachi* had been used previously used to reference socio-spatial differences between entitled retainers and the commoner population of Edo (Tokyo). They connote a topography as well as class. Yamanote is coded as high city, upper class. Shitamachi is coded as low city, working (and merchant) class. See Edward Seidensticker, *Low City, High City: Tokyo from Edo to the Earthquake* (New York: Alfred A. Knopf, 1983).

scratch.545

For fiscal year 1958, Murakami projected that concrete-type apartments that traced back to the earliest postwar prototype (Takanawa) amounted to 350,000 units and contained 1,000,000 people. 546 At this time, the portion of units produced by the Japan Housing Corporation was less than 100,000, which implies that a large amount of the apartment units and the danchi-zoku that Murakami refers to were contained in municipal and public-law danchi built since the late 1940s. While the Japan Housing Corporation would continue to influence *danchi* design and site planning throughout the 1960s and 1970s, Murakami's analysis makes evident that the meaning of danchi was shaped as much by municipal public apartment complexes and the prior development of concrete apartments in Japan, as it was by the national activities of the Japan Housing Corporation.

Murakami's report does contain negative appraisals of community life, but her article does not conclude that the *danchi* were defective by design. The blame does not rest squarely on form, which would reduce the above-mentioned issues to problems of design. Rather, her analysis demonstrates that lived reality remains in excess of even the most well-intentioned plans to order and contain everyday life in postwar Japan. From day one, the danchi were a contradiction. They were new and modern, but also frustrating and cramped. Danchi residents—pioneers of the postwar skyline—as much as the bureaucrats at the Ministry of Construction, and the planners at the Japan Housing Corporation, knew that the danchi were not ideal, even if they were advertised as better than most other housing in the 1950s and something to aspire to.

546 Murakami, "Atarashiki shomin 'danchi-zoku," 4.

⁵⁴⁵ See also Christie Weber Kiefer, "Personality and Social Change in a Japanese Danchi." (Ph.D. diss, University of California, Berkeley, 1968), 1. Cf. Neitzel, The Life We Longed For, 44.

Conclusion

Returning to Nishiyama's observation that concrete apartment had become "a symbol of the postwar period" by 1963, two questions remain: 1) What was the nature of this symbolism? and 2) What does it mean to be postwar? At least one interpretation is that concrete apartments represented a process of acculturation. Here acculturation does not mean accommodating oneself to the culture of the occupier (in this case coded as American/Western). Viewed as a process, acculturation means becoming familiar with. It is the way in which something novel is made to be quotidian. At first incongruous impositions, concrete apartments became the commonplace everyday. Focusing on processual acculturation highlights the way in which apartments not only marked time (the postwar period), but were made to be of their time (the postwar itself) and naturalized through pedagogical efforts and an aesthetics of housing.

While previous scholarship has productively explored the way in which *danchi* (concrete apartment complexes) were central to housing policy after 1945, as well as what it meant to live modern, less attention has been given to the process of acculturation which subtended both modern living and public housing. As detailed above, the "ready acceptance" of concrete apartments by the early 1960s was not reducible to an advance of time (progress), but was constructed through domestic education efforts and an ideology centered on how public apartments could productively order life in the postwar. To underscore the idea, if public apartments were merely the expected advance in the standard of living that occurred after the war, then Nishiyama's observation that concrete apartments "gave a feeling of anger" makes little sense.

Beginning with the *Houses and Cities of Tomorrow* exhibition, postwar planners summoned time to their cause: housing the people. The condition of the present and prewar were juxtaposed

to a vision of the future in which dramatic changes to the shape of the home and everyday life would be introduced. The explication of the necessity of change, as well as the details of the change itself, speak to the non-inevitability of urban development, rather than its opposite. Tange Kenzō was anxious to press this point, noting that if the people of Sendai (northeastern Japan) did nothing they could expect to continue "living like animals," rather than increase their standard of living.⁵⁴⁷ In Tange's reading of the postwar housing problem, the motor of modernity could not spin where human labor was idle—he encouraged people to wakeup to the siren of progress. Nishiyama Uzō, while not blaming the people themselves, observed how capitalism under empire tended toward the production of slums and led to overcrowding. Compensating for this condition through the creation of new forms of housing was an admission that it would not be self-correcting. As seen in the film *Tokyo: Twenty Years Later* (1946), the war had certainly cleared the ground, but haphazard reconstruction was threatening to turn a "tremendous opportunity" into wasted space.⁵⁴⁸ The people who remained were asked to take a close look at the city and participate in schemes for its reordering and reorganization.

A Plan for Youth (1952) dramatized the move to concrete apartment buildings as a prize to be won. 549 Far from reluctant, the young couples who are shown relocating to newly built apartments are portrayed as ecstatic. The drudgery of domestic work is reframed as play in the space of the apartment. Ichirō and Yoshie (the young couple) engage in the fantasy of modernized apartment life as they simulate a reportage style interview that simultaneously reveals the features and functions of the apartment. Here, there is a doubling of character as Ichirō impersonates a reporter and Yoshie performs as a housewife. Implicitly the film shows that

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⁵⁴⁷ Asu no jūtaku to toshi, 83.

⁵⁴⁸ Nijūnengo no Tōkyō. Nihon kankō eiga sha (Tōkyō, 1947)

⁵⁴⁹ Seishun no sekkei. Nihon jūtaku kyōkai (Tōkyō: 1952)

everyday life in the space of the apartment is a performance. By acting as if she is a housewife, Yoshie models the role of a woman as the happy manager of a concrete apartment. Beyond the possibility for housing to alleviate the marriage problem by opening up space for young couples to start families, *A Plan for Youth* provides a model for concrete life: drudgery is recoded as joy in the *danchi*.

As pictured in *Tokyo: Twenty Year Later* the housewife's successful management of the apartment space showed up as leisure time enjoyed as respite in the outdoor space of the housing complex. The *Reader for How to Live in a Concrete Apartment* details how it is possible for leisure time to appear: through rationalization. If rationalization, as way of thinking and mode of conduct, is productive of something it is a surplus: time. Proper (i.e. rationalized) domestic conduct led directly to enjoyment. When housework was performed efficiently it produced time for relaxation. Paradoxically, if free time did not appear it was not because there was no time, but because time enough had not been made. The constant effort to make time for things was a daily chore that reset every twenty-four-hours and could not be accumulated in the same way that a salary could be when stored in a bank for future withdrawal.

Rather than framing acculturation as alienation inverted, this chapter demonstrated how pedagogy and aesthetics were fundamental to constructing a new image of everyday life in Japan after 1945. More than utopian visions, an aesthetics of housing provided models for imitation while pedagogical efforts instructed people on how to live according to those models. In this way, concrete apartments stood in for the becoming familiar with the reconstitution of national space in the postwar. The everydayness of the apartment was not the negative appraisal of the quotidian, but a recognition of the way in which community was normalized through a way of

⁵⁵¹ Cf. Neitzel, *The Life We Longed For*, 20-21.

⁵⁵⁰ Konkurīto apāto sumaikata dokuhon, ed. Nihon jūtaku kyōkai (Tōkyō: Shinkenchiku sha, 1958).

thinking about space: rationalization. The normalization of everyday life in the shape of concrete apartments was politics. It was the way in which concrete apartments were made to be of the postwar and stand in for the possibility of life after war as a positive expression of present forms of community.

Chapter 4. JHC Danchi: Models for the Postwar Community

"Some people curse [these apartments] saying they're like a wall of chicken coops. But then again, there are many who move in here thinking they've arrived in heaven. Within each and every window, a working home." -Nishiyama Uzō, Nihon no sumai, Vol. 1

Introduction: The Japan Housing Corporation's Community Image

Pushing the domestic union of the happy young couple shown in A Plan for Youth (1952) to its logical conclusion, Japan Housing Corporation (JHC) apartment complexes built after 1955 were presented as a seventh heaven for child rearing. Raising children in a JHC danchi meant participating in a project of becoming, generating growth within a residential environment that instantiated a new way of living (atarashii seikatsu). 552 From the late 1950s to the mid-1960s, Japan Housing Corporation marketing materials were increasingly addressed to the national future. Showing life in concrete apartment complexes was not just about demonstrating residential abundance by emphasizing the quantitive supply of shiny new apartment units in opposition to the ragtag shelters and emergency dwellings constructed swiftly after the war. What the Japan Housing Corporation envisioned was concrete apartment complexes as crucibles for the postwar community. Forged in dining kitchens and cooled in park-like playgrounds between the units, danchi youth would be the adamantine citizens of a revivified Japan. Growth was not just an idea, it was an imperative. In the discussion below, I argue that JHC marketing materials and corporate histories endeavored to establish a connection between child rearing, apartment community living, and the postwar nation by explaining that JHC apartments were the new form of the Japanese house and cradles for a new type of human. 553

⁵⁵² Nihon jūtaku kōdan, *Umarekuru jūtaku to toshi* (Tōkyō: Nihon jūtaku kōdan, 1960). A "new way of living" is the organizing concept for this pamphlet.

⁵⁵³ The familiar critique of JHC apartment complexes is that they lacked ornamentation and variety from an architectural perspective. However, JHC marketing materials presented in this chapter show that building apartments was only part of the project.

Showcasing concrete apartment complexes as the timely homes of a new people who would literally and figuratively be the Japanese who counted in the postwar, JHC marketing materials produced in the late 1950s and early 1960s were replete with images of infants and able-bodied children, in addition to photographs of young adults. The strong emphasis on youth and human development suggests that the JHC considered residents of its *danchi*, adults included, as children of the state who, through life in concrete apartment complexes, would be made into a preferential public. Tutelage or instruction in how to be a new human was accomplished through the structure of everyday life in the *danchi*, as well as through resident education initiatives like the New Living Guides explored in the previous chapter.

In seeking to cultivate a new type of human (atarashii ningenzō ga sodatteiku), JHC construction projects went beyond providing affordable housing for the middle-income segment of the population and, as Neitzel observes, the promotion of a "middle class constituency." As a form of domestication particular to the postwar, JHC danchi apartment complexes manifested a settlement procedure—aiming to occupy land throughout the archipelago and establish communities for rearing citizen-subjects. As machines for living, danchi apartments functioned continuously as residential interfaces between the state and the domestic population, processing people in an effort to generate a preferential public that would gradually replace others seen as unproductive and inferior in the eyes of the state. In this sense, emphasis on "the middle" was not about a regression toward the mean, but the center point from which a redefinition of who counted as a human from the perspective of the state was established.

⁵⁵⁴ Cf. Neitzel, *The Life We Longed For*, 35-36. See also Christie Weber Kiefer, "Personality and Social Change in a Japanese Danchi." (Ph.D. diss., University of California, Berkeley, 1968), 2. Kiefer observes that Japan's "new middle class," or white-collar workers, inhabited the JHC *danchi* and that *danchi* were "a kind of laboratory, in which certain elements of social structure had been artificially altered." What Kiefer characterizes as "social structure...artificially altered," I cast as an aesthetics of everyday life, a political project that aimed to intervene continuously at the level of domestic lived reality.

As Yamanouchi Yasushi has observed, "as powerful nation states, modern societies cannot exist without political integration, but such nation-states also presume an image of the ideal citizen..."555 In the postwar, the image of the ideal citizen was not necessarily derived from religious values or drawn from the Imperial Rescript on Education (1890), as Yamanouchi notes was the case before the war, but was intimately related to one's ability to live in economically and biologically active ways. Danchi-type public apartments both housed and conditioned an ideal postwar political subject, encouraging economic and biological conduct that was conducive to the ordering of Japan after the war. What the JHC describes as atarashii seikatsu is, therefore, not a natural change from wartime conditions to postwar everyday life, but a political project that operates through housing. Rather than the mundane background to spectacular events, everyday life in public apartment complexes was a site of change, instantiating a lived reality where the national future was brought into being. JHC marketing materials promoted images of ideal humans by showing that they existed and thrived within the danchi community; an aesthetics of housing was produced by pairing images of concrete apartments with images of these active humans, using the materiality of the buildings to signal a change in lifestyle and the potential of a new age for Japan after the war.

Improving on the design of concrete apartments developed through experimental projects beginning with Takanawa, the JHC aimed to house not only middle-income or middle class residents, but also to shift the definition of who counted as a human being and member of the national community after the war. The JHC positioned its space making activities on the peripheries of urban areas throughout the archipelago as a positive, if not historically inevitable, mode of development that placed its projects at the apex of a long unfolding progression of

⁵⁵⁵ Yasushi Yamanouchi, J. Victor Koschmann, and Ryūichi Narita, *Total War and "Modernization,"* (Ithaca, N.Y: Cornell University East Asia Program, 1998), 2.

national-historical time. As Kanō Hisaakira, the first president of the Corporation detailed in a 1958 lecture (discussed below), JHC apartments were were made to manifest the zenith of Japanese civilization. He went on to say that:

Higher standards and a new mode of living are being encouraged by the Japan Housing Corporation with its ferro-concrete apartment buildings in which each dwelling is provided with a modern kitchen and a private bath. The kitchen-dining room arrangement provides for serving meals, not in the traditional manner on the floor on low tables, but on a dining table.⁵⁵⁶

Critiques of the Japan Housing Corporation's concrete apartment complexes and the communities they engendered emerged in contemporaneous films. In *She and He* (1963), director Hani Susumu visually re-stages a JHC *danchi* as an oppositional community, showing how concrete apartment complexes and the everyday life they permit threaten other modes of life and forms of community. In the film, the JHC's project of producing new humans is viewed in light of a neighboring community, a *bataya buraku*, that includes non-normative and disabled residents. Over the course of the film, the *bataya buraku* is gradually destroyed, first by fire and later through dehousing. As the community disintegrates, the residents are reduced to a condition of extreme precarity and scatter to the wind.

Hani's critique was about more than the construction of *danchi* in general, focusing in on the community structure and the kind of public that the JHC was promoting in the early 1960s.

Staging the opposition of a JHC apartment complex and a *buraku*, Hani forefronts the return of a thanatopolitics of housing in the postwar, one in which other types of people and community

⁵⁵⁶ Kanō Hisaakira, Lecture delivered February 10, 1958. Reprinted as "Public Housing in Japan," *Annals of Public and Cooperative Economics* 30, no. 1 (1959): 78.

⁵⁵⁷ In the script for the film, the neighboring community is referred to as a バタヤ部落 (*bataya buraku*). See Shinario sakka kyōkai, ed., *Nenkan daihyō shinario shū '63* (Tōkyō: Daviddo sha, 1964), 191. E.g. 「団地のすぐそばのバタヤ部落が燃えている。」"The *bataya buraku* adjacent to the *danchi* is burning."

space that were deemed inferior from the perspective of the state were subject to elimination. In Hani's critique, the seemingly progressive housing projects that the JHC promoted serve to settle one type of public while uprooting another. The film is an imagined instance of a general trend: the plowing under of metropolitan hinterlands—agricultural and forest land on the periphery urban centers—and seeding them with instant communities.

In the epigraph opening this chapter, Nishiyama Uzō, a planner and critical observer of housing, highlights the lived contradictions of life in *danchi* apartments, calling attention to their overall structure, as well as a structure of feeling. He notes that while some residents praised the modernized *danchi* environment, others described the apartment buildings as "a wall of chicken coops," alluding to the way in which these residential communities, which housed families by the hundreds, and sometimes thousands, in standardized, rectilinear living spaces, were conducive to a kind of human agriculture. These contemporary, yet opposing critiques, point to the way in which *danchi* apartments sought to increase the standard of living for some, while establishing residential interfaces for farming a preferential public. Seen in this light, the construction of *danchi* apartments as instant communities and machines for living was not simply an attempt to mimic a global modernism that found economy and utility in concrete slabs that could bring order to both houses and the city. More than that, JHC *danchi* were a vehicle through which the state was able to grab hold of life at its most basic level, moving beyond the mere sheltering of life to governance through everyday life.

Marketing the Japan Housing Corporation Danchi

The JHC publication entitled *Nihon jūtaku kōdan no go annai* (An Introduction to the Japan Housing Corporation) published in 1961 was representative of marketing materials addressed to prospective residents and the general public during this period. It captures this focus

on youth in the context of national futurity.⁵⁵⁸ Following aerial shots of apartment complexes that include Tamadaira Danchi in Tokyo, Kōri Danchi in Osaka, and Yamanota Danchi in Fukuoka, the pamphlet presents a full-page picture of children playing in front of a multistory concrete building within an apartment complex.⁵⁵⁹ The caption adjoining the photograph reads: "A new figure of humanity is being formed around collective housing as the new style of dwelling in Japan."⁵⁶⁰ The verb *sodatteiku*, which could be more literally translated as "being raised," implies upward movement and a process of becoming. The text reinforces the notion that Japan Housing Corporation apartment complexes are sites of growth, locations where physically active, able bodied children will mature into tomorrow's citizens.

A large matrix of windows providing light to a central staircase in the building behind the children appears to be watching them like a towering sentinel. Metonymically, the glass windows embedded in the concrete edifice stand in for the watchful eyes of parents and teachers who are notably absent in this scene. The photograph intimates that concrete buildings are steadfastly guarding everyday life in the *danchi* as they monitor the boys and girls below. The text and images reinforce that it is the materiality of the community, its concreteness, that conveys a new everyday. It opposes wooden dwellings that are no longer suitable for modern (national) life to the life-activating community of concrete that is JHC housing. While wooden dwellings might be familiar, the text reads, people are growing accustomed to apartment communities as a new form

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Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan no go annai* (Tokyo: Nihon jūtaku kōdan, 1961). What I characterize as marketing materials are short publications, small pamphlets, and other ephemera that were available at the time, but are not necessarily preserved in major libraries. The ones citied in this study were obtained primarily from the Urban Renaissance Agency (the institutional heir to the Japan Housing Corporation) and personal collections.

⁵⁵⁹ Although not explicitly noted, this building is likely a school incorporated into the apartment complex. 560 Nihon jūtaku kōdan sōmu-bu kōhō-ka, Nihon jūtaku kōdan no go annai, 28. In Japanese the text reads: 「日本の新しい住居形式としての集団住宅を巡って新しい人間像が育っていく。」

of collective dwelling.⁵⁶¹ If JHC *danchi* stand in contrast to what people were formerly used to then this is precisely the point. The visio-rhetorical strategy employed in the publication was designed to show and tell people how to properly understand the social function of *danchi* apartments.⁵⁶² On the whole, the 1961 publication can be seen as a response to the kind of questions that Murakami Sachiko raised in her 1958 *Shūkan Asahi* article: "*Danchi-zoku? Owakari ni narimasenka*" (Do you know who the *danchi-zoku* are?)⁵⁶³

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Asahi, 20 July 1958, 4.

⁵⁶¹ Nihon jūtaku kōdan no go annai, 28

 ⁵⁶² In other words, the publication serves a pedagogical function in addition to making *danchi* visible.
 ⁵⁶³ Murakami Sachiko, "Atarashiki shomin 'danchi-zoku': apāto sumai no kurashi no techō." *Shūkan*

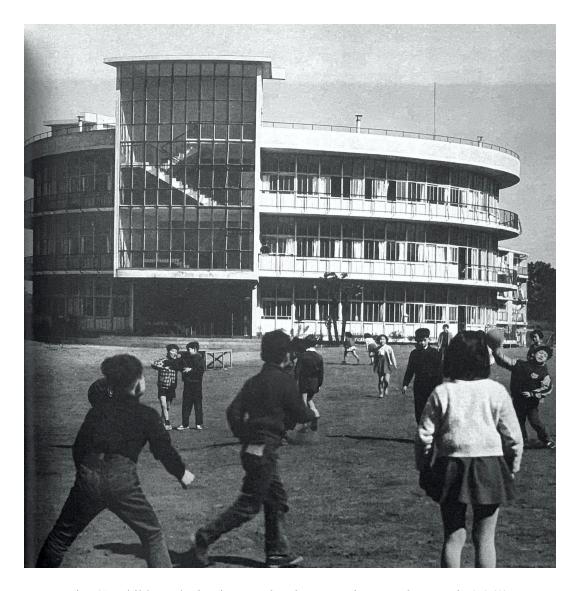


Fig. 41: Children playing in JHC danchi. Umarekuru jūtaku to toshi (1960).

The Corporation's goal was to provide a living environment that fostered educated and active citizens who were growth-oriented and lived economically. If JHC apartment units were modernized dwellings, then it followed that JHC *danchi* dwellers (the *danchi-zoku*) were modernized people. Both the houses and the people living in those houses were opposed to the preexisting stock of homes and humans throughout the archipelago. JHC *danchi* were a model of the possible, cast to mould the national future. They were part of a social project that involved

not only overcoming the housing shortage brought about by war, but also the remaking of a nation by radically transforming the domestic built environment and outmoded ways of life. Tange Kenzō's derogatory observation (examined in the previous chapter) that people in northeastern Japan (Tōhoku) were living like farm animals, for instance, was a striking example of the negative evaluation of the already housed. Although people in Tōhoku were sheltered, their homes did not appear to be modernized. In Tange's mind, everyday life in Tōhoku was tantamount to a condition of perpetual feudalism. ⁵⁶⁴ How could people be considered productive members of society if they lived like this? Building domestic environments according to logics of industry, rationalizing ways of life as part of the planning process, and imagining ideal residents was part of a project of making sure that Japan would not be trapped in the past.

A close look at JHC marketing materials reveals that JHC *danchi*, as public projects, were styled as the paragon of postwar living, rather than housing of last resort. It is a remarkably different image of public housing than is generally assumed to be the case today. JHC *danchi* were not homes for the poor, the elderly, or the disabled. They were intended for middle income residents who could invest their time and money in a particular version of modern life that was seen as preferential from the perspective of the sate. ⁵⁶⁶ Whether or not one lived in a JHC *danchi*, people were beginning to see images of alternative forms of community and new ways of living

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⁵⁶⁴ Cf. Neitzel, *The Life We Longed For*, 15-20. As Neitzel observes, the rhetoric of feudalism was deployed in a range of housing debates in the late 1940s and early 1950s, and also contributed to perceptions of temporal unevenness. What I am showing here is how a variation of this rhetoric was deployed alongside visual images and functioned to organize the way in which the JHC both saw and marketed its *danchi* apartment complexes in the later 1950s and throughout the 1960s.

⁵⁶⁵ I am here paraphrasing Tange's assessment of the people of Tōhoku and their residential condition. See the beginning of Chapter 3 for a more detailed explanation. Note that Tange's reference to farm animals expresses a sub-human primitivity, while Nishiyama's allusion to chicken coops underscores they way in which the quantitative (scalar) sheltering of people according to modern industrial logics resembles structures of containment for farm animals.

⁵⁶⁶ For more on the JHC's focus on middle income residents, see Kanō, "Public Housing in Japan," 77.

that they could model and aspire to. The contrast between danchi apartments and other forms of community was made apparent in the JHC publication titled *Umarekuru jūtaku to toshi* (1960).⁵⁶⁷ The sense of the title is "Houses and Cities of Tomorrow," but the verb *umarekuru* more literally translates as "coming into being" or "being born," which is an attempt to express futurity in a biological, as well as temporal sense. It is not just the time of the future to which the publication is addressed, but a process of becoming. The front cover prints "NEW LIFESTLYE" (atarashii seikatsu) in large bold characters that take up almost a third of the page and overwhelm the title, while the back cover says "NEW GENERATION" (atarashii jidai). To press the point, the first image in the pamphlet is not an aerial shot of a danchi apartment complex, but an urban hodgepodge—the kind of low-rise vernacular community space that would have made a sought after target for the United States Army Airforces' B-29 bombers. ⁵⁶⁸ The caption adjoining the picture reads, "Japan's old townscape, it's going to be a thing of the past." The implication is that this urban vernacular, the way of life enabled by it, and the people inhabiting it are obsolete. 570 This was not a cityscape that reflected Le Corbusier's ideals of light, air, and the right angle.

⁵⁶⁷ Nihon jūtaku kōdan, *Umarekuru jūtaku to toshi* (Tōkyō: Nihon jūtaku kōdan, 1960). This pamphlet was produced on occasion of the Japan Housing Corporation's 5th year anniversary.

be the series of the old town seen from above is early reminiscent of the optic of strategic dehousing employed by the USAAF during the war in that it makes an assumption about the area and the people in the area based on how the built environment looks from the air. The implication is that if the houses look this way, then the way the people in those houses live is similarly disordered. Cf. "Toshi keikaku—toshi to Keichiku to kenchikuka," *Shinkenchiku* 34, no. 9 (September 1959). As seen in *Shinkenchiku*, this was not limited to housing, but other aspects of the urban landscape, roads etc. also came under the knife. n.b. The arrangement of the articles and images in *Shinkenchiku* (Japanese) differs considerably from the edited and republished article in *The Japan Architect* (English).

⁵⁷⁰ See also *Shinkenchiku* 34, no. 9, (September 1959), 55. Photograph of Asahigaoka Danchi by Futagawa Yukio, who along with Murai Osamu, were responsible for the photographs in *Nihon jūtaku kōdan no go annai*.

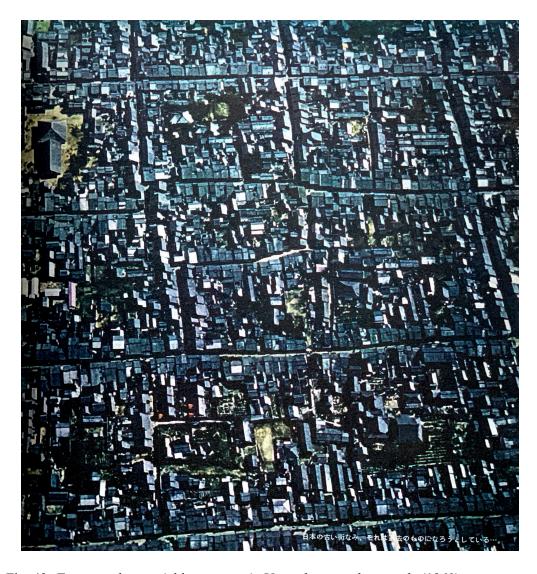


Fig. 42: Furui machinami (old townscape). Umarekuru jūtaku to toshi (1960).

By contrast, the regularized spacing of apartment buildings, their rectilinear form, and the integration of services (gas, water, electricity) made them the manifestation of principled urban design—the fusion of city planning and homebuilding techniques—constituting a reordering of everyday life. The vernacular residential environment that the JHC pamphlet makes visible is characterized as a "furui machinami" (an old townscape).⁵⁷¹ It is temporally defunct, an

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⁵⁷¹ Nihon jūtaku kōdan, *Umarekuru jūtaku to toshi*, 1. Note that *furui machinami* (old townscape) is not necessarily a slum. The emphasis here is on its temporality, that it is outmoded or not progressive.

anachronism. Judgement passed on the area was not necessarily grounded in logics of medicine extending to health and sanitation, but in terms of topography and chronology. The layout of the buildings in the *furui machinami*, as much as their community arrangement, was interpreted as being no longer in accord with the times. The adjective *furui* (old) imparts a pastness to a place that, from the perspective of city planners, unfortunately persisted into the present. "Old" is used here in a pejorative, rather than romantic sense, and functions to delegitimize the townscape. Dating the buildings to a precise time in the past is subordinate to establishing their relative temporal perceptibility—seen from above, the area is unplanned, irregular, materially inferior, and therefore "old." While the furui machinami might have slum-like characteristics, it was this visibly antiquated built environment that urban planners in the 1950s and 1960s, as well as the Japan Housing Corporation, hoped to banish from the present.⁵⁷² The Japan Housing Corporation was engaged in prophylactic urbanism. It acquired land and shaped it according to the danchi ideal before that space became more of "old Japan." By imposing a kind of Corbusierian order on the land it developed, the JHC hoped to prevent the spread of an unplanned, non-rationalized built environment.

Making Space for the Projects and a Model Village

The jarring disconnect between *danchi* communities and their surrounding environments was indicative of the confrontation between regimes for the ordering of national space. ⁵⁷³ The Japan Housing Corporation capitalized on this disconnect by circulating images of its new community form, such as those pictured at the outset of *An Introduction to the Japan Housing Corporation*, in an attempt to make concrete housing projects both highly visible and highly

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⁵⁷² Note that, the home building activities of the Japan Housing Corporation were larger in scope than slum clearance programs of the late 19th and early 20th centuries described in the previous chapters in that they were addressed to the residential built environment of Japan writ large.

⁵⁷³ e.g. untamed nature, agricultural enclosures, and the built environment.

desirable.⁵⁷⁴ In the context of the postwar housing shortage, mass dehousing was not a politically tenable strategy. The JHC's approach was to remake cities from the outside in. Unlike slum clearance and rehousing, which took preexisting residential space (often within the city center), demolished it, and put up new dwellings, the Japan Housing Corporation was tasked with developing new residential tracts by targeting other forms of space, such as military bases, agricultural fields, and forest land on the metropolitan fringes.⁵⁷⁵ What was described in *Umarekuru jūtaku to toshi* (Houses and Cities of Tomorrow) as *takuchi kaihatsu* (residential land development) involved turing previously non-residential space into a place for housing by grading the site and laying gas, electric, and water lines.⁵⁷⁶ This newly opened space was ordered according to the principles of postwar community that the Japan Housing Corporation acted as a standard-bearer for: rationalized land use and modern homes. The JHC produced residential space in such a way that old Japan was excluded by omission. Irrationally sited low-rise wooden dwellings were not permitted within the space of concrete apartment complexes. JHC *danchi* communities on newly developed land sliced through preexisting environments.⁵⁷⁷ This is

⁵⁷⁴ The aerial photographs of the danchi presented in the publication are examples of how the JHC made visible the disconnect of the *danchi* community from the surrounding environment. Note that the optic is similar to that of B-29 bombers, as well as reconnaissance photos that enabled the firebombing of cities during the war.

In other words, space is not a natural given, but is produced by enclosing land and designating uses and users. It is a political process of ordering the land. See James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998). See also also Henri Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Malden, MA: Blackwell, 1991). Neitzel, *The Life We Longed For*, 44-45.

⁵⁷⁶ Nihon jūtaku kōdan sōmu-bu kōhō-ka, Nihon jūtaku kōdan no go annai, 8.

Environment is used broadly here, referring to the natural environment and prior man-made environments, such as older residential communities. The JHC targeted non-rationalized environments, and replaced them with modernized dwelling and community space. In the 1960s and 1970s, land use and land management on municipal and national levels was a prominent issue, both in Japan and abroad. See for instance, *Proceedings of the Seminar on The Supply, Development and Allocation of Land for Housing and Related Purposes*, organized by the Committee on Housing, Building, and Planning of the United Nations Economic Commission for Europe, Paris, France, 28 March - 6 April 1965 (New York: United Nations, 1965). See also *The Papers and Proceedings of The International Symposium on Regional Development*, Hakone, Japan, April 1967 (Japan Center for Area Development Research, 1967).

exactly what the image on the page following the "old townscape" in the pamphlet shows: freshly cut dirt.⁵⁷⁸ Juxtaposed to navy blue water in the lower register and a cloud covered cerulean sky in the upper register, the middle of the photograph foregrounds camel colored vacant lots. In the background lurk concrete apartments under construction. The viewer is encouraged to make the logical leap that the vacant lots will soon be filled with houses and that this residential development will soon be complete. The adjacent page reinforces this idea with the headline "The age of construction has begun" (*kensetsu no jidai ga hagimatta*);⁵⁷⁹ a graphic illustration abstracts land captured by the photograph, rendering it as shaded areas according to indented use. The illustration demonstrates how land was coded. Employing zoning techniques, the site was partitioned according to different uses, with part of the land given over to the JHC *danchi*, while other plots were marked as lots for sale or parks.

⁵⁷⁸ Nihon jūtaku kōdan, *Umarekuru jūtaku to toshi*, 3.

⁵⁷⁹ Umarekuru jūtaku to toshi, 2.

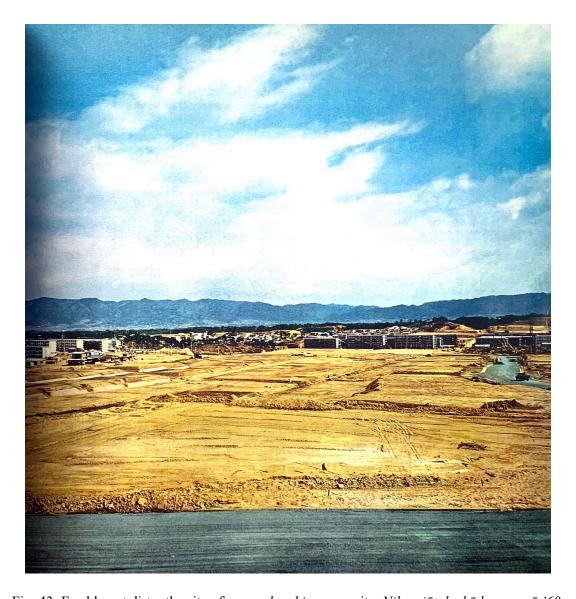


Fig. 43: Freshly cut dirt—the site of a new danchi community. Nihon jūtaku kōdan nenpō '60.

The freshly cut dirt would not remain so for long. This site was home to Osaka's Kōri Danchi, which was located on the outskirts of the metropolitan area near the prefectural border with Nara and Kyoto. As noted in the JHC annual report for 1960, the Kōri Danchi was serviced by the Keihan train line connecting Osaka and Kyoto and was within a stone's throw of the Yodo River. In the JHC *danchi* proper (as opposed to the lots for sale) there were 3,194 apartments for

rent.⁵⁸⁰ Captured in a photograph taken by the Associated Press (AP) on February 7, 1962, the the completed Kori Danchi was filled with a number of protesters signaling their displeasure with another kind of land grab, the continued occupation of Okinawa by the United States. As seen in the photograph, two protesters hold up a sign in front of the danchi apartments that reads, "Give back Okinawa. Go home Yankee!!"581 The occasion for the protest was the arrival of then U.S. Attorney General Robert Kennedy. Text subtending the photograph qualifies these protesters as "leftists" because two others are holding a sign that reads, "We are against the oppression on [sic] the Communist Party of America." Undeterred by the negative attention of their arrival, another AP photograph shows the Kennedy couple listening to "Japanese school children play 'The Star Spangled Banner'...in a model village at Kori Danchi."582 While at the school the Kennedy's took the opportunity to reinforce the pedagogical relationship between the United States and Japan. Mrs. Kennedy was pictured in front of a blackboard writing "nichibei shinzen" in Japanese characters, which the AP translated as "friendly relations." 583 The Kennedy's arrival at Kōri demonstrates that this danchi was more than just a new residential development. It functioned as a site for educating citizens. As the AP was careful to note, "In the foreground are heads of two of the students in the class, who were writing the same words:" nichibei shinzen. 584 If Kōri Danchi qualified as a model village, it was not only the buildings that the Kennedy's had come to see. They were there to see (and be seen seeing) the model behavior of the Köri Danchi youth, children who stood in for the national community itself. The arrival of the Kennedy's showed that newly made danchi were not just the background to life in Japan,

⁵⁸⁰ Nihon jūtaku kōdan sōmubu kōhō-ka, *Nihon jūtaku kōdan nenpō '60* [The Annual Report of the Japan Housing Corp.] (Tōkyō: Nihon jūtaku kōdan, 1961), 34-35. Refer to map and charts.

⁵⁸¹ "Signs for Kennedys," AP Wire Photo (Tokyo: February 7, 1962).

⁵⁸² "Musical Greeting for Kennedys," AP Wire Photo (Tokyo: February 7, 1962).

⁵⁸³ "Language No Barrier," AP Wire Photo (Tokyo: February 7, 1962).

^{584 &}quot;Language No Barrier," AP Wire Photo.

they were political contact zones where politics met everyday life.



Fig. 44: "Sings for the Kennedy's"—"Go Home Yankee!!"AP Wire Photo (1962).

Danchi as a Settlement Procedure

The opening of land combined with the image of a new community made the Japan Housing Corporation an active agent in carrying out a settlement procedure that aimed to turn land on the periphery of urban areas into the postwar state's preferred type of residential environment. As the avant-garde of a postwar settlement procedure, the Japan Housing Corporation was charged with the ongoing development of both the land and the people. What a settlement procedure refers to here is a form of domestic politics that seeks to overcode previous spatial arrangements by and through housing. It is processual in that it involves multiple phases, such as planning tracts, grading sites, building units, and soliciting residents. In another sense, it

proceeds both spatially and temporally. Settlements expand over and into other areas and exist for a duration that is determined by the materiality of the structure, lending arrangements, and length of habitation. *Danchi* were designed remake national space by occupying territory through the imposition of modernized residential communities. In the first few decades of the postwar, *danchi* were at the forefront of metropolitan expansion, remaking peripheries while remaining firmly linked to urban centers. ⁵⁸⁵

This kind of development or topological overcoding was not limited to the spaces of Tokyo, but was occurring throughout the archipelago. What differentiated the Japan Housing Corporation *danchi* from other municipal apartment complexes was nation-wide land development, which was one of the JHC's expressly stated and legally authorized objectives. By 1965, the corporation estimated that it had developed around 10,000 hectares and constructed 300,000 dwellings throughout the archipelago (excluding Okinawa). The JHC did not have to respect municipal boundaries and could build on the borders of or in-between previously established cities. Residential land development was as important as the houses actually built. *Takuchi kaihatsu* (residential land development), a space making activity, paved the way for new communities by creating a kind of *tabula rasa*. Crucially, this residential *tabula rasa* was not found or presupposed, nor did it arise from forces outside the control of planners. Making a *tabula rasa* was the first stage of *takuchi kaihatsu*, claiming the land through development while simultaneously denying competing uses. As demonstrated by the image of the freshly cut dirt, mentioned above, *takuchi kaihatsu* scraped away previous structures, be they natural or man-

⁵⁸⁵ Although *danchi* appeared on the periphery of cities, they remained tied to the center through consumer networks and the diurnal migration of labor.

⁵⁸⁶ Neitzel, The Life We Longed For, 44.

⁵⁸⁷ Nihon jūtaku kōdan, *Nihon jūtaku kōdan jūnen shi* (Tōkyō: Nihon jūtaku kōdan, 1965).

⁵⁸⁸ Neitzel, *The Life We Longed For*, 118-119.

made, and primed the area for residential building. As a strategy of construction through area denial, *takuchi kaihatsu* named a practice of spatial violence that was generally interpreted positively as "development." Planning for a preferential public meant preventing or displacing other forms of association and types of communities.

Housing and the Nation

In taking the long view of residential development in Japan, a historiographic hazard presents itself. The conflation of geography and the state in the word "Japan" makes it possible to talk about housing as instantiating and reflecting lifeways endemic to the archipelago while rendering them always already particular and essential throughout time. This is the image of housing that the Japan Housing Corporation presented in its 1957 film *Nihon no jūtaku* (Houses of Japan), which showed different types of dwellings within a deep-time view of the nation. In the film, changes in form are explained by the progression of time itself. Dwellings appear to suit their age, while the nation-state Japan is assumed to be contiguous with the boundaries of the archipelago from time immemorial to the present. Material difference in dwelling is co-opted as a manifestation of the substance of Japan; the historicity of the abstract nation-thing cannot be readily discerned because it is an idea without a specific embodiment, changing forms of dwellings, from thatched roof huts and $sh\bar{o}in$ -style villas to concrete apartments, illustrate a progression from past to present, as much as they affirm that the nation has always been there. In *Nihon no jūtaku*, the essence of the nation is read through the structure of homes. For this

⁵⁸⁹ Nihon jūtaku kōdan, *Nihon no jūtaku* (Shinriken eiga, 1957). See also synopsis in "Nihon no jūtaku," *Jūtaku 6*, no. 8 (August 1957): 36-37.

⁵⁹⁰ Cf. Ernest F. Fenollosa, *Epochs of Chinese and Japanese Art: An Outline History of East Asian Design* (London, 1912). See also Edward Sylvester Morse, *Japanese Homes and Their Surroundings* (New York: Dover Publications, 1961).

⁵⁹¹ For more on the nation-thing, see Slavoj Žižek, *Tarrying with the Negative: Kant, Hegel, and the Critique of Ideology* (Durham: Duke University Press, 1993), 201.

reason, the Japan Housing Corporation describes its apartments as the "new form of the Japanese dwelling." As mentioned above, the JHC was not interested in a return to old Japan, the *furui machinami*, but in advancing the latest material iteration of Japan. Concrete apartments were the domestic form considered suitable for the postwar era. Even if the internationalization of these forms and the use of shared technologies led to typological similarity across world housing developments at this time, the film did not present the apartments as particularly "western" or as being imposed on Japan by other nations. Precisely the opposite is at work, these dwellings manifest the continuity of "Japan," its further progression in time, and its presence in the postwar.

A lecture delivered in Tokyo in early 1958 by Kanō Hisaakira, then president of the Japan Housing Corporation, reinforces the links between housing and history presented in the film *Nihon no jūtaku*. The first half of Kanō's lecture titled "Housing in Japan" spoke to "Japanese dwellings of the past." As recorded in the October 1958 issue of *Ekistics*, "As a prelude to a discussion of public housing in Japan, Mr. Kano has here given us a concise and compact picture of the evolution of housing in the most developed nation in Asia." The summary presented in *Ekistics* follows Kanō through time, it begins with "the ancient people who lived in the islands of Japan in prehistoric times," residing in thatched-roof pit dwellings, and were "much like primitive peoples of other races." From these humble beginnings, Kanō ran through wet-rice agriculture, the development of a landed elite in the 7th and 8th centuries, and the rise of the warrior class in the 12th and 13th centuries. By the 15th and 16th centuries, he noted that the

⁵⁹² Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan no go annai*, 28

⁵⁹³ Hisaakira Kano, "Japanese Dwellings of the Past," *Ekistics* 6, no. 36 (October 1958): 92–93. Kanō's lecture "Housing in Japan" was presented in Tokyo on February 10, 1958. Ekistics provides a summary of the lecture, paraphrasing Kanō.

⁵⁹⁴ Kano, "Japanese Dwellings of the Past," 92.

expansion of merchant and artisan classes in cities along with the fusion of a new religious thinking (Zen) and military institutions led to "the creation of the 'chashitsu' or tea room style."595 Despite being characterized as feudalistic, the Tokugawa Shogunate, formed in the early 17th century, is observed as presiding over 250 years of peace in which the ruling class built extravagant dwellings, particularly in Edo (present day Tokyo). Kanō mentioned how the "dwellings of the masses remained at very low standards," before observing that "With the brith of modern Japan, 90 years ago, the re-opening to the outside world and the overthrow of the feudalistic Shogunate, industrialization began. At the same time the well known housing shortages began to appear, and some workers were housed under terrible conditions." For instance, "the existence of the uncovered dirt floor as an integral part of [commoner dwellings] is reminiscent of the pit-dwellings of ancient times; and there is a fundamental difference in conception from the 'shoin' or 'sukiya' styles which prevailed in the dwellings of the ruling class."596 Similar to Tange, Kanō conflated the condition of the dwellings with the social situation of peoples. Thus, the earthen floor of the house, which would have been found in the kitchen area of commoner dwellings and those of the urban working class, was indicative of a latent primitivity.⁵⁹⁷ Beginning about 1940 state-supported housing began to address these conditions.

Kanō's housing-centered romp through Japanese history briefly (and almost comically) sketches the complex history of prior periods, but is notable for at least two reasons: 1) it presupposes a transhistorical Japan and demonstrates its existence through housing; and 2) it

⁵⁹⁵ Kano, "Japanese Dwellings of the Past," 93.

⁵⁹⁶ Kano, "Japanese Dwellings of the Past," 93.

⁵⁹⁷ One can here observe why reforming the kitchen area and the creation of the dining kitchen in JHC dwellings was so important. Modernizing the kitchen meant eliminating the space of the house that was associated with primitivity.

leads to a discussion of public housing in the present as the apex of Japanese civilization. Affirming the nation in the postwar meant constructing houses that were suitable for a new age, the atrashii jidai. As Kanō makes clear in the second half of his lecture, reprinted in the Annals of Public and Collective Economics, "Higher standards and a new mode of living are being encouraged by the Japan Housing Corporation with its ferro-concrete apartment buildings in which each dwelling unit is provided with a modern kitchen and a private bath." 598 Danchi communities were nothing if not timely. JHC-built apartment complexes looked nothing like the old vernacular and because of this were capable of fostering the citizens of tomorrow. Because the settlement procedure occurred within already nationalized space, it was not used to solidify or expand national borders in an effort to encroach on international others. Rather, it was a tactic of settling a preferential public, citizen-subjects who were opposed to other types of already existing people. It aimed to foster select parts of the public by providing them with a ready-made, modern form of living and a community of like-minded peers. The state hoped that this preferential public would gradually replace outmoded publics, such as the people that Tange had identified in Tōhoku. Imagining what these citizens of tomorrow looked like proceeded their actual becoming. Image making and modeling were important facets of the JHC's settlement procedure because, as mentioned above, pastness and inferiority were established visually. When things appeared to no longer suit their age, they seemed to be out of place in time. As Kanō's lecture suggested, the forward advance of history would gradually make it possible to overcome the last remnants of pit-dwellings and primitiveness.

Danchi as New Hometowns

Kano's lecture demonstrates that the Japan Housing Corporation was not only aware of

⁵⁹⁸ Hisaakira Kano, "Public Housing in Japan," *Annals of Public and Cooperative Economics* 30, no. 1 (1959): 78. Note that this text is abridged from Kano's Feb. 10, 1958 lecture.

its place in history, but also cognizant of the power of time. Toward the end of *An Introduction to the Japan Housing Corporation*, a photograph presents a child looking up with a gaze that suggests she can see the horizon line of the future from within the *danchi* apartment. An open window shows a background in which only the neighboring building is visible, making the interior of the apartment appear three-dimensional while the outside world is flat and two-dimensional. The adjoining text reads, "Japan is a beautiful country that is rapidly changing. We want to create towns and dwellings suitable to the beautiful land of this country that are the hometowns of the new Japanese people." 599

The use of the word *furusato* (hometown) and the image of the child imply that the *danchi* will have a generational duration. They are not just temporary residences for people on their way to homeownership, but constitute a man-made environment in which a new type of Japanese citizen will be born and raised. In this example, the *furusato* (hometown) is not located elsewhere, it is here, in and of the space of the *danchi*. This can be seen in contrast to the kind of *furusato* that were later imagined to exist as part of the Japan National Railways "Discover Japan" campaign of the early 1970s, which, as Jennifer Robertson notes, "provided access to another, presumably more 'authentic' world." The railways, which benefitted from people moving rather than remaining settled, incentivized travel by encouraging people to visit rural communities that conveyed the feeling of old Japan. He making materials positioned *danchi* as the new *furusato* of modern Japan. These were hometowns in the making, yet to be

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⁵⁹⁹ Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan no go annai*, 38.

⁶⁰⁰ Jennifer Robertson, "Hegemonic Nostalgia, Tourism and Nation-Making in Japan," *Senri Ethnological Studies* 38 (1995): 97. http://doi.org/10.15021/00003024

As Neitzel notes, commentators like Isoda Kōichi and others questioned whether or not the *danchi* could serve as a *kokyō/furusato*, and it seemed that notions of *furusato* and *danchi* were incompatible. What I am emphasizing here is that it was not just authors and film-makers who sought to leverage this concept, but that JHC marketing materials and corporate histories relied on this concept as well, and were at times explicit that JHC *danchi* could exist as *furusato* that were generative of a new Japan.

remembered by future citizens.

At first glance it might seem like atarashii seikatsu (new life) and furusato, which can also be translated as "old town," are conceptually oxymoronic. However, furusato also conveys a structure of feeling, not simply a timeworn place. What furusato points toward is the imagined affective relationship between a person and the space of community that constitutes their hometown. 602 The styling of *danchi* as *furusato* was less for the benefit of the conjugal couple, who might rightly feel that their hometown was elsewhere, and more for the benefit of children raised in the danchi. Parents were invited to participate in making the danchi a furusato by working to uphold the social structures of the settlement. They helped construct a hometown by maintaining a convivial domestic environment and by activating the programmed space of the danchi—dwellings, shops, schools, and the community center. The hope was that as children matured, moved out, and achieved some separation from the danchi that they would think about danchi as their hometown. For children, a vision of the domestic past would appear anchored by the modernized built environment of the danchi not the furui machinami or old townscape. As origin points for new citizens, danchi anticipated the further unfolding of a national future. In this sense, there was a deferred return. The construction of JHC danchi as a furusato necessitated the projection of the community into the future while maintaining the possibility of later homecoming. Whether or not people actually returned to the *danchi* in the future was in someways beside the point. Characterizing the danchi as furusato was important because it reminded people who were moving into newly developed apartment complexes in the 1960s that they were not just receiving homes, but that they were helping to build a new national community. The proof of this community would be found in the children who successfully

⁶⁰² Cf. Jennifer Robertson, "Furusato Japan: The Culture and Politics of Nostalgia" in the *International Journal of Politics, Culture, and Society* 1, no.4, 1988: 494-518, https://www.jstor.org/stable/20006871.

matured and passed through the danchi environment.

The idea of the *danchi* as *furusato* was enshrined poetically as part of an epigraphical diptych that began the Japan Housing Corporation's *Ten Year History* published in 1965. The poems, written by Tanigawa Shuntarō, are titled "A New Hometown" (*atarashii furusato*) and "Garden of Steel" (*tetsu no niwa*).⁶⁰³ In "A New Hometown," the poetic image of a stream flowing through the wilderness is likened to children traveling to school on a bridge that has been built above it. The untamed wilderness yields to the *danchi* become *furusato*, and rather than inhabiting the spaces of nature the imagined forest spirits (*kodama*) are imparted to the concrete.

新しい故郷	A New Hometown
荒野を流れていた小川が	The small stream that flowed through the wilderness,
いつか林の中を流れ	Sometime ago meandered through these woods,
今日は子ども等の学校へ通う	Today it flows under the bridge,
橋の下を流れている	That the children traverse on their way to school.
人々がここでも寄りそって	Even here the people draw near,
つくってゆく新しい故郷	Building their new hometown;
コンクリート の谺	Spirits of the concrete.

A photograph following the poem continues the theme of growth by presenting an enlarged stem of a flower that is about to bud. This is not a flower that has already bloomed and is beginning to wither, but a flower in a stage of becoming; it is about to open up, to bloom, to become beautiful. The caption at the top reads "The age of new construction." The series of images that follow are aerial shots of recently constructed *danchi* apartments—serially

⁶⁰³ Nihon jūtaku kōdan, *Nihon jūtaku kōdan jūnen shi* (Tōkyō: Nihon jūtaku kōdan, 1965). See front matter. Tanigawa's poems follow Forward.

⁶⁰⁴ Nihon jūtaku kōdan jūnen shi, 11.

reproduced rectilinear blocks that tower over the surrounding townscape and spaces of agriculture. The next series of photographs begins with a flower in bloom and the title "We can build a town," followed by more aerial shots of danchi. 605 The third series of photographs, also introduced by a flower in bloom, is marked by the title "We have a new lifestyle." 606 Many of the photographs in this section are taken at ground level, simulating the perspective of someone standing on the streets or pathways in and around the apartment complexes. Having arrived in the danchi, the focus of the camera shifts to children, who are seen playing on gym equipment (also made of concrete) within the apartment complexes. ⁶⁰⁷ An establishing shot of a playground within the Higashikurume Danchi (Tokyo) sets up a photographic essay that parallels Tanigawa's poem. The images from pages 82-88 repeat lines from the poem while capturing aspects of the danchi playground. In still more images that follow, children are seen commuting to school with their parents, singing in choir practice, learning at school and even receiving medical care. Recalling the child who was looking to the future from the apartment window, as presented in An Introduction to the Japan Housing Corporation, a boy now looks out from the living room of a terrace house, a smile on his face as he plays with a toy bus. 608

If there is a theme that emerges in this series of images it is that *danchi* apartment communities are concrete spaces for youth. Extending the theme of the Japan Housing Association's *A Plan for Youth*, the Japan Housing Corporation demonstrated that in its *danchi* the plan was starting to pan out: conjugal couples had viable offspring. Overall, photographs of

⁶⁰⁵ Nihon jūtaku kōdan jūnen shi, 45.

⁶⁰⁶ Nihon jūtaku kōdan jūnen shi, 65.

⁶⁰⁷ Nihon jūtaku kōdan jūnen shi, 81. Curiously, a playground that is shaped like an elephant's head, with a long slide perhaps being the trunk, was presented cryptically in outline on the front cover of the previously mentioned pamphlet An Introduction to the Japan Housing Corporation (1961). See Nihon jūtaku kōdan jūnen shi, 91.

⁶⁰⁸ Compare Nihon jūtaku kōdan no go annai, 38 with Nihon jūtaku kōdan jūnen shi, 115.

adults by themselves in the *danchi* are sparse and the overwhelming emphasis is on concrete apartments and children. When the series of photographs draws to a close, the interiors of the apartments and even the space of the dining kitchen are curiously absent of people. The photographs seem to invite viewers into the *danchi*, suggesting that this could be your house, that these could be your children. This pleasant fantasy space of the danchi underwrote the Ten Year *History*. There are over 100 pictures that precede the explanatory text, which begins on page 123. The instagrammable surfeit of images shows that in historicizing its projects the Japan Housing Corporation was concerned with how the communities it built were visually represented. It sought to relate the design of the apartment buildings and the residential tracts to human growth and the postwar public. The ability of *danchi* to aggregate quantities of people and bring them into association through the common purpose of child rearing was the demographic goal of JHC danchi apartment complexes in the 1950s and 1960s. While the stainless steel sink reflected the modern design of the dining kitchen, what was truly modern about the danchi was the ability to instantaneously aggregate people into a model community that could help manufacture a preferential public. As the JHC historians remarked:

こうして、この「陸の孤島」に短時日のうちに集ってきた数千人の人々が、それまでお互いに全く無縁だったにかかわらず、何がしかのコミュニティとしての共感を持って住むということが経験されはじめた。609

In this way, even though residents were, until recently, completely unrelated to each other, the thousands of people who have gathered on these 'islands of land' in a short period of time began to experience dwelling with some kind of community feeling.

What the Japan Housing Corporation hoped to show was not only its modern dwellings, but an idealized modern community—a community that could be created by the state through

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⁶⁰⁹ Nihon jūtaku kōdan jūnen shi, 148.

public housing to further the ends of the nation. What modern living meant was having dwellings that were capable of generating a preferential public and spaces where family life meant national life. Even if the state could not perfectly control the outcome of each and every domestic unit, the intent of the instant community instantiated by the JHC danchi was to design away the furui machinami and settle the public in a community that would be modernized by design. In this way, the kind of criticism that Tange leveled at Tōhoku had no place in the danchi. Even if danchi were criticized for being "like a wall of chicken coops," as Nishiyama remarked, they were still serving their social function. The *danchi* imaginary that was constructed alongside the actual production of apartment units through JHC histories, marketing materials, films, and photographs was less a matter of masking the mundane reality of life in concrete apartments, and more an attempt to provide models of community behavior. The contemporary production of competing imaginaries, or what Laura Neitzel has described as "danchi dystopias," can be seen in the work of Abe Kōbō, Teshigahara Hiroshi, and Hani Susumu, among others. 610 Novels and films set in and around danchi apartments presented fantasies-in-critiques that paralleled the Japan Housing Corporation's own. These works traded on the category "danchi" which signified the apartment complexes as much as it named the people, the danchi-zoku, who inhabited the estates. Unlike documentary films, which attempt to approach the real by presenting actually existing people and lived conditions, a film like Hani's She and He (1963) offers a critique of public housing projects by presenting a competing imaginary.⁶¹¹ It simulates life in a *danchi* that does not have the glossy venere of the photos presented in the JHC marketing materials or the Ten Year History. It imagines a danchi apartment complex as capable of fostering one type of public, while threatening another.

⁶¹⁰ Neitzel, The Life We Longed for, 104.

⁶¹¹ Kanojo to kare (1963), dir. Susumu Hani, DVD (Rōranzu firumu, 2014).

Competing Imaginaries: She and He

The 1963 film *Kanojo to kare* (She and He) directed by Hani Susumu deserves special mention because it stages the confrontation between two types of community: a *danchi* and a *bataya buraku*.⁶¹² As Laura Neitzel has observed, Hani's film is a particularly rich site for examining representations of *danchi* life in the 1960s for its focus on the situation of the so-called *danchi* housewife.⁶¹³ What I emphasize here, is the way in which *She and He* demonstrates how the *danchi* community form and the kind of life it authorized stood in contradistinction to other types of lifeways that were portrayed as simultaneously undesirable and inferior.⁶¹⁴ The *danchi*, through its rationalized built environment and proper people, delegitimizes the neighboring community. This staging of a *danchi* and a *bataya buraku* through the use of visual images (film) was contemporaneous to the JHC's portrayal of its communities as places that could foster life and community development. While the JHC sought to portray its complexes as generative of life, Hani taps into the way in which JHC *danchi* continue to function according to logics of elimination in support of a preferential public, even after the initial development phase.⁶¹⁵

She and He begins with an establishing shot showing rectilinear concrete apartment

⁶¹² In the context of the film, the *bataya buraku* is a small grouping of informal dwellings that establish an organic community considered in contradistinction to the surrounding built environment of the *danchi*. The qualification *bataya* indicates that the *buraku* is composed of people who make their living by harvesting and recycling junk. I use the Japanese word *buraku* because the English word slum is a pejorative characterization of community, while *buraku* does not necessarily carry this connotation.
⁶¹³ Cf. Neitzel, *The Life We Longed For*, 104-106; 112-113.

⁶¹⁴ Hani is not implying that competing communities like the *buraku* are essentially inadequate or inferior, but they begin to appear as such in contradistinction to the *danchi*. Furthermore, it is not just that the development of the *danchi* sets up this contract, but that it works to *continuously* delegitimate the neighboring community and eventually forces its elimination.

⁶¹⁵ As Neitzel notes, "A new generation of authors and filmmakers did choose the *danchi* as the setting for their stories but they certainly did not find their 'home' there. In fact, the *danchi* generally represented the antithesis of home in films and novels. They were depicted as places devoid of history, devoid of culture, and indeed, devoid of life." Neitzel, *The Life We Longed For*, 112.

blocks at night. Within one of the units, a woman sleeping next to her husband is awoken by light and shadows playing on the ceiling. Parting the blinds on the veranda, she finds a dwelling in the nearby *bataya buraku* bursting with flames. Greatly concerned, she dashes out of the apartment unit yelling "fire, fire." Yet, none of the other *danchi* residents, including her husband, seem particularly concerned. The flames against the night sky make for a spectacle of destruction eerily reminiscent of the air raids for those who watch from the comfort of their own balconies. The silhouettes of people inhabiting the *buraku* can be seen scrambling against the fire as they desperately try to preserve their life and property.⁶¹⁶

The fire in the *bataya buraku* provides the *danchi* housewife, Ishikawa Naoko (played by Hidari Sachiko) with an excuse to transgress the boundaries of the apartment complex and venture into the *buraku*. In the ruins, she finds the rubble of a former everyday life: the burned-out skeleton of a bicycle, a pot filled with ashes, a charred chest of drawers, and a kaleidoscopic array of broken utensils. Unexpectedly, she discovers a girl picking through the remains. Naoko smiles at first, but as the child turns around she reveals the whites of her eyes (she is blind). Taken aback by this unexpected revelation of disability, Naoko flees the *buraku* tripping on a toy left by one of the children from the *danchi* (the item is labeled with the apartment unit number). Over the course of the film, Naoko's sympathy toward life in the *bataya buraku* intensifies as she befriends Ikona, a garbage recycler, played by Yamashita Kikuji. 617 Beyond developing a close

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⁶¹⁶ Cf. Ango Sakaguchi, "Discourse on Decadence," *Review of Japanese Culture and Society* 1, no. 1, 1986: 1-5.

⁶¹⁷ Yamashita Kikuji was also a painter known for his politically engaged art. As Linda Hoaglund has observed, "Yamashita painted his most iconic work, 'The Tale of Akebono Village'...after traveling to the remote village in Yamanashi prefecture at the behest of the Cultural Brigade of the Japanese Communist Party (JCP)." See

http://visualizingcultures.mit.edu/protest_art_50s_japan/anp1_essay04.html. Yamashita also expressed an awareness of the discrimination faced by *buraku* communities, particularly the Tsuji-cho community in Tokushima near where he grew up. "My thanks to Linda Hoaglund for sharing a portion of her interview with Yamashita Masako, the artist's widow, for her film ANPO: Art X War."

personal relationship with Ikona and the blind girl, played by Igarashi Mariko, Naoko bears witness to the destruction of the *bataya buraku*. The fire shown in the beginning of the film is counterposed to the wholesale bulldozing of the *buraku* at the end of the movie. From a fence that has been built to separate the *danchi* community from the *bataya buraku*, Naoko watches pensively as a Mitsubishi branded bulldozer plows through the remaining dwellings of the *buraku*. The film critiques the way in which the *danchi*, through its rationalized built environment and its mode of life has delegitimized and ultimately contributed to the destruction of the *bataya buraku*. Hani intimates that the lives of people existing in the *bataya buraku* are valued less than the lives of those living in the *danchi*: first, the *buraku* dwellers are burned-out with little help from the *danchi* residents; then, as the ragpickers and recyclers become a nuisance to the *danchi*, a fence is erected to prevent easy passage between the two communities; finally, the inhabitants of the *buraku* are dehoused and forced to abandon the site.

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⁶¹⁸ Cf. Neitzel, *The Life We Longed For*, 106.



Fig. 45: The bataya buraku is razed to the ground by a Mitsubishi bulldozer. Kanojo to kare (1963).

Much like the bus housers described in Chapter 1, the residents of the *bataya buraku* form an organic community and practice forms of mutual-aid and self-help. They inhabit informal dwellings built from ill-fitting timbers, corrugated iron sheets, cardboard boxes, and tin cans. These patchwork dwellings might be characterized as shacks or shanties and do not appear to be legally authorized, existing in a no-man's-land in between the *danchi* and more distant low-rise wooden housing. Hani's film depicts the *bataya buraku* residents as being formally unemployed, but not idle. Some, like Ikona, survive by scraping a living from the waste

 $^{^{619}}$ The *buraku* in the film is qualified as a *bataya buraku*. Here *bataya* signifies that the people make a living by harvesting refuse from the *danchi*.

generated by the apartment complex. With mannerisms that are odd from the perspective of the danchi residents, Ikona represents an outsider, an other who is alternately a nuisance and a reminder that poverty resides close to domestic plenty. With his scrappy dog Kuma, Ikona forages daily for discarded items, collecting many from the recycling bins where the danchi housewives throw their trash. While characters in the film use the word danchi to describe the apartment complex rather than $k\bar{o}dan\,j\bar{u}taku$ (lit. Corporation housing), the apartments are unmistakably those of the Japan Housing Corporation. The logo of the Corporation Ω (Ω) Ω 0 the corporation Ω 1 (Ω 2) can be seen embossed on the corner of the rubbish bins.

The relative cleanliness of the *danchi*, with its manicured lawns, tidy spaces, and tidy people makes Ikona aware that he is associated with a kind of earthen lifestyle unbecoming of the apartment complex. In one scene, Ikona takes special care to wipe all the paws of his dog as he enters Naoko's apartment unit. In another, he tries to brush Kuma's paw prints off of Naoko's dress after the dog jumps on her while they are walking on a dirt road near the *danchi*. Ikona is not fundamentally dirty. Rather, he is sensitive to the difference in standards of cleanliness between the two communities. The film suggests that as a machine for living, the danchi is equipped for cleanliness, with dedicated spaces for trash, running water, and in-unit bathtubs. By contrast, the bataya buraku lacks any kind of investment in infrastructure that facilitates daily life. Hani highlights this difference in infrastructure by showing two bathing scenes. In the first, Ishikawa Eiichi, Naoko's husband, played by Okada Eiji, indulges in a steamy bath in the wooden tub incorporated into his apartment unit. While small by contemporary standards, this kind of in-unit bathtub was considered a desirable modern convenience during a time when bathing in public bath houses (sent \bar{o}) was a common practice in urban areas. The sense of privacy provided by the in-unit tub is enhanced by Naoko's reluctance to enter the bathroom

while her husband bathes. She lingers outside the closed door and carries on a conversation while Eiichi tries to relax in the tub. Designed for a single adult body, the wooden JHC *danchi* bathtub had little chance of accommodating the conjugal couple together. In the second bathing scene, which occurs toward the end of the film, Ikona improvises a hot bath by setting a fire underneath a repurposed oil drum. Under cover of a starry night sky, Ikona becomes so absorbed in his enjoyable ablutions that he fails to notice that Kuma has gone missing. The juxtaposition of these two bathing scenes, which contrast the successful, professional, *danchi* dwelling male (Eiichi) to the unemployed, underhoused, *bataya buraku* dwelling male (Ikona), underscores that the difference between the two communities rests in the infrastructure of everyday life and not in inherent differences of purity and impurity. Like Eiichi, Ikona is conscious of cleanliness and takes care to bathe, even allowing himself to indulge in the bath, but he does so without the convince or creature comforts found in the well-equipped *danchi* apartments.

Trespass is a key theme in the film, as well as a device that allows characters to move between the spaces of the *danchi* and the *bataya buraku*. The rationalized built environment of the apartment complex helps to establish it as a settlement (residential territory) that is physically distinct from the surrounding community. However, its boundaries are initially unsecured allowing people from either community to cross easily between the two camps. At first, the *danchi* dwellers reluctantly tolerate the recyclers and ragpickers that venture from the *bataya buraku* into their community, but over the course of the film grow increasingly hostile to their presence. Rather than call the police, the administrators of the apartment complex decide to construct a border wall, discouraging the circulation of bodies between the two communities while instantiating their physical separation. While spatial power rests firmly on the side of the

⁶²⁰ Cf. Neitzel, The Life We Longed For, 105.

danchi, demonstrated by the effort to secure the borders with a fence, Naoko and her husband also trespass into the bataya buraku. In one scene toward the beginning of the film, Eiichi confronts Ikona over the theft of a trophy from the genkan (entrance area) of his apartment. As Naoko and Eiichi approach the bataya buraku at night, the community is enjoying a shared meal. They are gathered around a makeshift table, drinking sake, laughing, and carrying on, while the blind girl is shown eating rice. The couple are marked as outsiders by their relatively better clothing and upright posture, but the assembled residents initially tolerates their trespass. When Eiichi directly confronts the thief, his overt hostility toward Ikona prompts other residents to rise up in defense. At this point, the couple's temporary pass is implicitly revoked and they are forced to beat a hasty retreat back to the danchi in the face of the overwhelming support for Ikona. This scene portrays the bataya buraku as a space of community whose members are capable of practicing mutual-aid. At this moment of gathering, Eiichi's aggressive behavior is interpreted not just as an attack on Ikona (as an individual), but on the community writ large.



Fig. 46: Naoko (center) mediates a confrontation between Eiichi (left) and Ikona (right) in the *buraku*. *Kanojo to kare* (1963).

As her intimacy with Ikona deepens, Naoko ventures more frequently into the *bataya buraku* and her trespasses do not trigger any meaningful reaction. She is sympathetic, rather than hostile like her husband. From her first timid foray after the fire in the beginning of the film, Naoko gradually becomes familiar with life in *buraku*, while enabling Ikona's being in the *danchi*. Forgiving him for the theft of Eiichi's trophy, Naoko goes so far as to invite Ikona and his dog into her apartment for tea. Toward the end of the film, when the blind girl becomes ill with pneumonia, it is Naoko who takes care of her, calls the doctor, and lets her recover in the

danchi. 621 Aside from Naoko and her husband, the other adults in the danchi, particularly the housewives refrain from crossing over into the bataya buraku and look upon the neighboring community with disdain. Naoko and Ikona are willful border-crossers, but so too are the children.

Hani portrays both the *danchi* and *bataya buraku* children as capable of interaction through play that disregards the imagined distinctions between the two communities. Toward the beginning of the film, children from the *danchi* and *buraku* are seen mixing freely in an undeveloped expanse between the two communities. They are "playing war," conducting a mock battle with toy guns and samurai swords. Et is unclear if the battle specifically pits the *danchi* children against the *bataya buraku* children—the chaotic, untamed nature of the fighting suggests that such a distinction is not intended. Likely the toys have been bought with *danchi* money, but in several scenes the boys steal weapons from each other, leading to a blurring of distinctions between what communities the arms signify. More than class warfare, the battle shows that *danchi* youth, as well as *bataya buraku* youth, are capable of enacting violent behavior. Seen in light of the recent war, the armed conflict foreshadows the development of a generation that is not working to overcome war, so much as they are perpetuating the essence of it through play. Perceiving the play as potentially harmful, Naoko attempts to intervene in the conflict by telling the children to "mind the rules." The children pause their play for a moment

⁶²¹ Note the difference in health care infrastructure between the *bataya buraku* and the *danchi*. The *buraku* lacks access to medical institutions. The *danchi* becomes an interface between modern dwelling and modern medicine.

This scene stages an instance of what Frühstück describes as mock battles conducted by children or "playing war." This play not only functions as a substitute for the real thing, but underscores that the recent war was an episode, not the end, of confrontation. For nations in the 19th and 20th centuries, war has been a constant. See Sabine Frühstück, *Playing War: Children and the Paradoxes of Modern Militarism in Japan* (Berkeley: University of California Press, 2017).

⁶²³ Cf. Neitzel, The Life We Longed For, 113.

before Naoko herself is absorbed in the game. One of the children steals the broach from her blouse and she eventually gives up as the war moves on to a more distant part of the undeveloped expanse. When a border wall is later established between the two communities, the children find that they can easily subvert it by jumping over and crawling under the fence. The children's easy subversion of the fence (they do not mind the rules) suggests that they are not particularly concerned with the normative practices that the *danchi* adults are trying to impose on the community. The children's game, which occurs in a space that is neither properly part of the *danchi* nor clearly part of the *bataya buraku*, serves as a foil to the structuring of both communities.

Though informal, the *bataya buraku* does have a community structure. There are separate dwellings, spaces of congregation, and an awareness of insiders and outsiders. The territory of the *bataya buraku* is established by the materiality of the buildings, with the makeshift shacks and shanties visibly marking the *buraku* as distinct from the *danchi* and the undeveloped expanse. By contrast, the space of the *danchi* is marked by rectilinear concrete apartment buildings and the rationalization of space. Families are partitioned according to their private apartment units and adult residents associate through controlled cultural activities, such as choir practice, or as they watch their children play in the complex's designated playgrounds. The laissez-faire community life of the *bataya buraku* serves as a poignant counterpoint to normalized life in the *danchi*. While *danchi* residents appear to inhabit a community that is materially and socially superior to the *bataya buraku*, they are also depicted as being more rule-bound and constrained. Although the *danchi* community form allows for the rationalized congregation of thousands of people, it also enables their separation. For instance, when Naoko attempts to return the toy she tripped over, she confronts the steel door of another *danchi* resident

with whom she has no former acquaintance. About to ring the bell, she notices a sign hanging on the door handle that says "Children sleeping! Please don't push the button." Complying with the request, she lightly knocks on the door. The eyes of the resident-housewife peer warily through a slat in the door, before she reluctantly opens it a crack to receive the toy. When Naoko later ventures into the bataya buraku, several of the dwellings, including Ikona's, have rudimentary sliding doors and she freely lets herself into the homes. Comparing the structure of the danchi community to that of the bataya buraku shows how features like the steel door, which were lauded in the 1950s and 1960s as a means of enhancing privacy, securing the unit while residents were away, actually contribute to a fundamental separation between people and households. 625 That the *danchi* allows for the structured concentration of people and families at scale does not necessarily mean that such aggregations were inherently better communities. Hani intimates that there is something uncomfortable and depersonalizing about the structure of the danchi. After all, the film reaches a climax with the death of Ikona's dog, Kuma, in the stairwell of a star house *danchi* building. This is the film's one and only scence of anti-social violence leading to the loss of life. While Ikona was taking his bath in the oil drum, several older boys succeed in capturing Kuma, leading him with a rope to the danchi. After a frantic search, Naoko and Ikona discover the ailing Kuma, but it is too late. They hold him tenderly as he breaths his last breath.

Kuma's death scene demonstrates the necrosocial verso of the *danchi* that lurks behind images of youth and play, but which is immanent to the structure of the community itself.

Dismissing the adolescents who perpetrate the crime as deviant would be to explain away a specific instance of a general tendency. Hani's film suggests that, taken to its logical conclusion,

⁶²⁴ Kanojo to kare (1963), dir. Susumu Hani, DVD (Rōranzu firumu, 2014).

⁶²⁵ Cf. Neitzel, *The Life We Longed For*, 105.

danchi life will lead to the displacement and elimination of life that deviates from the norm that is being constructed in its image. While Naoko's intentions are good, the camera shows that she ends up with blood on her hands, expressing the deep contradictions between her humanitarian sensibilities and the structure of danchi life that she participates in. In the end, Kuma's death and the dehousing of the bataya buraku residents reinforce the idea that danchi are not just an architecture, but a force of internal colonialism. With the advance of the danchi, vernacular communities, shown to be composed of shoddy structures and underperforming people, are trampled under foot.

Real Imaginings

Shown in theaters in 1963, *She and He* can be included in a list of films produced in the 1960s that center on life in public apartment complexes. *She and He* (1963) and the film *The Ruined Map* (1968), directed by Teshigahara Hiroshi, are notable among these for centering *danchi* and a critique of everyday life in these communities. In this, *She and He* and *The Ruined Map* present imaginaries in contradistinction to the images developed by the Japan Housing Corporation, as detailed above. I argue that films like *She and He* and *The Ruined Map* can be seen in this light as *real imaginings*. While the stories they tell are essentially fictions (the events they refer to did not actually happen), the patterns of life and the material environment they depict simulate the built environment during the time period in which they were produced. For instance, a script book used in the production of *The Ruined Map* (1968) shows how film makers photographed actually existing apartment complexes to construct a composite visualization of the *danchi* that Abe Kōbō describes in the novel *The Ruined Map* (1967).⁶²⁶ Teshigahara's film is

⁶²⁶ Compare Abe Kōbō, *Moetsukita chizu* (Tōkyō: Shinchōsha, 1967). And *Moetsukita chizu*, dir. Teshigahara Hiroshi in Teshigahara no sekai DVD (Daiei, 2002). And *Moetsukita chizu* [daihon], Abe Kōbō, (Katsu purodakushon, 1968?).

a visual translation of Abe Kōbō's literary work that required mapping actually built *danchi* onto Kōbō's fictional *danchi*. Like *She and He, The Ruined Map* also unfolds within a postwar *danchi* apartment. These fictive stories depend on the material construction the *danchi*, as well as the real circulation of *danchi* as a discourse and imaginary by way of newspapers, magazines, television, and advertisements. The critical potential of both films rests precisely in their being fictions. What they aim to critique is not so much a specific *danchi* or an actually existing person, but *danchi* apartment complexes and *danchi* inhabitants in general—the imagined community of the *danchi-zoku*. These fictions existed in competition with officially sanctioned imaginaries, such as those produced by the JHC.



Fig. 47: Location shot of danchi for Moetsukita chizu (1968).⁶²⁷

 $^{^{627}}$ This location shot was appended to a script book used during production of the film.

While She and He includes contextual cues that imply that the danchi in the film is the Japan Housing Corporation's Yurigaoka Danchi, the film trades on the idea that actually existing danchi are both real and imagined at the same time. As Murakami Sachiko observed in her Shūkan Asahi article discussed in the previous chapter, the words danchi and danchi-zoku function categorically to establish similitude between people who are fundamentally unique individuals all leading separate lives. Invoking the word danchi involves similar risks as invoking the word slum. As detailed in the first chapter, conflating the materiality and structure of the slum with the people residing in the slum led to practices like dehousing that were radically dehumanizing. In the Tokyo air raids, military strategists worked from visualizations of the built environment in targeting industrial labor and workshops of war. Similarly, invoking the word danchi-zoku in describing people inhabiting actually built apartment complexes conflates the structure of the community with the life of the residents. In the case of danchi, the standardization and serial reproduction of the apartment gives a feeling that the people who inhabit these structures are also standardized and serially reproduced. In She and He, Hidari Sachiko portrays Naoko as a housewife who both conforms to and resists the *danchi* stereotype—she is living the contradiction. Naoko keeps a tidy home, prepares breakfast for her husband, tailors his clothes, and pours sake for him at the dining table. Yet, she is childless, constantly ventures into the bataya buraku, invites Ikona and Kuma into her house, and even lets the blind girl sleep in her husband's bed. Although the *danchi* provides a structure to life, it does not determine it in every instance.

As Benedict Anderson has discussed when explaining the nation form (the ubercommunity), the sense of togetherness felt among countrymen and women relies on a structuring fiction—an imaginary—that enables one to believe that complete strangers inhabiting the shared space of the nation nevertheless share a similar set of beliefs, practices, and histories. The nation, Anderson says, "is *imagined* because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion."628 The same holds true for danchi, which were scalar communities distributed throughout the archipelago, ranging from hundreds of people in smaller complexes to tens of thousands in the larger projects. The word danchi invokes an imagined community because it calls to mind a commensurability that cannot be easily verified in reality. The danchi residents feel themselves to be part of the community in so far as they imagine that others also imagine that they are part of that same community, even though many of them will never meet. Naoko's return of the toy from the undeveloped expanse near the buraku to another resident within the danchi illustrates this idea clearly. Rather than welcomed by the neighbor, Naoko is greeted with suspicion. Even after she verbally identifies herself by stating her name and building number (signally that she is part of the same community), the skeptical housewife is reluctant to open the door. Cracking the steel door just enough to receive the toy, but not enough to let Naoko in, the two women have a brief, stilted conversation using relatively formal language (indicating that they are not on intimate terms). The return of the toy is a scene that enacts both the assumed commensurability of members of a community, along with the mutual verification of membership. Naoko not only confronts another danchi resident, she also confronts the danchi imaginary. The simulated reality of the danchi stairwell becomes a site of verification for testing an assumed commensurability, while the apartment door serves as a shield maintaining the distinction between the *danchi* interior and the outside world.

The Japan Housing Corporation's annual report for 1960 presented a more sober view of

⁶²⁸ Benedict R. Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 2006), 6. Italics in the original.

the Yurigaoka Danchi than the one shown in Hani's film. A photograph appearing in the report labeled as "Yurigaoka Danchi (Kanto)," shows a lateral view of apartment buildings within the tract, while a site plan drawn on top of the photograph hovers in the sky above. 629 The photographers, Murai Osamu and Futagawa Yukio, attempted to capture the scale of the danchi by placing the camera at a distance in the undeveloped area beyond the apartment complex. The lower register of the image foregrounds the untamed (non-rationalized) vegetation that is abruptly halted by a large concrete wall that separates the territory of the *danchi* from the undeveloped expanse. Apartment buildings in the lower-middle register of the image appear as both the background and mark the horizon line—they seem to be the end of the earth and nothing is visible beyond them save the sky. The image does not capture all of the buildings, but suggests that this site is composed of star house type apartment blocks and rectilinear flat-type apartments. The silhouettes of two people visible against the light-struck concrete wall provide a sense of scale; they appear as reminders that this gargantuan residential landscape is not just the terrain of modern goliaths, but meant to be inhabited by ordinary men and women. Laundry hanging from the balconies of the units are a sign that the buildings are lived-in. From such a vantage point, the photographers cannot hope to capture the entirety of the site, which is represented by the heavenly site plan floating in the sky. Comparing the site plan to the photograph, it is evident that only a quarter, at most, of the buildings are here represented.

⁶²⁹ Nihon jūtaku kōdan, Nihon jūtaku kōdan nenpō '60, 33.

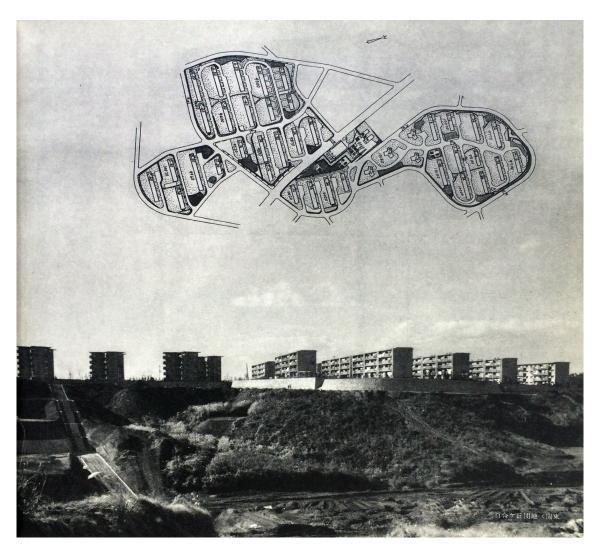


Fig. 48: Yurigaoka Danchi lateral view (bottom). Site map (top). Nihon jūtaku kōdan nenpō '60.

Details in the annual report show that the Yurigaoka Danchi was managed by the Japan Housing Corporation's Kanto branch office. It was serviced by the privately managed Odakyu train line running between Tokyo and Yokohama. As of 1960, the site had 1,079 apartment units. It was the fourth largest *danchi* managed by the Kanto branch office after the Kasumigaoka Danchi (1,793 units), the Shintokorozawa Danchi (1,609 units) and the Myojindai Danchi (1,156 units).

 $^{^{630}}$ Nihon jūtaku kōdan nenpō '60, 29.

the Yurigaoka Danchi (labeled 60) is exceptionally far out.⁶³¹ The majority of the office's managed apartment complexes were located within a few kilometers of the Tokyo Bay coastline, including the Myojindai Danchi. The peripheral siting of the Yurigaoka Danchi helps to explain the undeveloped expanse see in the film and the photograph by Murai and Futagawa. Yurigaoka is not among the city *danchi*, but exits on the metropolitan fringe.

Another section in the report titled "Housing types and scale," provides a closeup shot of an apartment building within the Yurigaoka Danchi as well as photographs of a representative interior. A photograph labeled "Yurigaoka Danchi 4DK (Kanto)" establishes the exterior of an apartment building bearing the serial number "K59-4N-4DK-Ma" designating a four-room plus dining kitchen, located on the north facing fourth floor of a building produced in 1959. A relatively large unit (almost twice the size of a 2DK), it had a total floor area of 79.9m² (24.17 tsubo). From the floor plan detail, it is possible to see that there are three 6-mat rooms and one 3-mat room that flank an expansive dining kitchen that also serves as a central corridor. The generous balcony space spans two bedrooms and the dinking kitchen, in total about five mats in length. A photograph, divided in two by a partition between the rooms, shows a television set standing on top of tatami mats in one room and another well-appointed room filled with a table, chairs, a hanging lamp, curtains, and a carpeted floor. Another photograph provides a closeup of the dining table, ringed with four chairs. Three of the rooms are visible behind the table. The

⁶³¹ Nihon jūtaku kōdan nenpō '60, 28.

⁶³² Nihon jūtaku kōdan nenpō '60, 56. See also. Nihon jūtaku kōdan no go annai (An Introduction to the Japan Housing Corporation) printed in October of 1961, repurposes images from the 1960 annual report. Text adjoining the pictures of the 4DK reads: "As our standard of living increases, the scale and equipment of our houses will also gradually improve. The Corporation's apartments are enlarged year after year. At present, the average floor area is 16 tsubo [53m²]. Within this expansion, [the Kanto branch office K59-4N-4DK-Ma with a floor area of 79.9m² (24.17 tsubo)] is, in particular, representative of experimental construction. It is anticipated that in the future, apartments of this size will be in demand."

final image shows the entrance area (*genkan*) of the unit. 633 Galoshes are resting on the lower floor, while slippers standing on an upper floor covered in linoleum tiles establish this as a space of transition between inside and outside the unit. An *ikebana* (flower) arrangement sits on top of a low cabinet, while an open door provides a view into the apartment interior, showing the back room with curtains and a chair. The photographs in this section do not show people. They are intended to show what the JHC built.



Fig. 49: Interior of experimental 4DK apartment unit. Nihon jūtaku kōdan nenpō '60.

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⁶³³ Nihon jūtaku kōdan nenpō '60, 57.

The section labeled "seikatsu," showing scenes of everyday life, is a pastiche of images aggregated from various Japan Housing Corporation danchi, including the Shintokorozawa Danchi, the Kōri Danchi, the Tokiwadaira Danchi, and the Maebara Danchi, to name a few. 634 The images primarily feature women and children. The color photograph of the outdoor marketplace (shōtengai) within the Shintokorozawa Danchi shows children and a baby carriage in the foreground, while women and children walk past shops full of household items in the background. Another color photograph (most in the report are in black and white), shows three children playing in front of the danchi. 635 A boy wearing a red sweater blows bubbles into the air, while a girl wearing a red and black plaid dress has her arms out as if she about to reach for the bubble. Laundry hangs from the windows of the danchi apartments. 636 The photographs in the "seikatsu" section show the activation of the danchi program (the apartment units, shops, and common spaces), while overwhelmingly depicting images of youth. The pastiche establishes a similitude between the geographically separated danchi apartment complexes and the individual families that inhabit them. The annual report reinforces the imagined community of the danchi through its mode of presentation.

Conclusion

By 1970, the Japan Housing Corporation had built more than 600,000 apartment units throughout the archipelago. From 1965-1969, aided in part by the government's forth five-year housing construction plan, the JHC constructed over 50,000 units per year, with nearly 80,000 built in fiscal 1969 alone.⁶³⁷ A map presented in the annual report for 1970 abstracts the

⁶³⁴ Nihon jūtaku kōdan nenpō '60, 76.

⁶³⁵ Nihon jūtaku kōdan nenpō '60, 79.

⁶³⁶ Nihon jūtaku kōdan nenpō '60, 87.

⁶³⁷ Nihon jūtaku kōdan sōmu-bu kōhō-ka, nihon jūtaku kōdan nenpō '70 [The Annual Report of Japan Housing Corp.] (Tōkyō: Nihon jūtaku kōdan, 1970), 73.This figure includes both rental and owned units. In fiscal year 1955, the first year of production, the corporation produced 20,000 units, split evenly

distribution of apartments across the archipelago, representing the number of units built as scaled blocks. 638 The map shows that rental apartments were primarily constructed in large metropolitan areas, but that owner-occupied apartments were constructed in almost every major prefecture, giving the JHC national coverage. Looking back on the past fifteen years of construction, the report notes that:

"since the 'housing complex dwellings' [danchi] were born; and as the number of these dwellings increases in the suburbs of large cities, the conventional wooden houses have been replaced with fireproof, earthquake-proof apartment buildings, and the new mode of living 'to separate the dining room from the bedroom' has gradually been incorporated into Japanese-style dwellings."

While seemingly perfunctory, the narration provided by the JHC annalists speaks to the ongoing normalization of large-scale apartment complexes within the domestic built environment. The replacement of wooden houses, the *furui machinami*, is rendered as quotidian as the colonization of everyday life by the modernized structure of the *danchi* as a machine for living. The new mode of living represented in part by *shokushin-bunri* (the separation of eating and sleeping), both a behavioral practice and a matter of space design, has made inroads into other "Japanese-style" dwellings. This language rhetorically reinforces that the Japan Housing Corporation, as a principle agent of change, is overcoding both national space and national life ways with up-to-date structures and practices suited to the long postwar. Mentioning that concrete apartments were also fireproof and earthquake-proof attests to the scientific foundations of building construction technology, while further delegitimizing the use of wooden construction in home building.

The annual report not only marks time, the year 1970, but shows its plentitude. It is full

between rental and owned.

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⁶³⁸ Nhon jūtaku kōdan nenpō '70, 69.

of concrete apartments made vital through daily life in the *danchi*. The collection of statistics (so many units built, so much land developed, so much money received and spent) attests to the progress made by the Corporation at the same time as it shows how much it has accumulated. Although the focus is 1970, the data in the report is accretive. The quantities of buildings and people represent the productivity of the Corporation over the past fifteen years. The construction of everyday life, as much as the colonization of one type of life by another, is made normal through the progressive force of time. By demonstrating quantitative growth, the Corporation attempted to legitimate its activities. Seeming to continue under its own momentum, the forward movement of time and the projections of future plans lend weight to the idea that this will all continue—apartment construction is now the new-normal of the Japanese lifestyle. Yet, the annual report is not just a purely discursive exercise, it is not content with presenting impersonal abstract statistics, it represented the vitality of the *danchi*. To show the public that it has created, and that is thriving within its built environment.

What the report presents as *aru hi no danchi*, "One day in [the] housing complex," simulates an idealized everyday life hour-by-hour, while establishing similitude between disparate apartment complexes by employing the category *danchi* as term which signifies both the built environment and the lives of the people therein. ⁶³⁹ It is between five and seven in the morning on a dateless day in the representative *danchi* and children have gathered among shrubs and small pines just outside the apartment building to perform calisthenics. They reach for the sun, enacting the vitality of youth and demonstrating their able bodies. As the hours pass, the reader observes them walking to school, adventuring around the *danchi*, singing in choir practice, riding the mechanical rockers in front of the supermarket, and enjoying a meal on an

⁶³⁹ Nhon jūtaku kōdan nenpō '70, 9.

outdoor dining table. The report confidently declares that the *danchi* "is the virtual paradise of children."⁶⁴⁰ As in the *Ten Year History*, photographs of adults are sparse. The reader is offered a prose summary of the male breadwinner's morning routine: "When the bright sunlight shines into the room though the large window, the husband wakes up. A hot breakfast is waiting for him on the table in the dining-kitchen. The foreign style toilet, at which he felt awkward before, has now become comfortable."⁶⁴¹ Then an even shorter summary of what is in store for the housewife who, "getting through the cleaning and the laundry takes the small children to the nearby playground."⁶⁴²

What is meant by the production of public housing, namely *danchi*, cannot be reduced to the physical building of units, because it involves media practices (mediation) through which literary and photographic images served to condition the way people perceived apartment complexes, even if they did not determine in the last instance what people thought. In corporate histories, annual reports, marketing materials, and other ephemera, the Japan Housing Corporation staged its own projects by presenting a pastiche of everyday life in the *danchi* through the arrangement of the simulacra of dwelling. By brining the *danchi* into association in this way, the Japan Housing Corporation constructed an imaginary that it hoped would make its apartment complexes and the publics they contained visible and sensible. Making sense of the *danchi* incorporated both wishful thinking and a pedagogy of the projects as it showed and told people how to imagine life and live in large-scale apartment complexes.

While the perceptions of residents who inhabited the complexes could also be read with and against the imaginaries presented in this chapter, the aim has been to show how the Japan

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⁶⁴⁰ Nhon jūtaku kōdan nenpō '70, 15.

⁶⁴¹ Nhon jūtaku kōdan nenpō '70, 10.

⁶⁴² Nhon jūtaku kōdan nenpō '70, 10.

Housing Corporation, from the late 1950s through the 1960s, worked to produce and normalize its new lifestyle and new people throughout the archipelago. That the category *danchi* functioned to bring people into association was not just a phenomenon that was observed by journalism, but became a core strategy of the Japan Housing Corporation to both mark and make a preferential public of the postwar. Although its materials demonstrate that it was not unaware of criticism, as a corporation with a well known brand and product, the JHC hoped to present its housing in the best light.

The front cover of the 1970 annual report is telling, it shows Senri New Town, which covered 1,160 hectares and included 29,000 units of housing, some of which were built by the Japan Housing Corporation. *Danchi* and other highrise apartments loom large in the foreground, while the avant-garde structures recently built for EXPO '70 are faintly visible in the background. As the architectural equivalent of Disneyland, EXPO '70 was a simulated community and a fantasy space. Juxtaposed to the Japan Housing Corporation's projects, it shows the simultaneity of competing forms of community and presents yet another lived imaginary. EXPO '70 was a crossroads for experimentation in architecture and design, and also a lightening rod for criticism. While EXPO '70 was certainly internationally captivating, the forms it proposed proved to be a flash in the pan, while the Japan Housing Corporation would go on to build more than 400,000 more units over the course of the next decade.

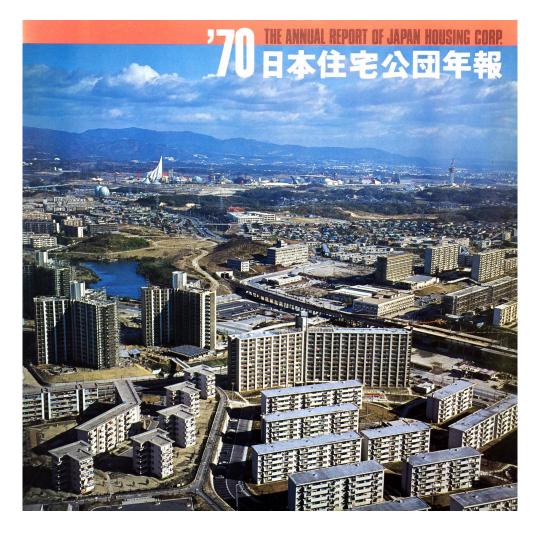


Fig. 50: Senri New Town (foreground). Expo'70 (background). '70 nihon jūtaku kōdan nenpō.

Chapter 5. Structures of Desire: Uneven Development in the 1960s & 1970s

"We now no longer camp as for a night, but have settled down on earth and forgotten heaven." *Walden*, Henry David Thoreau

Introduction: A Hazy View of Paradise

The year 1970 was bursting with fullness, packed as it was with the substance of history. It was now twenty-five years since the end of the war, opening up a space of temporal distance in which to reflect on the past. Newspapers flooded the streets with retrospectives, comparing the charred cities of 1945 to the rebuilt present.⁶⁴³ What the Angelus Novus, that spirit of history, would have seen from on high was Tokyo "filled with a cluster of high-rise buildings and...covered with a freeway network...the sky over the city...become dim with smog."⁶⁴⁴ Ruins of war had been transmogrified into skyscrapers that had stolen the sky. In the shadow of the towers ringed by a halo of smog, growth was no longer a foregone conclusion as the city had become inundated "with environmental pollution."⁶⁴⁵ It was from this temporal and physical vantage point that city officials working for the Tokyo Metropolitan Government penned a report that must have surprised many: *Tokyo's Housing Problem*. How, at this late date, could there still be a housing problem in Tokyo? Did not skyscrapers and smog attest to all the development that had taken place? Were not these towers of Tokyo synonymous with a higher standard of living for all?

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⁶⁴³ Liaison and Protocol Section, Bureau of General Affairs, Tokyo Metropolitan Government, ed., *Tokyo's Housing Problem*, TMG Municipal Library, no. 5 (Tokyo: Tokyo Metropolitan Government, 1972), 3.

⁶⁴⁴ See Walter Benjamin "Theses on the Philosophy of History" in *Illuminations*, Hannah Arendt ed. (New York: Harcourt, Brace & World, 1968). In thesis IX Benjamin refers to a painting by Paul Klee named "Angelus Novus." He says that "Where we perceive a chain of events, [the Angelus Novus] sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet." In this chapter, I interpreted what Benjamin calls "wreckage" as waste and obsolescence immanent to cycles of production.

⁶⁴⁵ Liaison and Protocol Section, *Tokyo's Housing Problem*, 3. Cf. Neitzel, *The Life We Longed For*, 117.

Looking back on both the historical richness of 1970, as well as the preceding quarter century, Tokyo's Housing Problem presented a sobering reminder that something was rotten in paradise. The publication's opening gambit employed a visio-rhetorical strategy comparable to Umarekuru jūtaku to toshi (Houses and Cities of Tomorrow), the Japan Housing Corporation's 1960 pamphlet celebrating its first five years of operations.⁶⁴⁶ The leading image in the Tokyo Metropolitan Government (TMG) report shows children playing on recreational equipment within a concrete apartment complex. They are smiling. The camera captures them in the midst of a game, freezing them in action. Two of the children look into the lens of the surveilling cyclops as if defending their state of play, while two of their compatriots, having scaled a wall, gaze excitedly into the distance. In the background, apartment buildings loom overhead forming a concrete maw that chomps on the sky. These are not the quaint four and five story apartments of the early postwar, but recently constructed 12-story mega complexes. The caption printed on the photograph reads "Tokyo's new face," punning on the faces of the children and the face of the building. The opposing page presents an image of a vernacular townscape filled with one and two-story wooden structures jammed into irregularly shaped lots—what the Japan Housing Corporation had characterized as old Japan. There is a sense of fullness here too, as if parts of the city remain bloated with inferior structures trapped in a substandard past. In this dreary picture, the photographer has given up on showing any sky at all. The caption affixed to the photograph reads "Tokyo's other face." With this in mind, the reader-viewer is cognitively primed to consider what follows within the context of this Janus-faced built environment: the new Tokyo of towering concrete, and the old Tokyo of cowering wood.

The expectant reader is waiting for the word danchi to drop, but it has been eclipsed by

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⁶⁴⁶ *Tokyo's Housing Problem*, 1-2. See also Nihon jūtaku kōdan, *Umarekuru jūtaku to toshi* (Tokyo: Nihon jūtaku kōdan, 1960), 1-3.

another media star: the condominium. The TMG report notes that contemporary newspapers "contain a large number of advertisements for exotically named 'mansions' (deluxe apartment houses), giving the remarkable illusion that there is no longer any housing problem in Tokyo."⁶⁴⁷ The report intimates that the spectacle of residential abundance represented by glitzy new mansions is drawing attention away from other residential concerns that remain just out of sight; emphasis on a higher standard of living for some neglects the plight of those struggling to form a household and obtain residential space that has the capacity to house a growing family. At base, the housing problem was fundamentally a family problem: young couples were forced to choose between having children and securing affordable space. Ensuring rightsized dwellings for those in need continued to be a problem that evaded a satisfactory solution.

By 1972, the time of the report's publication, applications for public housing managed by the Japan Housing Corporation and the Tokyo Metropolitan Government still exceeded the number of available units.⁶⁴⁸ This was particularly true for conveniently located units, even if the surrounding environment was not always desirable. The TMG authors describe the case of the Honhaneda Danchi which, despite being located near factories and a garbage dump, received more than 1,563 applications for ten available units.⁶⁴⁹ In the eyes of city planners, strong demand for public housing meant that spatial needs were not being met by other types of homes. What was the living situation like for those who aspired to residence in the projects? The TMG report cites a family crammed into "a six-mat [9.9m²] room." In such a small space, "a young couple...is unable to have a child because childbirth would force them to quit the house on

⁶⁴⁷ Liaison and Protocol Section, *Tokyo's Housing Problem*, 3.

⁶⁴⁸ Applications in excess of units indicates supply constraints.

⁶⁴⁹ Liaison and Protocol Section, *Tokyo's Housing Problem*, 36. Admission rates were generally better for JHC housing at this time, but the reason according to the TMG was that higher rents discouraged applicants.

which they have a contract..."650 Metropolitan officials understood that domestic poverty inhibited family formation. For a young couple, the cost of raising a child began with the purchase of excess spatial capacity, an investment in a larger apartment that would accommodate a child over the duration of their maturation.⁶⁵¹ This residential conundrum recalls the 1952 film A Plan for Youth in which families apply for residence in public housing while overcrowding stymies a prospective couple's marriage—the socially preferred conjugal union that spurs the birth of a child. 652 In the TMG report, the young couple, while technically housed, cannot purchase a larger space and thus cannot economically bring a child into the world. In the TMG report, the young couple represents a rational economic actor who proceeds first financially and then biologically in decision making regarding their life and social welfare. While the couple might want a child, it is not in their present economic interest to have one. Seen from this vantage point, the housing problem in 1970 was not so much about architecture or construction technology as it was about biology and economy—a dearth of affordable dwellings meant that economically disadvantaged urban families chose not to have children. ⁶⁵³

Revitalizing the residential built environment in such a way as to harmonize family reproduction, domestic space and household income remained a challenge in the 1970s even if the problem was not new. One might rightly wonder why the housing problem eluded a

⁶⁵⁰ Liaison and Protocol Section, *Tokyo's Housing Problem*, 3. By comparison, the smallest 2DK apartment the Japan Housing Corporation built in 1970 was 45.4m². See the *Japan Housing Corporation* Annual Report 1970, 94.

⁶⁵¹ The logic being that smaller bodies require less space than larger bodies, so there is a need to anticipate the future growth of the child. This is also the reason why in housing statistics one observes fractional counting of persons (e.g. 2.5). Children have physically smaller bodies that take up less space. A house considered adequate for two parents and a child would be considered over crowded with three fully grown adults.

⁶⁵² Seishun no sekkei (1952). This film was sponsored by the Ministry of Construction, prefectural governments, and the National Public Housing Mutual Aid Society.

653 A right-sized house was one that could foster the family through the provision of affordable space.

satisfactory solution more than twenty-five years after the war. Part of the reason is that the built environment in the modern era is a composite of public and private property. The state, which presides over the sovereign space of the nation, seeks to govern the population under its purview without controlling absolutely for the production of space. Urban building laws and architectural standards govern what kinds of structures can be constructed legally, but they generally do not dictate the cost of construction or the rate at which a home may be rented. As the cost of construction and the cost of land rise, the rental rate also rises to ensure a net positive return on capital (i.e profit). Consequently, public housing emerges as a spatial intervention that allows the government to intervene directly into the production of homes for certain social ends while controlling for price. What the TMG report identifies in 1972 is that public housing still has a role to play in Japan because it can be used as a mechanism for indirectly incentivizing the birth rate by creating affordable domestic space for expectant young families. While people up and down the housing ladder (the progression from smaller homes to larger, and from rental to ownership) might be experiencing hardships, the TMG report directs attention to a specific segment of the population. Public housing does not need to be a totalizing solution. It will be most efficient and have the greatest efficacy if it addresses the needs of a target population. For instance, the JHC danchi of the early postwar were meant for those with incomes exceeding maximums under the Public Housing Law, yet unable to purchase a home. The Japan Housing Corporation did not anticipate that everyone would live in a danchi or that its apartments would replace all other forms of housing in Japan. JHC danchi apartment housing was a limited but specific intervention targeting middle income salaried professionals in urban areas who were housing challenged. In a similar way, the TMG report authors propose that public housing going forward should be targeted to young families with relatively lower incomes who were struggling

to make the transition from conjugal couple to childrearing parents.

Space Design and Family Needs

The close connection between residential space design and the production of the family had been a recurring theme in housing literature not only in Japan, but also in England, France, the United States, and a host of other countries dealing with demographic challenges in the wake of the Second World War. Despite a keen awareness of the problem, a satisfactory solution continued to slip through the grasp of housing reformers. The British Ministry of Housing and Local Government report titled *Homes for Today and Tomorrow*, published a year after the JHC's *Umarekuru jūtaku to toshi*, for instance, demonstrated how the space of the home was intimately related to the development of families and influenced human lifecycles in the postwar era. 654 The report was based on an extensive survey of more than 600 homes (including apartments) constructed in England, Wales, and Scotland since the end of World War II. The first three chapters explore "Homes for family needs," "Factors in home design," and "Aspects of living in flats" (apartments), with the summary forth chapter being a recommendation regarding future standards for floor space. Gary A. Boyd has insightfully noted the oddity of the "floating baby" in the drawing at the chapter head for "Homes for Family Needs," observing that "free from the vicissitudes of gravity, [the floating baby] can be viewed as another example in a contemporary spirit of utopian thinking that seemed to equate technology and transparency respectively as the means and essence of modern ways of living."655 An alternative interpretation is that the specterlike child that haunts the space of the home is dematerialized because it represents potential that which is not yet, but may be. As if the proverbial stork has dropped the baby onto a house,

⁶⁵⁴ Ministry of Housing and Local Government, *Homes for Today and Tomorrow* (London: Her Majesty's Stationary Office, 1961).

⁶⁵⁵ Gary A. Boyd, "Parker Morris and the economies of the Fordist house," in *Economy and Architecture*, eds. Jo Odgers, Mhairi McVicar, and Stephen Kite (London: Routledge, 2015), 43.

the child is situated at the intersection of volumetric rooms drawing the viewer's attention to changing spatial needs. The implication is that a household with a child requires more space. The largest volume in the diagram is a rectangle with parents and two children inside—the model nuclear family. This space is juxtaposed, respectively, to a cube in which a couple stands as if expecting a child, a smaller rectangle in which a bachelor sits biding his time, and another small rectangle in which a couple reclines convivially, satisfactorily settled in their present state of domesticity. What this image signifies precisely remains ambiguous. However, in the context of the explanatory text that follows detailing "the relevant ways in which family life influences the size and design of homes," it is possible to interpret the floating baby as the ultimate X-factor—the variable that will determine whether a family expands and needs more space or will be content with occupying a more limited domestic cube. Homes for Today and Tomorrow shows that biological concerns are also spatial concerns because they influence a demand for space.

⁶⁵⁶ Ministry of Housing and Local Government, *Homes for Today and Tomorrow*, 7.

⁶⁵⁷ Ministry of Housing and Local Government, Homes for Today and Tomorrow, 8.

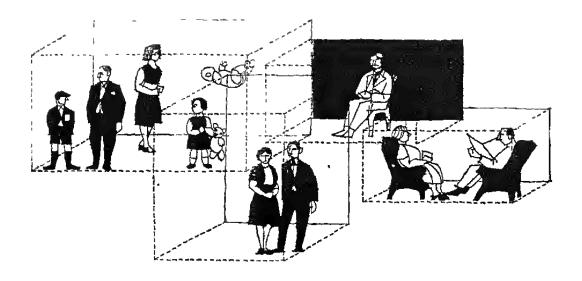


Fig. 51: Floating baby and dwelling space. *Homes for Today and Tomorrow* (1961).

Over and above these biological concerns were subjective considerations endemic to the modern condition. Consciousness that the family unit was constituted by private individuals had, by 1960, created a "desire [among family members] to live their own lives for an increasing part of the time they spend at home." Spaces of social gathering, while not eliminated, did not continuously function as domestic loadstones attracting people from elsewhere to a common center. *Homes for Today and Tomorrow* highlights a need for privacy, noting that "individual members of the family are more and more wanting to be free to move away from the fireside to somewhere else in the home." Despite images of the wholesome family broadcast in the 1960s, such as in the American sitcom *Leave it to Beaver*, *Homes for Today and Tomorrow*

⁶⁵⁸ Ministry of Housing and Local Government, *Homes for Today and Tomorrow*, 2.

⁶⁵⁹ Ministry of Housing and Local Government, *Homes for Today and Tomorrow*, 2. See also, Neitzel, *The Life We Longed For*, xxi. As Neitzel notes, the acquisition of consumer goods in Japan led to similar changes in apartment space design and demands for privacy; "they resulted in the rearrangement of interior living space, changes in household labor, the privatization of activities that were previously communal, and, consequently the transfiguration of relationships within families and communities."

identified the propensity for people to live privately and individually, all while under one roof.⁶⁶⁰ The postwar nuclear family grew up with the free market economy. Neoliberalism as an ideology which valorized the individual as a rational actor best able to judge how to spend their time and effort penetrated the last refuge of togetherness: the household commons of the domestic interior.⁶⁶¹ Reaching inside the home, the invisible hand of the market pointed the finger at parental authority that (like a helicopter government) attempted to hover over and regulate the behavior of individual occupants in these spaces of congregation. While seemingly antithetical, since the metaphor suggests a closeness and togetherness, the so-called nuclear family was well within an ideology of privacy. 662 What the nuclear household represented was the exclusion of relatives, lodgers, and live-in domestic help. The conjugal couple, as well as their children, achieved privacy from their parents (senior patriarchs and matriarchs) at the same time as they asserted a right to independent living among themselves. Domestic privacy busted the tight bonds of lineage, but in doing so it frayed the rope all the way down the line. As much as possible, children were provided their own spaces to sleep and study, while young adults asserted their will in choosing where and how to spend their days within the household.

The JHC danchi interior is a particularly rich example of how, even in a small space,

⁶⁶⁰ Leave It to Beaver was a sitcom created and produced by Joe Connelly and Bob Mosher that aired in the United States from 1957-1963. It projects a vision of an idealized mid-century domesticity: a conjugal couple with two active children. See also Michael B. Kassel, "Mass Culture, History and Memory and the Image of the American Family" (PhD diss., Michigan State University, 2004).

⁶⁶¹ See, for instance, Friedrich A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944), 14. In principle, the kind of liberalism that Hayek advocates for involves the supremacy of the individual, as opposed to a government-directed, planned economy. He says that historically what the growth of commerce allowed for was a system "where men could at least attempt to shape their own life, where man gained the opportunity of knowing and choosing between different forms of life." What I am highlighting here is that while the space of the home is planned or highly determined, it coexists with an ideology of privacy and the individual. Said differently, the planned space of the home is not necessarily opposed to personal choice.

 $^{^{662}}$ It can also be seen how concepts like $sh\bar{u}shin-bunri$ (the separation of sleeping rooms) worked to further atomize members of the family. Collective sleeping, common in the past, was discouraged by the plan of the apartment.

planners tried to achieve a spatial synergy of the seemingly antithetical, but coeval ideas of privacy and togetherness. 663 In JHC *danchi* apartment units, as well as modernized private homes, the dining kitchen anchored the domestic interior serving as a space of surveillance and congregation, while updating the Meiji era concept of the *ikka danran* (family gathering). 664 In the dining kitchen, the housewife could cook efficiently while keeping an eye on the children during the day. Yet, provisioning dedicated space for the dining kitchen and dining table was justified according to the principle of *shokushin-bunri* (the separation of eating and sleeping), which moved eating activities from the *tatami* floor to the dining kitchen's tabletop. In tandem, the concept of *shūshin-bunri* (separation of sleeping rooms) expressed the idea that children should sleep apart from their parents in separate rooms and should be segregated based on gender. 665 While lauded as being morally and socially hygienic, these concepts attempted to influence the congregation and separation of individuals within the household depending on the type of activity being performed.

The leading image in *Homes for Today and Tomorrow* expresses a similar set of concepts by depicting residents performing three types of activities: two people are seated in conversation, a man reclines on an easy chair, and a child studies in an adjacent room. The transparency between the rooms and the dollhouse diorama-like character of the image presents the viewer with a synchronic view of multiple behaviors. Ribbon-like lines snaking throughout the house indicate pathways of movement and flow;⁶⁶⁶ the logic of the market has permeated the space of the household. The message is that the homes of tomorrow, if not the homes of today, should

⁶⁶³ Cf. Neitzel, *The Life We Longed For*, 12.

⁶⁶⁴ See Jordan Sand, *House and Home in Modern Japan: Architecture, Domestic Space, and Bourgeois Culture, 1880-1930* (Cambridge, Mass.: Harvard University Asia Center, 2003), 29. See also "Daidokoro wo koshite benri ni," *Shufu no tomo*, October, 1959, 36.

⁶⁶⁵ See Nishiyama Uzō, *Jūkyo ron* (Tokyo: Keisō shobō, 1977), 17.

⁶⁶⁶ Ministry of Housing and Local Government, *Homes for Today and Tomorrow*, 1-2.

allow for the free flow of bodies and individual choice.

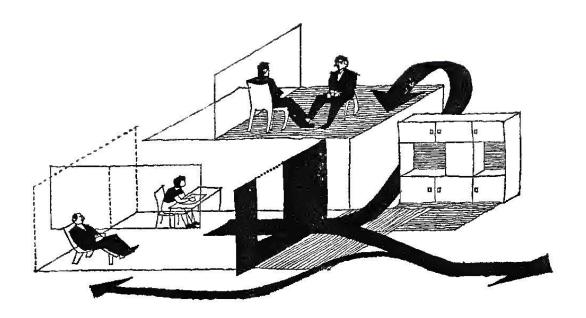


Fig. 52: Pathways of movement and flow. Homes for Today and Tomorrow (1961).

Toward a New Economy of Dwelling

Here the free market functions in a double sense, influencing the cost of residential space and conditioning the experience of people within that space. Houses are not just shelter from the elements, but sites of subject formation. What domestic everyday life refers to is a set of behaviors and practices that are carried out within and around the space of the home. It is not simply the diurnal performance of biological necessity (e.g. eating, sleeping, excreting) because within the bounds of the modern nation-state everyday life characterizes the way in which a person survives at the intersection of economic and biological flows that are socially and politically determined. For this reason, the TMG report necessarily looks beyond the narrow conditions of domestic poverty to housing policy at large. The solution to the housing problem

cannot just be about the quantitative provision of affordable dwelling space, although this is certainly part of it. Solving the housing problem means establishing a new economic framework for dwelling. 667 The reason why the report targets the gaudy mansions and the mythos of home ownership, expressed in Japan by the catchphrase "my own house," is that these are enabled by government policy that supports the expansion of industry and private enterprise at the expense of the community and the environment. The report proposes that "Only a policy that realizes the citizens' affluent living and maintains the natural environment means real wealth."668 What affluence means in this context is a right-sized home that *precedes* the financial prosperity of the tenant. The TMG report's authors propose a home-first housing policy where houses congruent with family needs are a certainty and the basis of urban community, rather than left up to the whims of the market. Such a proposition is firmly anti-neoliberal. A home-first housing policy necessitates strong government intervention and a concrete plan for the future, the very thing that Friedrich Hayek and Milton Friedman, the fathers of neoliberal thinking, would have vehemently opposed.⁶⁶⁹ The TMG report does not shy away from stating its aims clearly, saying that "all responsibilities for housing, [a] healthy living environment and town-making should be handed over to the local authorities. The housing problem will never be solved without the extension of home rule."670 Said differently, domestic affluence cannot be the result of an enterprise-first policy and free market forces. Achieving a "living-first" paradigm involves shifting the power of

⁶⁶⁷ The TMG report goes on to say that, "The city housing inconsistency is a problem arising primarily from the capitalist economic setup, so it cannot be solved without a change in the economic setup." The report criticizes current policy for merely offsetting economic crises immanent to capitalism, rather than working toward a fundamental restructuring of the economic system. See Liaison and Protocol Section, *Tokyo's Housing Problem*, 206.

⁶⁶⁸ Liaison and Protocol Section, *Tokyo's Housing Problem*, 10.

⁶⁶⁹ See Daniel Stedman Jones, *Masters of the Universe: Hayek, Friedman, and the Birth of Neoliberal Politics* (Princeton: Princeton University Press, 2014), 4-5.

⁶⁷⁰ Liaison and Protocol Section, *Tokyo's Housing Problem*, 10.

investment from private enterprises and the central government to municipalities which are better able to plan residential environments at the local level.⁶⁷¹

Taking a leaf from Nishiyama Uzō's work, the TMG report thinly veils its leftist politics in establishing the housing problem as contiguous with the urban condition and the economic contradictions inherent in a capitalist society. While acknowledging that the crisis of shelter has ameliorated since the end of the war, and certainly not unaware that city's high-rise "mansions" allow some to live well, the report asserts that the housing shortage has not been overcome. Inline with Nishiyama's discussion in *Houses and Cities of Tomorrow* (1948), the TMG report aimed to correct the idea that the housing problem writ large was only ever about responding to war damage. The roots of the problem went far deeper into history, making the present celebration of the past twenty-five years look like a spectacle distracting people from examining the housing crisis more carefully. What the report identified as a longstanding problem was uneven development imminent to modern social formations. Unevenness began as "workers reach the cities with nothing, leaving rural communities where they had their own houses and land, and are made to live entirely on wages," the report observes. This characterization of rural to urban migration alludes to the historical development of capitalism in which industrialization and the privatization of land contributed to a fencing off of the commons, dispossessing peasants and forcing them to abandon the countryside for the city where they were made available for capital in the form of waged labor. ⁶⁷² The TMG authors suggest that dispossession and

⁶⁷¹ The TMG report attempts to get ahead of what it views as the further neoliberalization of the housing market in the 1970s and beyond. "There is a sign that the key to continuous growth in the 1970s may be sought in the housing industry...to make a profit on the people's desires for better lives..." Liaison and Protocol Section, *Tokyo's Housing Problem*, 206.

⁶⁷² Liaison and Protocol Section, *Tokyo's Housing Problem*, 4. See also Karl Marx, *Capital: A Critique of Political Economy. Volume 1*, trans. Ben Fowkes (London: Penguin Books, 1990). Chapter 27: Expropriation of the Agricultural Population from the Land describes the historical movement which is also a general tendency of capitalism.

dislocation are not confined to events occurring only in a specific place and time in the past, but are part of a continuous process in the present. They describe a general condition or tendency of modern development. The scope of the problem is, at a minimum, national, bound up with the formation of Japan as a modern nation-state. The report finds that Tokyo is a representative rather than unique case, asserting that the "housing shortage is a feature of all the cities of Japan, from the Meiji era (1868-1912) to the present."673 The time of modern Japan that the report identifies—from 1868 to the present—is significant. It reminds readers that the housing problem in Tokyo cannot be narrowed to the kind of quantitative problem that drove housing policy in the aftermath of war. As the report observes, there are many vacant houses in Tokyo at present, but they are not available at affordable rents. There are also many houses that are mismatched to family size or, as detailed above, prevent families from expanding biologically. The goal of the critique in Tokyo's Housing Problem is to shift the politics of housing away from the idea that any type of house whatsoever contributes to shoring up the shortage of dwellings. Solving the housing problem meant establishing a new economy of dwelling, returning power to local authorities, and solving for social problems endemic to the modern condition. There was hope: a new politics of housing based on the principle of "living-first" would ensure a balanced production of domestic space where residential demand was equal to the availability of rightsized homes.

Overall, the TMG report aims squarely at the conventional narrative that the recent period of high speed economic growth and the trend toward home ownership from the early 1950s to 1970s is indicative of generalized wealth and prosperity.⁶⁷⁴ Contrary to this, the TMG authors

⁶⁷³ Liaison and Protocol Section, *Tokyo's Housing Problem*, 4.

⁶⁷⁴ See also Asahi shimbun keizai-bu, *Kutabare GNP: kōdo keizai seichō no uchimaku* (Tokyo: Asahi shimbun sha, 1971). Critiques of economic growth were popular in the early 1970s, even before the Oil Shock of 1973.

have identified a "new poverty," something which is not just a matter of money, but of affect. What postwar economic growth has led to is a situation in which "people are constantly discontented while their desires are constantly inflamed."675 Satisfaction is fleeting as people scurry about the city in search of new objects that can fulfill their needs. The "enticing wares on display and the incessant allure of leisure pastimes and automobiles" contributes to a spectacle of commodities that are draining away rising incomes. The report links this consumer condition to the concept of "my own house" showing how home ownership is "infused into the mind[s] of people by newspaper and magazine advertisements."⁶⁷⁶ Frustratingly, it is the visibility of this material abundance that contributes to a sense of dissatisfaction because new production encourages more consumption. It is not just that "enticing wares" have been produced in response to basic human needs, but that they have been produced to trigger spending. The gap between desire and its satiation is mediated by the commodity and enabled by the yen. Home ownership seems to offer an "escape from the sense of labor alienation and dissatisfaction with life" but it can, paradoxically, contribute to a lower standard of living when people "save money by scrimping even on necessary eating expenses."677 While the home is billed as the crucible of everyday life and a site of matrimonial bonhomie, one has to ask: at what cost is this domestic security obtained?

The TMG report exposes the spectacle of residential abundance for what it is: empty space. Tall buildings pockmarked with hundreds of windows give the appearance of available dwellings, but are full of holes. When people see the mansions growing ever skyward they interpret the stories of the building (the layering of artificial ground) as an index of industrial

⁶⁷⁵ Liaison and Protocol Section, Tokyo's Housing Problem, 5.

⁶⁷⁶ Liaison and Protocol Section, *Tokyo's Housing Problem*, 5.

⁶⁷⁷ Liaison and Protocol Section, Tokyo's Housing Problem, 5.

productivity. Yet, the production of space is not tantamount to its equitable distribution. It is true that many new residences have been produced since the end of the war, but these homes are not available to everyone. The report suggests that at a high level, apartment space, like a detached single-family home, is a kind of economic enclosure. A house is a physical space that is lived in, but also the manifestation of an investment and a site of accumulation. Those who have built apartment space (the owners of capital who make housing available for rent) have done so according to certain lending arrangements. They do not want to rent space cheaply because doing so would mean letting the unit beneath the cost of capital.⁶⁷⁸ In the current market framework that the report identifies, such a practice would neither be economically efficient, nor would it be socially appropriate. Renting a space for less than the so-called market rate contributes to the perception that the value of the home is diminishing rather than increasing. This leads to a confounding, but common, conundrum in which homes remain vacant as owners hope to woo a renter who can pay at or above the going rate. The vacant home is a counterintuitive, yet real situation in which it is more economical for the owner of property to leave a dwelling uninhabited, rather than lock in a new tenant at a cheaper rate.

For the contrarian authors of the TMG report, "my own home" is not a positive trend.⁶⁷⁹ Rather, it is indicative of a dialectic of desire imminent to the modern subject. The owned home is situated at the midpoint between a feeling of dissatisfaction generated by the alienation of labor under capital and the anticipated fulfillment of desire through material possession. "My own home" is made to seem like a destination, a safe haven and an escape from the work routine. Framed in this way, it is more than shelter or a site to regenerate labor power because it exists as

⁶⁷⁸ See also Daniel M. Abramson, *Obsolescence: An Architectural History* (Chicago: The University of Chicago Press, 2016), 24-25. Here this principle is carried even further and it results in the destruction and rebuilding of space that can capture the appropriate economic rent.

⁶⁷⁹ Cf. Neitzel, *The Life We Longed For*, 123.

an affective antipode to the workplace. "My own home" is invested with a sense of psychological well-being, it is a psycho-physical space of habitation that defies precise quantification. Relators have taken advantage of this feeling by fanning the flames of desire with seductive advertisements, while central government officials simultaneously bashed the public projects. The TMG report fired a shot across the bow of this juggernaut of desire, blasting the idea that "my own home" is a transhistorical want that all people aspire to:

"Opposing publicly built urban houses [to 'my own home,'] government officials in charge of housing policy always say, 'people want their own houses with gardens, so we should meet this.' Some housing experts chimed in too, saying, 'the love of an individual house with a garden is innate in the Japanese.' These are nothing but fallacious arguments. The desire for an individual house is not at all characteristic of the Japanese; rather it is a trend that developed ten years after World War II. In prewar days most workers lived in rented houses."

This is not to say that public apartments, as they then stood, were objectively better than "my own home." The report observes that public apartments were often smaller and less amenable than "my own home," but that the reason for the gap was a lack of investment in public projects. The report criticizes the Government of Tokyo for paving over waterways and infilling Tokyo Bay in an effort to build roads, factories, and office buildings at the expense of better and more equitably distributed housing. Although the population continued to concentrate in Tokyo, the city did not build enough units of public housing (only 6,000 per year) and failed to secure land for housing that could establish a close relationship between the dwelling unit and the surrounding living environment. The problem was not that *danchi* apartments as a form of public housing were defunct by 1970, but that investment in *danchi* did not go far enough. The relative smallness of a *danchi* apartment unit and its distance from the center of the city were

⁶⁸⁰ Liaison and Protocol Section, *Tokyo's Housing Problem*, 7.

economic problems, not ones of architecture and engineering. The size of the unit was primarily a function of the cost of construction, site acquisition, and lending rates. More spacious *danchi* apartments located in central urban areas could have been produced with greater government subsidy and more conscientious investment. This unrealized possibility vexed the TMG report authors.

The renewed emphasis on the living environment in the early 1970s can be seen within the context of a growing global recognition that industrialization and the proliferation of pollution were having deleterious effects on the natural environment. However, controlling the space surrounding large-scale apartment complexes had been a planning objective since the early postwar. The authors' proposal for a better relationship between the dwelling unit and its surroundings draws close to Ikebe Kiyoshi's 1946 plan for Shibuya Ward, where apartments, community services, transportation, and green space found the urban center itself. What is meant by the "living environment" in this context is less a nature-first and more a people-first development. It is a deeply anthropocentric idea, centered on a belief that public projects could be designed to regulate both the domestic unit and the surrounding environment in equal measure so as to harmonize their ability to maintain human life. Mitigating pollution was a bonus, but it was not the central objective. As the activities of the Japan Housing Corporation attest to, emphasizing the pleasant living environment achieved through public projects went hand in glove with the production of more housing units. Taking the long view, it is possible to see that

⁶⁸¹ See also Kevin H. Richardson, "Scientific Wastelands and Toxic Utopias: The New Environmentalism of 1970s Japan," (Ph.D. diss., University of California, Los Angeles, 2020), https://www.proquest.com/dissertations-theses/scientific-wastelands-toxic-utopias-new/docview/2388759006/se-2?accountid=14512. See also Donella H. Meadows et al., *The Limits to Growth* (London: Earth Island, 1972). As stated in the introduction the "intent of the project is to examine the complex of problems troubling men of all nations: poverty in the midst of plenty; degradation of the environment; loss of faith in institutions; uncontrolled urban spread; insecurity of employment; alienation of youth; rejection of traditional values; and inflation and other monetary and economic disruptions."

Tokyo's takeover of the Kanto Plain, in which forests, farms, and waterways were plowed under, was greatly enabled by public projects like *danchi* apartment complexes and new town development.⁶⁸²

Beyond the Housing Shortage

In spite of the government officials cited in the TMG report who attempted to delegitimize public housing and divert public investment to "my own home," the JHC continued to press its case that it was a capable home builder. By the 1970s, the Japan Housing Corporation was attempting to shift the narrative of its projects, adjusting for a significant amount of home building since the war. It also needed to advocate for its continued relevance as an institution and justify further interventions into the metropolitan built environment. By 1975, the JHC was in the awkward position of trumpeting its achievements while finding a way to argue that there was still more work to be done. As noted in a then contemporary JHC report, the Statistics Bureau of the Prime Minister's Office observed that, numerically speaking, the housing shortage had been resolved. There were now 31,060,000 dwellings in Japan compared with 29,100,000 existing families. 683 This statistic is both impressive and misleading. In one sense, this is the fulfillment of the *sengo no jūtaku mondai* (postwar housing problem) that was initially conceived of as a lack of 4.2 million dwellings after the war. Not only had the deficit of dwellings been dealt with, but there was a surplus of 960,000 dwellings. In another sense, this statistic is a gross

The Kanto Plain is a relatively flat expanse (16,000 square kilometers) of land extending from Tokyo westward toward the central mountain ranges. This area has been steadily growing in population since the early 1600s, but much of the urban development has been in the 20th century, particularly in the postwar period. For a brief overview of the geography, see The Editors of Encyclopedia Britannica, "Kantō Plain," *Encyclopedia Britannica*, October 12, 2015, accessed August 1, 2021, https://www.britannica.com/place/Kanto-Plain.

Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements* (Tokyo: Japan Housing Corporation, 1976), 10. This pamphlet lacks precise publication information. The citation given above conforms to the information currently registered in the WorldCat database. See also, Neitzel, *The Life We Longed For*, 119.

oversimplification. The high-level tabulation (31 million homes) does not account for the uneven distribution of dwellings and the population within national space. Families from anywhere cannot be plugged into a home somewhere. Demand for dwellings was greater in metropolitan areas like Tokyo and Osaka where office buildings and jobs were being created in in large numbers. The problem, which is more apparent today with the so-called *akiya* (or empty house) phenomenon, is that rural depopulation led to vacancies that have no chance of being filled. As the domestic population becomes more concentrated along the coasts and in urban areas, empty homes in the hinterlands lie fallow. What *akiya* signifies is a problem in the economy of space: the availability of dwellings is not tantamount to their equitable distribution. The demand for dwellings tends to be greatest in places where the need for industrial and commercial labor is also high, as the TMG report indicated. The reason why municipal and the JHC apartments remained relevant to housing activities in 1970, when their postwar mandate seemed to be at an end, was that the housing problem was continuously reproduced by the tendency for labor to concentrate near centers of commerce and industry.

The JHC report notes that, despite the fullness of 31 million dwellings, there were, remarkably, 10,030,000 families or a third of all families in Japan, expressing "difficulty in having access to housing" in the early 1970s. The JHC report says in no uncertain terms that "although the Japanese people's consciousness about their living and their desires had become sophisticated due to the rises [sic] in their income and living standards, the prevailing housing standards remained retarded and therefore have yet to satisfy the need."⁶⁸⁴ The consciousness of rising standards of living made visible in the fancy mansions advertised by relators, contributed to the desire for something new and better: more space and "my own home." Said differently,

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⁶⁸⁴ Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements*, 10.

difficulty in accessing housing voices a concern over the uneven distribution of dwellings. The modern condition identified by the JHC in 1975 is similar to what Engels had observed more than a century earlier. The contemporary problem, the JHC notes, is that "The excessive concentration of population and industry has resulted in densely aggregating [sic] existing urban areas, thus leading workers in many urban spheres to puzzle their brains over the worsened environment, spiraling rises in rent, long-distance commutation [sic] and the quantitative lack of housing." Could *danchi*, as a technology of dwelling, solve for the equitable distribution of dwellings?

By the 1970s, *danchi* as a form of public housing, including those built by the Japan Housing Corporation, were associated with urban sprawl and long commute times.⁶⁸⁶ Longer commute times were symptomatic of the rising cost of land that increasingly pushed JHC housing further and further out as the Corporation attempted to maintain affordable rents in the face of increased development expenses. Cheaper land was found on the metropolitan fringes, rather than at the city center. That *danchi* were not built closer to places of work was less a matter of shortsightedness on the part of planners and more a concession to financial arrangements.⁶⁸⁷ Despite the tremendous production of public apartments since 1945, municipalities like Tokyo generally favored commercial land arrangements at the expense of public projects. In directly confronting uneven development since the end of the war, particularly that which occurred during the period of high-speed economic growth from the latter 1950s through the 1960s, Prime Minister Tanaka Kakuei attempted to find a middle ground between

⁶⁸⁵ Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements*, 10.

⁶⁸⁶ Neitzel, The Life We Longed For, 116.

⁶⁸⁷ Ever since the experimental housing project at Takanwa, which demonstrated the viability of postwar concrete apartment *danchi* in the heart of Tokyo, *danchi* were constructed further and further away, extending out as far as 40km from the city center.

economic efflorescence and land management. While well intentioned, Tanaka's 1972 plan to "remodel the Japanese archipelago" and bring "balanced economic development extending to every corner of [Japan]" had disastrous consequences for housing. Contrary to its aims, the plan triggered speculative investment in land and sent prices soaring, contributing to even more adverse housing conditions. As seen in the JHC report, Tanaka's plan was not the first time such a policy had been attempted. The JHC characterized the five-year period between 1965-1969 (inclusive) as being one in which "the extraordinarily spiraling rises in land princes caused by the so-called Japanese Archipelago reform policy...made it increasingly difficult for the Japan Housing Corporation to carry out housing projects. The conflict between land as a store of value and the construction of affordable housing was a battle that could not be won by policy alone.

Economies of Space

Superficially, it would seem that because Japan is an island nation limited by the Pacific Ocean and the Sea of Japan that the cost of land is naturally high. In reality, such a limit exists not only for Japan, but for any post-imperial nation-state.⁶⁹⁰ What is sovereign space if not an island of land among other islands of land? Under such conditions, land is always already scarce because it is always already limited by the nation form.⁶⁹¹ As it appears to individuals, corporations, and state institutions, land is mediated by a marketplace. Parcels are divided up, sold off and, in effect, the space of the nation becomes further territorialized according to the

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⁶⁸⁸ Naohisa Goto, "Rethinking the Value of Land in Twenty-First Century Japan," *The Tokyo Foundation for Policy Research*, last modified September 12, 2018, accessed May 19, 2021, https://www.tkfd.or.jp/en/research/detail.php?id=679. See also, Neitzel, *The Life We Longed For*, 118.
⁶⁸⁹ Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements*, 15.

⁶⁹⁰ By post-imperial, I am referring to the situation in which a nation-state maintains relatively stable borders and is not necessarily concerned with an overt politics of territorial aggrandizement.

⁶⁹¹ The nation frames an economic enclosure within which specific laws, monetary policies, and usage patterns exist. In practice, people do not have unlimited rights to land.

designs of small sovereigns (owners of land). Ownership or the right to use land is also the right to prevent other people from using that land as they please. In this sense, what the people of any nation confront is not so much a scarcity of land, but an economy of space. The problem for public housing in Japan is that the state operates within this marketplace for housing right alongside private individuals and corporations. While the state virtually maintains sovereignty over national space, private property is the limit of its power.⁶⁹² The Japan Housing Corporation and municipal authorities needed to abide by the rules of the game and could not build housing in an authoritarian manner that ran roughshod over private property whenever and wherever they chose. The paradox of postwar development was that the privatization of space and the concentration of the population in metropolitan centers drove the cost of housing production up precisely in the places where it was most needed. While Prime Minister Tanaka's plan aimed directly at the erroneous belief that scarcity was purely a geographic concern, noting in 1974 that "Japan still has plenty of land," he missed the point that the TMG report was trying to make: any serious attempt to address the housing shortage could not be just about reallocating space; it had to address fundamentally the economic framework that housing was situated in. As Goto Naohisa has argued, the focus should be on the "utility value—not the exchange value—of the land." In other words, the use of land within a given social structure should take precedence over the ability of the land to serve as a store of value. 693 In an economic system where exchange value trumps use value, land functions just like any other kind of commodity, serving as the medium of transference between two parties irrespective of what it holds (e.g. a house, a school, or an office building).

⁶⁹² Even in cases where the government exercises eminent domain, some form of compensation for property is expected.

693 Naohisa Goto, "Rethinking the Value of Land in Twenty-First Century Japan."

Well before the 1973 Oil Shock, the Japan Housing Corporation and municipal housing agencies were losing the battle of utility versus exchange value despite concerted attempts to guard against price increases. Since its inception in 1955, the Japan Housing Corporation had paired land development with rationalized construction techniques in an effort to control the two biggest costs in housing development: land and labor. This led to the standardization of apartment units and helps explain the scale of danchi apartment complexes. Expansive parcels of land developed for apartment housing achieved economies of scale; houses could be supplied quantitatively, while rents remained affordable. Yet, in its attempt to design for utility, the JHC employed the very financial and industrial techniques that it intended to correct for. JHC danchi apartments became trapped in an endless cycle of innovation that attempted to continuously offset rising prices though more efficient production and higher land utilization. By the mid 1960s and early 1970s, the Japan Housing Corporation's cost mitigation strategy pushed it to participate in the development of new towns and the construction of mammoth apartment complexes. This meant more land and taller apartments.⁶⁹⁴ Residential cities like Senri New Town and Tama New Town were supersized *danchi* that attempted to plough under ever larger parcels of land (3,000 hectares in the case of Tama New Town) for apartment housing and adjacent community services, while controlling for speculative price increases. As the JHC report notes, Tama New Town was developed at the intersection of Tama, Hachiōji, Machida and Inagi cities "To cope with a constant shortage of land and aggravating urban sprawl in the Metropolitan Capital Region."695 It was located 30-40 kilometers from the center of Tokyo with a prospective population of 410,000. Similar to large-scale JHC danchi like Akabanedai, new

⁶⁹⁴ For a detailed examination of new town development in Japan, see Michelle L. Hauk, "Postwar Residential New Towns in Japan: Constructing Modernism" (M.A. thesis, Washington University in St. Louis, 2015), https://openscholarship.wustl.edu/samfox arch etds/1/.

⁶⁹⁵ Nihon jūtaku kodan, Japan Housing Corporation and Its Achievements, 2.

towns attempted to wrap services like primary schools, childcare centers, and medical facilities around the residences in order to ensure convenient access to institutions that could support youth development. Places like Tama New Town were far from the center of Tokyo, but this is only one metric by which they may be considered. The distance to the center was likely to be felt most acutely by male workers who were compelled to make a diurnal journey to the office. The commute was gendered, with the burden resting squarely on the shoulders of laboring husbands. In large scale *danchi* and in new towns, commuting time for female housewives was greatly reduced to the degree that more services could be situated in proximity to residences. The time saved in commuting to distant markets, hospitals, and schools was redeployed to housework and child care. 696 This is not to say that housewives worked any less than their husbands—likely they worked more—but that the pattern of movement was considerably influenced by the design of the residential community. The primary difference between JHC danchi and new towns was that new towns allowed for a wider range of institutional underwriters and more diversity in building types, incorporating single family homes as well as JHC built apartment complexes. Senboku New Town, situated 20 kilometers from the center of Osaka and 10 kilometers from the center of Sakai city, for instance, was a joint effort of "various bodies such as the local government, local housing corporations, and the Japan Housing Corporation." In all, the JHC was responsible for 9,400 units in Senboku out of a total of 56,000 units designed to house a projected population of 190,000 residents.⁶⁹⁷

In addition to the spatial expansion of housing sites, the height of apartment buildings also increased beginning in the mid 1960s. These increases were enabled by the Urban Building Law of 1963 that relaxed the building height limit of 31 meters established in 1919. By itself, the

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⁶⁹⁶ Hauk, "Postwar Residential New Towns," 70.

⁶⁹⁷ Nihon jūtaku kōdan, Japan Housing Corporation and Its Achievements, 4.

law does not account for why buildings actually got taller during this period. It merely allows for such a possibility. As Carol Willis has observed in Form Follows Finance, the height of high-rise buildings is strongly correlated to underlying financial arrangements. Willis notes that even back in 1900, Cass Gilbert (who designed the Woolworth Building in New York) described a skyscraper as "a machine that makes the land pay," while "George Hill, an authority on commercial real estate, explained in The Architectural Record: 'An office building's prime and only object is to earn the greatest possible return for its owners, which means that it must present the maximum of rentable space possible on the lot, with every position of it fully lit."698 It follows then that as the exchange value of land increases, the occupying structure must increase its rentable space to ensure a net positive return on investment. One may here observe that while an exchange of land occurs in the instance when a buyer and a seller meet, an office or apartment building must function continuously on the land. The problem with a small and less efficient structure is that the owner can only increase revenue by raising rent or cutting service costs. In the case of the Japan Housing Corporation, which aimed to achieve affordable rents for the middle-income group of urban workers, building heights tended to rise as land prices increased. Increased height meant more rentable space that was vertically distributed. For this reason, building heights tend to be taller toward the center of metropolitan areas and around transit hubs, not only because demand is higher there, but because that is where the cost of land is also highest. JHC city apartments (shigaichi jūtaku) took the form of towers where it was not possible develop a large-scale danchi. Where it could, as in the case of the Takashimadaira Danchi, the JHC tried to combine both approaches. *Danchi* remained a useful residential technology into the 1970s because they were a horizontally and vertically scalar community form that attempted to

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⁶⁹⁸ Carol Willis, *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago* (New York: Princeton Architectural Press, 1995), 19.

account for both more costly land and the swelling population of the metropolitan region.

While it was true that some *danchi* dwellers on the peripheral areas of Tokyo, as in Tama New Town, continued to face a lengthy commute to the center of the city, the Japan Housing Corporation did develop *danchi* with an eye toward swiftly moving people (mostly male workers) from home to office. Far from being in any kind of decline by the early 1970s, the Japan Housing Corporation was to build the mammoth of all mammoth danchi. The Takashimadaira Danchi, constructed in 1973, was the largest JHC danchi ever built. It had a total of 10,170 units, with 8,287 for rent and 1,883 for sale. This mammoth was born with help from the Land Readjustment Program of 1966 and the Urban Building Law of 1963, which enabled the redevelopment of land and allowed for more building height. Takashimadaira was located 15 kilometers from the center of Tokyo on 332 hectares of formerly agricultural land. The population density of the development was determined in advance with a maximum of 180 persons per hectare yielding a total population of not more than 60,000 persons.⁶⁹⁹ Contrary to negative appraisals amplified by newspapers and magazines, it was not categorically the case that JHC danchi condemned people to horrendously long commutes or that nothing was being done to address the double need for both housing and quality of work-life. Responding to concerns over commuting times, the JHC and local government took steps to bring the subway to the danchi. The Tokyo Metropolitan Subway Line Number 6, for instance, was scheduled to run between Takashimadaira and the center of Tokyo with an anticipated one-way journey of just 30 minutes.

Aesthetics of Obsolescence and the Politics of Progress

If early postwar *danchi* apartments appeared increasingly inferior to high-rise mansions

⁶⁹⁹ Nihon jūtaku kōdan, Japan Housing Corporation and Its Achievements, 6.

and the JHC's mammoth projects of the early 1970s, much of this was due to obsolescence, rather than fundamental defects of design. Obsolescence is another way to understand the process by which increases in the standard of living occur. It reframes progressive development as the sequential delegitimization of prior forms. As it applies to the built environment, obsolescence was a term adopted in the early 20th century by the real estate and commercial building industry in America to denote "changing technology, economics, and land use, in which the new would inevitably outperform and devalue the old." By the 1960s, obsolescence had "become ubiquitous worldwide in architectural thinking [as] a dominant paradigm for understanding change in the built environment."⁷⁰⁰ James Marston Fitch, for example, has pointed to the way in which industrial production which calls for the annual model or yearly iteration of standard unit design is part and parcel of "the throwaway city." Changes in design contribute to waste as production from prior years is discarded. The concept is easily visible in the automotive industry in which car models are updated yearly, while earlier models are deprecated and sent to the junkyard. The reason for automotive obsolescence is less that old cars case to work and more that the production cycle drives demand for new units by framing technical iteration as desirable technological progress. The visibility of new features like traction control, power steering, and air conditioning contribute to a desire for the new and a dissatisfaction with the old, even though all cars are essentially a box on wheels. While new features are billed as satisfying a need, they also induce demand—want of new features is a reason to buy the car beyond its basic utility as a means of transportation. The superimposition of technological innovation and cycles of production contributes to the perception that what is

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⁷⁰⁰ Daniel M. Abramson, *Obsolescence: An Architectural History* (Chicago: The University of Chicago Press, 2016), 3.

⁷⁰¹ Abramson, *Obsolescence*, 3.

produced in time is not only new, but also better. Capital regenerates itself as products appear to advance. Metaphorically speaking, the process of capital regeneration and technological advancement is akin to a spring or corkscrew in that the rings (cycles) are not truly closed but ascend into the next ring in an upward spiral. While the spring rises in physical space, capital cycles "rise" in time (i.e. they proceed chronologically). As Daniel Abramson has observed, "obsolescence as a process is almost by definition fundamental to capitalism. In the basic progression of money turned into commodities for sale, turned into more money to make more commodities—the endless cycle of M-C-M'—the old must give way to the new, or the process of accumulation fatally seizes up."703 In other words, what sits between capital (M) and more capital (M') is the thing being sold, the commodity (C). If nothing is sold (exchanged) the capital cycle cannot continue. Because private individuals retain the freedom to choose what to buy, producers must stimulate demand for their particular product by appealing to a consumer's sense of satisfaction. This might be characterized as the D-C-D' cycle: desire (D) → commodity (C) → new desire (D'). It is not just that the commodity mediates the exchange between money and more money, but that the appearance of new commodities triggers desire. The commodity mediates between one desire and the next, while satisfaction remains elusive. In this sense, commodities not only have a use value or an exchange value, but also a desire value. The superimposition of D-C-D' onto M-C-M' explains why people are not only dissatisfied with the old but continue to buy even when they already in possession of an object with a definite utility. 704 Viewing danchi within the structure of obsolescence helps explain why the trendsetting

⁷⁰² My thanks to Tatiana Sulovska for pointing out the usefulness of this metaphor.

⁷⁰³ Abramson, *Obsolescence*, 6. See also Marx, *Capital*. Discussion of M-C-M' in Chapter 4: The General Formula for Capital.

⁷⁰⁴ In both D-C-D' and M-C-M' the commodity is king. It is what mediates between both capital and desire.

2DK apartment and four-story reinforced concrete buildings of the late 1950s seemed outmoded a mere twenty years after their invention. Critics focused only on the style of the apartment building in explaining why they are no longer preferred tend to overlook these economies of desire. As detailed above, the TMG report calls out the way in which the desire cycle (D-C-D') functioned over and above capital cycle (M-C-M') in the home building industry when it observed that real estate agents were pumping up mansions and "my own home," while government officials were simultaneously bashing the public housing projects as things of the past.

The Japan Housing Corporation was caught between a rock and a hard place—situated between public housing reserved for people with low-incomes and private home builders. This meant that the JHC needed to thread the needle between affordability and amenity, making its units desirable while pricing apartments for those in the medium-income group. In the early to mid-1950s, when mortgage and lending markets were still recovering following economic disruptions caused by the war, the Japan Housing Corporation and local governments possessed sufficient capital to bring *danchi* apartments to market at a time when comparatively few private apartments and modernized houses existed in urban areas. In the following decades, as the metropolitan built environment filled in with apartments and reformed single-family homes (those with dining kitchens, stainless steel sinks, etc.), early postwar danchi began to appear outdated, even though they had been at the forefront of this modernization. Rectilinear apartment blocks that lacked ornamentation and exuded industrial efficiency exemplified modernization of the urban built environment in the early 1950s, but no longer appeared new by 1970. This aesthetics of obsolescence was not merely a matter of style or simply attributable to the proliferation of alternatives and the rhetoric of "my own home." Technical iteration and

technological innovation within the JHC's own production framework led to obsolescence. The JHC's own functioning as a capital-intensive producer of housing led to the sequential dating of models built in prior years. Over time, new JHC *danchi* apartments got better (more space, improved amenities) not worse. At the same time, the concrete apartments of the recent past appeared prematurely aged. The spartan outward appearance of the buildings tended to cast *danchi* apartments as unchanging monoliths, when in reality the JHC was busily updating its models and regenerating capital.

While the Japan Housing Corporation was in principle a public corporation and not a for profit company, it still needed to convert capital into housing and back into capital. It did this by renting apartments or selling them through structured installments that functioned like a mortgage. The diagram below illustrates the complexity of the Corporation's capital regeneration cycle. The two circles regulating the flow of money are, respectively, the JHC headquarters (small circle) and the JHC branch offices (large circle). Capital proceeds from government and lending institutions in the upper left to payments for construction and operations on the right, through rent and installment payments on the bottom.

資金循還の概要

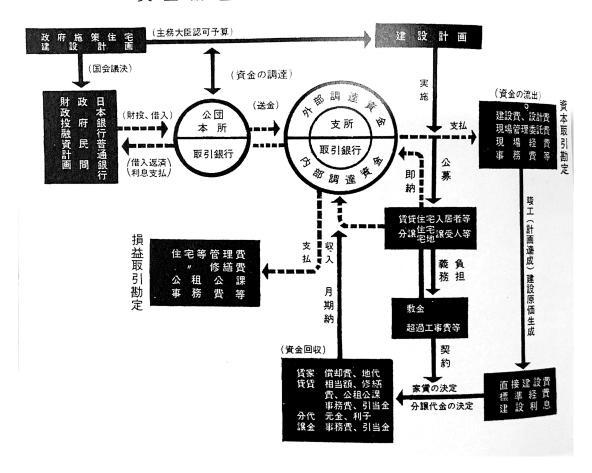


Fig. 53: Capital Regeneration Cycle, Japan Housing Corporation⁷⁰⁵

Because the JHC could not compel people to live in its apartments (or buy its product) it too leaned heavily on marketing and advertising to make its units seem desirable. As demonstrated in the preceding chapters, the JHC not only built apartments but talked them into existence by extolling the benefits of its modernized apartment layouts and praising the community form of its danchi. 706 For instance, JHC apartments were billed as cutting edge and

⁷⁰⁵ Kōhō shingikai iinchō, Nihon jūtaku kōdan nagoya shisho: '63 jigyō to keikaku, (Nagoya: Nihon jūtaku kōdan nagoya shisho, 1963), 5. ⁷⁰⁶ See, for instance, Nihon jūtaku kōdan, *Danchi e no shōtai*, 1960. In this film a young couple visit

as eminently suitable for childrearing. The overlay of capital and desire in JHC *danchi* apartments meant that although it was a public corporation, the JHC participated in the very economic framework that it consciously tried to correct for. The *danchi*-modern was an aesthetic, not a fixed state of being; it was indicative of a continuous process of modernization that persisted from the inception of the corporation in 1955 to its dissolution in 1981. Obsolescence was imminent to JHC *danchi* production. In its effort to remain competitive and affordable as a provider of housing, the JHC contributed to, rather than eliminated, unevenness in the domestic built environment.⁷⁰⁷ Much like the relators and government officials that the TMG report criticized, the JHC also capitalized on both technology and desire.

Raising the Standard: Floor Plans and Equipment

Since its establishment, the Japan Housing Corporation had deeply integrated the logic of mass production and technological development into its building process. Standardization and yearly iteration of unit design were part of the JHC's operational dynamic. Recent reports produced by the Urban Renaissance Agency (UR), the successor to the JHC, detail the yearly technological improvement of equipment, fixtures, and unit design in JHC apartments. The UR 'ING 機—Ki report gives a chronological overview of successive design changes, illustrating how the JHC's own research and development activities contributed to material improvements in the standard of living. For example, the 'ING 機—Ki report shows the evolution of the bathtub within Japan Housing Corporation units beginning in 1955. The diagram below maps these changes chronologically, detailing how the 1955 mokusei yokujō (wooden bathtub), labeled "A,"

acquaintances in a JHC *danchi*, simulating a day in the life of an apartment dwelling family.

The reason why older *danchi* persist when they might be renewed is a function of long-term depreciation costs that were used to establish rent and affordability which could range from 50-70 years, as well as the reluctance of tenants to move out. Renter rights are comparatively strong in Japan.

compares to the $1965 h\bar{o}r\bar{o}$ yokus \bar{o} (enamel bathtub) 800-series, labeled "B," and the 1975 enamel bathtub 1100-series, labeled "C." The diagram shows that the size of the tub also increased over time from the 800-series' dimensions of 800x700x550mm, labeled "D," to the 1100-series' 1100x720x550mm. Text to the left of the chronology explains the increase in size by noting that the 1100-series was designed for 1.5 persons. The tub was enlarged in response to the belief that "kodomo to issho $ni = komyunik\bar{e}shon$ " (parent and child together = communication). In other words, the tub was seen as a site for social interaction between parents and children. The larger tub served as a shared space for family bathing, bringing family members into contact while maintaining privacy vis-à-vis the outside world. 708

Fig. 54: Development of in-unit bathtub since 1955. UR Agency, 'ING Report—Ki (2011).

⁷⁰⁸ The men seen in the lower left of the image are models used to determine the size of the tub, taking into account different male body heights.

In the early postwar years, wooden bathtubs in JHC units were a substantial upgrade compared to municipal apartments and other urban homes. In the 1950s, bathtubs were not an expected feature of small-scale houses and many people bathed at sentō (bathhouses) located outside the residence. While sentō provided sites where residents could mingle and where class differences communicated by clothing were left in the locker room, they demanded considerable energy on the part of the housewife. The in-unit bathtub responded not just to a demand for ablutionary privacy, but to a demand for convenience, saving time and energy by bathing in one's own home. These modern marvels were not without their risks. The wooden bathtub, for instance, required that residents ignite a gas burner under the tub for hot water. As the JHC promotional video An Invitation to the Danchi (danchi e no shōtai, 1960) demonstrates, residents needed to be mindful of the wooden tub's gas fixture because if the window was not open for proper ventilation, residents might accidentally asphyxiate themselves or one of their children while taking a bath. 709 By the 1970s, the JHC discovered that it could integrate the bathtub's hot water heater into a central exchanger that no longer required user intervention. The new unit was not only safer, but more convenient. Lighting fixtures, toilets, kitchen counters and cabinetry also underwent a similar evolution. Within the context of this continuous development, the much lauded stainless steel sink can be seen as just one among the JHC's many home innovations. The stainless steel sink, like the wooden bathtub, was one of the JHC's early innovations that served as a talking point in the Corporation's pamphlets and histories. It was easier for the resident to clean and made possible by standardized mass production. Compared to stone or wooden wash basins, the shiny chrome sink reflected the machine age's mastery over metal. In the Corporation's literature, the stainless steel sink functioned metonymically, standing in for the

⁷⁰⁹ Nihon jūtaku kōdan, *Danchi e no shōtai*, 1960. See, Danchi biyori (Tōkyō: Arubatorosu, 2008), DVD.

JHC's commitment to standardization and mass production.⁷¹⁰

The 1973 3LDK floor plan made its predecessor, the 1955 2DK, seem like a quaint response to postwar housing difficulties. The 1955 2DK was technically small by 1973 and lacked new amenities and safety features. While the 1973 3LDK and the 1955 2DK are testaments to housing progress, they are also proof of obsolescence. Comparing units produced between 1955-1960 (S30-35) to those made between 1970-1980 (S45-55) shows how the once exceptional and trendsetting 1955 2DK was materially inferior to units produced in the 1970s. For instance, the diagrams below juxtapose the wooden bathtub with a user operated gas pilot in the lower left of the S30-35 image to the enamel tub that drew hot water from a centralized exchanger in the lower left of the S45-55 image.⁷¹¹

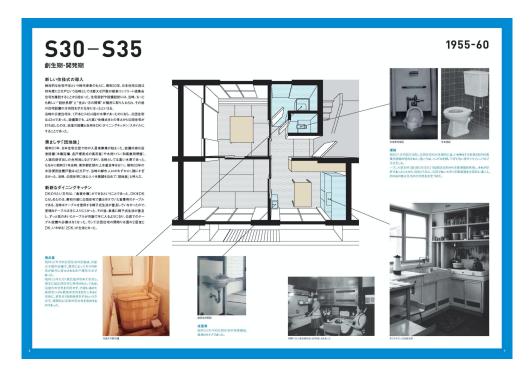


Fig. 55: Japan Housing Corporation 2DK equipment and furnishings 1955-1960.⁷¹²

 710 Nihon jūtaku kōdan, Nihon jūtaku kōdan shi (Tokyo: Nihon jūtaku kōdan, 1981), 14.

⁷¹¹ Fig. 55 and Fig. 56 compare a representative 2DK from the 1950s to a representative 3DK from the 1970s. The 3LDK included an extra room compared to the 3DK, but similar equipment was installed in both. See diagram below for 3LDK floor plan.

⁷¹² UR toshi kikō, 'ING Report—Ki: jūtaku setsubi no hensen to gijutsu kaihatsu (Yokohama: Toshi saisei



Fig. 56: Japan Housing Corporation 3DK equipment and furnishings 1970-1980.⁷¹³

Comparing the 2DK to the 3LDK might seem unfair because the 3LDK includes an extra bedroom and a living room. The comparison was intended. By the 1970s the 2DK was no longer considered adequate for the "standard family." The JHC anticipated that the 2DK, which had represented the space suitable for a "standard family of man and wife with two children," would be superseded by the 3LDK (three-rooms plus living room and dining kitchen) of 100 square meters by 1985. The goal was the quantitative increase in space for the family and more technologically advanced amenities. JHC 3LDK units were better equipped to compete with "my own home" and mansions that were being built throughout the city. Although JHC *danchi* as a

kikō, 2011), 8.

⁷¹³ UR toshi kikō, 'ING Report—Ki, 12.

⁷¹⁴ Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements*, 16, 31.

form of public housing were often talked about in the same breath as municipally built apartments, as seen in the TMG report above, the JHC aimed to constructed desirable urban and suburban apartments, not housing of last resort. By the early 1970s, the JHC was already well on the way to achieving its 100 square meter target for the 3LDK. The diagram shown below illustrates that the 1973 3LDK (84.81m²) is in principle a single family home transposed into the space of the apartment. The living room and dining kitchen (each equivalent to 8-mats) center the house. Adjacent are a 6-mat room and two 4.5-mat rooms. A bathroom, toilet, and four mats worth of closet space are distributed throughout the apartment. The unit has two balcony areas—one adjacent to the dining kitchen and bedroom, and another off of the living room, with a thin ribbon of wraparound space. These balconies provided a modicum of outdoor space attached to the apartment itself, reducing the feeling that one was trapped in a concrete box. They were an improvement over the single balcony that accompanied the 1955 2DK.

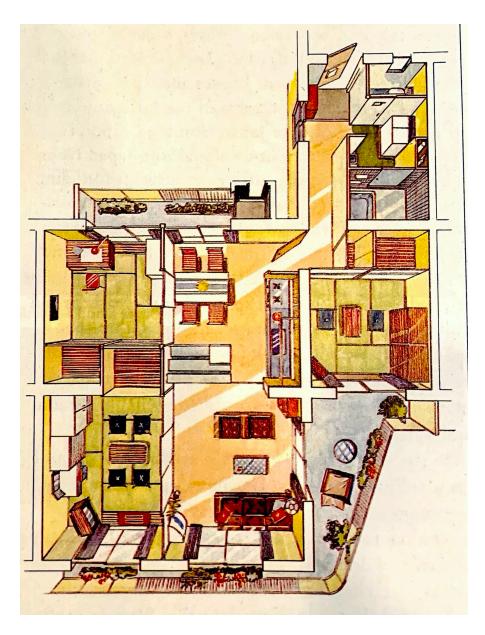


Fig. 57: Japan Housing Corporation 3LDK floor plan for 1973. 715

Standardization as it pertains to the production process does not indicate timelessness. It identifies a model that is serially reproduced to take advantage of economies of scale. These standards evolved in tandem with the means of production. The visibility of new standards in apartment dwellings meant that prospective *danchi* dwellers—the husband, wife and two

⁷¹⁵ Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements*, 30.

children considered to be the "standard family" of the 1970s—were not pining for the early postwar 2DK when the JHC was busy promoting the upgraded 3LDK as the standard-bearer of the Corporation's activities. The dialectic between production and obsolescence shows how the continuous increase in the standard of living tended to reproduce demand, rather than permanently sequester it. In other words, standards were manufactured rather than met in an final sense. The 1973 3LDK responded to the desire for better housing (D') and the dissatisfaction with the 2DK as a commodity (C) that attempted to meet the original desire (D). Narratives of JHC danchi that emphasize the early postwar 2DK, including those developed by JHC historians, rightly acknowledge its epoch making contribution to housing, however, it should also be emphasized that evolution in unit design was immanent to the JHC's production of public housing. Over time, this process of production (and obsolescence) made the previously produced danchi appear smaller and less desirable. The JHC 1973 3LDK was an alternative to the JHC's own product, as much as it was designed to compete with private mansions and "my own home." It was nothing if not timely, now framed as a desirable domicile and the best place to raise children.

Conclusion

The quantitative supply of housing and its increasing scale, both horizontally and vertically, made visible the continued production of domestic space throughout the archipelago in the 1960s and early 1970s. Increases in the standard of living for some led to the devaluing of prior standards, as earlier domestic forms were technically obsolesced by the introduction of more spacious and technology advanced units. This obsolescence had both a temporal dimension and an aesthetic dimension. It was not just the receding of present objects into the past that made them seem dated, but the way in which they were relativized by cycles of production, capital,

and the industrial manufacturing process. This aesthetics of obsolescence functioned in tandem with the appearance of abundance, driving a politics of progress. What a politics of progress refers to here is the way in which the regular progression of chronological time becomes the measure of technological advancement that is produced through the successive output of manufactured goods necessitated by the regeneration of capital (M-C-M'). Obsolescence functions aesthetically by establishing a comparison between past an present production leading to subjective evaluations (and value judgments) that frame one as outmoded and the other as advanced. The aesthetics of obsolescence and a politics of progress could be seen through new forms of production in the 1970s, such as the 1973 3LDK. This logic was not necessarily new, but endemic to the modern condition. For instance, in A Contribution to the Critique of Political Economy (1859), Marx observed that "The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness." Whether one agrees or disagrees with this statement, what Marx was pointing to was the relationship between productive forces, their socialization, and human consciousness. The structure of production conditioned perceptibility or an awareness of the material environment. Obsolescence names this awareness.

As Daniel Abramson noted in *Obsolescence: An Architectural History*, "When planners used it, the term *obsolete* designated substandard housing, health, and especially economic performance in entire urban districts." In the same way that medical knowledge led to an awareness of biological maladies affecting both humans and the city, economic knowledge provided a framework for understanding change in the built environment. Where health

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⁷¹⁶ Abramson, *Obsolescence*, 3.

assessments led to the perception of unfit homes and urban areas, economic assessments led to the perception of obsolete dwellings and neighborhoods. Unfit homes and obsolete dwellings were not just a matter of technical bureaucratic discourse, they were made real when people began to perceive the city in those terms and act according to those perceptions. As detailed above, the production of the 1973 3LDK led to the obsolescence of the 1955 2DK, scarcely 20 years its junior. While the 2DK was a modernized apartment of recent construction it was comparatively devalued by the introduction of a higher standard of living instantiated by the 1973 3LDK, which provided more space and better equipment. As mentioned in the Japan Housing Corporation report, by the 1970s the 2DK was no longer considered the standard for the standard nuclear family of a husband, wife and two children.

The JHC, which was firmly ensconced in cycles of capital reproduction (M-C-M') and operated according to the logics of the scientific management of labor and industrial mass production, contributed to the obsolescence of its own products as much as the rhetoric of "my own home" and the construction of mansions led to a perception of inferiority. The overlay of cycles of desire (D-C-D') on to cycles of capital (M-C-M') helps explain why people continued to buy even when they were in possession of an object of definite utility. In a concrete sense, the introduction of the 1973 3LDK as a new commodity led to a dissatisfaction with the old and a demand for the new. The discrepancy between demand and satisfaction immanent to the production process helps explain why the Japan Housing Corporation recorded that there were 10 million families dissatisfied with their current homes in the early 1970s, despite a nation-wide surplus of 960,000 homes. The very logics and forms of industry that had contributed to

⁷¹⁷ From its inception the JHC produced a range of apartments (e.g.1K, 2DK, 3DK, 4DK). The point here is that while the 2DK was considered adequate for a standard family in the early postwar, by the 1970s the Corporation was pushing the 3LDK as the preferred unit for the standard family.

overcoming the early postwar housing shortage were also perennially reproducing the housing problem. The quantitative supply of dwellings could not overcome changes in demand immanent to technical iteration and technological advancement within the production process itself. This is why the JHC was able to observe that despite the fullness of 31 million homes, there was still demand for housing of a higher standard.⁷¹⁸

What the TMG report pointed out beyond obsolescence-induced demand was the facade of plenty that masked the uneven distribution of dwellings within the national built environment. What the TMG report and the JHC reports speak to is the reframing of the housing problem by the 1970s from the quest to supply at least one unit of housing for every family to a surplus of affordable dwellings that could alleviate housing difficulties, particularly for those in urban areas. The TMG was militant in its critique that quantitative supply was not tantamount to equitable distribution. In Tokyo, there were still thousands of families by the 1970s that were experiencing biological pressure (deciding whether or not to have children) because more domestic space remained unaffordable for them. The TMG report targets the ideology of "my own home" and ritzy mansions as part of a frenzy to sell people on the dream of home ownership and plush urban living without fundamentally addressing domestic poverty. The JHC report shows that while public housing attempted to expand supply while maintaining affordability in public housing, it was hamstrung by operating within the very economic framework that it was designed to offset. JHC housing was mired in contradiction, both producing affordable housing for the middle-income segment of urban workers and contributing to spatial unevenness in the domestic built environment.

⁷¹⁸ Nihon jūtaku kōdan, *Japan Housing Corporation and Its Achievements*, 10.

Conclusion: Rethinking the Postwar Public through Housing

"What is to be done with this human sand, in which individuals and their gestures are stuck together in implacable, abstract blocks and dumped on the edge of the moors..."

—Henri Lefebvre, *Notes on the New Town (April 1960)*

One scarcely needs decades to achieve critical distance from postwar housing estates or to suppose that the present enables a critique that was not in some way possible in the past. As demonstrated in the preceding chapters, individuals contemporary to the construction of largescale apartment complexes were perceptive critics as well as active participants in the planning process. Journalists like Murakami Sachiko interrogated what it meant to live in a danchi, while filmmakers like Hani Susumu and Teshigahara Hiroshi made visible the fantasy of everyday life in postwar public housing. Nishiyama Uzō attempted to fuse architecture and urban design, aiming for a new economy of space after 1945, while Kanō Hisaakira helped corporatize the public construction of concrete apartments. Implicit in these projects is the idea that lived experience not only resides with the residents of apartment complexes themselves, but is shared by those who were party to the production, promotion, and imagining of postwar housing. While asking about how people experienced life in danchi apartments is an important question, it is also important to think about how they were produced? One of the objectives of the present study has been to show that large-scale apartment complexes called danchi were the preeminent from of postwar public housing from the late 1940s through the 1970s. They were rapidly built, planned communities that functioned as machines for living, enabling economic forms of everyday life while promoting a preferential public at the scale of the nation.

The construction of public apartment housing in Japan in the postwar era relied on state capital, corporatized administrative structures, modernized industrial techniques, and the rationalization of everyday life in an effort to deliver affordable dwellings to the lower and

middle-income segments of the urban working population. Builders and administrators like the the Japan Housing Corporation physically produced space, turning forests and farmland into graded residential tracts, while manufacturing ready-made homes for emerging families. The JHC marketed this space as an atarashii furusato—a new hometown that would serve as a crucible for human growth and a receptacle for memory. It anticipated that future adults would reflect fondly on their halcyon days in the danchi built-environment. The hope was that as children moved up and out they would remain psychologically anchored to the physicality of danchi, as much towers in space as castles in the mind. This generational duration of danchi life helped invest scores of spartan concrete blocks with a sense of living-history. The coding of large-scale public apartment complexes built in Japan in the postwar period as "danchi" signifies that they have a discursive life above and beyond their situation as physical structures within the topography of the archipelago. Particularly after Murakami Sachiko's 1958 Shūkan Asahi article interrogating the conditions of everyday life in multistory concrete apartment complexes, danchi became known as a genre of housing and a type of lifestyle. They were as much a type of dwelling as an architecture of everyday life. 720 Danchi in Japan have a specific history, but are also part of a general condition: the global production of housing after the end of World War II

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term implications of *danchi* dwelling by staging a return to the housing complex as a return to the *furusato* (hometown). The film enacts the fantasy of the *danchi* hometown as an anchor for the family. The main character Shinoda Ryōta, played by Abe Hiroshi, is a shabby private detective with a broken family. Unlike Teshigahara Hiroshi's detective in the 1968 filmic adaptation of Abe Kōbō's Ruined Map (1967), Shinoda believes that some kind of reintegration with society is possible and does not abandon modern domesticity for the urban wasteland. What kind of person is Shindoa? The film suggests that he is one of the *danchi-zoku* who has moved up and out, but did not arrive at a better future. He finds his way back to his home in the Asahigaoka Danchi, still kept by his elderly mother. A passing rainstorm forces him to shelter in place with his estranged spouse and their son. The space of the *danchi* becomes a place to reconnect with family and rebuild relationships. Koreeda portrays the return to the *danchi* furusato less as a trip down memory lane and more like running an extra mile in a pair of used shoes. The *danchi* serves to tie the family together, but it is already worn-out and well past its use-by date.

⁷²⁰ See Murakami Sachiko, "Atarashiki shomin 'danchi-zoku': apāto sumai no kurashi no techō," *Shūkan Asahi*, July 20, 1958.

that aimed to bring about domestic security through the structuring of the national community by way of urban apartment housing. As Henri Lefebvre observed of the projects in France, "Every object has been calculated and technically realized to carry out a daily function at the lowest possible cost; it implies a series of actions, and brings them into being."⁷²¹

In the postwar era, housing was politics. In Japan, the national production of public apartment complexes began after 1945 by way of state supported municipal and prefectural initiatives that evolved from experimental projects into standardized forms that could be built rapidly throughout the archipelago. Concrete apartment blocks were a material response to the destruction wrought by the air raids, shifting the built environment from wood to concrete and spacing buildings so as to avoid the dense imbrication of roofs that were so much kindling for fire, but they were also the bedrock on which the postwar public built their domestic future. *Danchi* apartments provided structure to patterns of everyday life decimated by the war and challenged by the Allied Occupation. Concrete apartments were a national postwar project bootstrapped by state planners responding to a demand for *i-shoku-jū* (food, clothing and shelter), the bare necessities of life. They were part of a solution to the postwar housing problem—defined quantitatively as a deficit of 4.2 million dwellings primarily caused by strategic dehousing during the war and the return of more than 6 million people from battlefronts overseas and spaces of empire. The first project, the Takanawa Apartments, a two-building, 48

⁷²¹ Henri Lefebvre, *Critique of Everyday Life Vol. 2*, trans. John Moore (London: Verso, 2008), 78. Originally published in French in 1961.

⁷²² Kensetsushō jūtaku-kyoku, *Jūtaku kensetsu yōran*. Nihon kenchiku gakkai (Tōkyō: 1953), yobun. Totsuka remarks that "It can be said that the stability of national life is predicated on the security of food, clothing and shelter." As of 1953, the quantitative production of fire-resistant housing was a key means of stabilizing everyday life. For Totsuka the structure of dwelling is intimately related to the stability of the state.

⁷²³ Hisaakira Kano, "Public Housing in Japan," *Annals of Public and Cooperative Economics* 30, no. 1 (1959): 76.

unit structure, erected on the grounds of the repurposed Takanawa Imperial Residence in Tokyo, initially seemed like a rounding error in rehousing efforts in 1948.⁷²⁴ Yet, it was from this proof-of-concept dwelling that millions of apartments would be constructed.⁷²⁵ State and local government investment in the technology for a concrete future spurred development in both the public and private housing sector. Financial aid provided by the state was wrapped in the dinner jacket of the law which ironed out who got housing, on what terms, and for how much. The Housing Finance Bank Law (1950), the Public Housing Law (1951), and the Japan Housing Corporation Law (1955), the so-called three pillars of postwar public housing policy, supported, respectively, three publics: 1) those who could afford to finance the construction of their own homes; 2) low-income urban workers and their families; and 3) middle-income professionalized urban workers and their families. These three laws provided for the ongoing financing, construction, and administration of concrete apartment complexes, as well as large-scale housing communities called *danchi*.⁷²⁶

The pattern of *danchi* apartments (rationally spaced, rectilinear housing blocks spread barrack-like across tens, if not hundreds of hectares) made them easily visible as objects within national space. From the late 1940s through early 1960s, many *danchi* apartment complexes were built relatively close to the city center, but as land and labor prices rose and the horizontal scale of the apartment complexes increased, they pushed further out into the metropolitan hinterlands. *Danchi* residents were pioneers of the postwar skyline, living in vertically organized community space at at time when most people still lived in wooden structures of two stories or

⁷²⁴ For more on Takanawa, see discussion in Chapter 2.

⁷²⁵ Takanawa was the first experimental *danchi*-type multistory concrete apartment project of the postwar. While tremendous advancements have been made since, unit design and residential technology for both public and private apartment construction traces back to Takanawa.

⁷²⁶ Cf. Hisaakira Kano, "Public Housing in Japan," 77. Kanō discusses the target constituencies in terms of financing and income.

less. 727 Public apartment complexes were intended to support the householding of young families and able-bodied urban workers who could be both biologically and economically active. As portrayed in the 1952 film A Plan for Youth, apartment complexes operating under the 1951 Public Housing Law helped expand the supply of affordable housing in urban areas, particularly for those in low-income groups. The visual language of the film challenged the idea that lowincome meant poor and that residential poverty was the result of a lack of personal motivation. It portrays an urban public with potential, but stymied by a dysfunctional built environment. Concrete apartments appear as a godsend, saviors of the urban working classes. Produced by the Japan Housing Association (nihon jūtaku kyōkai) with government support, A Plan for Youth showcased novel concrete apartment blocks lacking an overtly Japanese aesthetic as modernized homes capable of fostering family life.⁷²⁸ These modern marvels were not characterized as housing of last resort, but as coveted treasures won by lottery—fully equipped dwellings that could provide privacy and liberate the family from the crowded arrangement of a rented room.⁷²⁹ Responding to demands for more housing by the middle-income segment of the population (those who earned too much to qualify for housing in terms of the 1951 Public Housing Law, but were nevertheless hard pressed to finance their own home in urban areas or near places of work) the cabinet of Prime Minister Hatoyama Ichirō succeeded in passing the Japan Housing Corporation Law in 1955. This law legally authorized the establishment of the Japan Housing Corporation, permitting it to supply rental and owned apartments using a combination of public

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⁷²⁷ Kano, "Public Housing in Japan," 78. Kanō notes that "the average height of Tokyo houses is 1.4 story [sic]," and that "the dwelling construction undertaken by public housing agencies has, therefore, raised the skyline of the residential areas chosen as sites."

⁷²⁸ n.b. the Nihon jūtaku kyōkai (Japan Housing Association) is a similarly named but separate entity from the Nihon jūtaku kōdan (Japan Housing Corporation). The JHA predates the JHC.

⁷²⁹ Like Japan Housing Corporation *danchi*, multistory apartments produced under the Public Housing Law (1951) were also oversubscribed. The lottery system was a seemingly more equitable and impartial way of distributing housing to the many who qualified.

and private funds. The corporation was tasked with developing land for housing (*takuchi kaihatsu*), building large-scale concrete apartments (*danchi*), and city apartments (*shigaichi jūtaku*).⁷³⁰ The Liberal Democratic Party (LDP), established at the end of the year in 1955 through the merger of the Democratic Party led by Hatoyama Ichirō and the Liberal Party headed by Yoshida Shigeru in response to the unification of the left and right wings of the Japan Socialist Party, absorbed Hatoyama's housing program. In the following years, the Japan Housing Corporation helped cement LDP rule by providing residential structure, as well as a model for everyday life, during a time when mass protests, such as the reaction to the revision of the U.S.-Japan Security Treaty in 1960 and the student takeover of the University of Tokyo in 1969, demonstrated that citizens were deeply dissatisfied with the state's direction of the postwar nation.⁷³¹

Rather than the background to spectacular events and high-politics, the production of public housing, particularly of concrete apartment *danchi*, was an event of extended duration that set the foundations for the normalization of postwar everyday life. The production of public apartments in Japan was the primary means of enacting a settlement procedure—a processual politics of housing—that aimed to manufacture residential territory, provide domestic security, and foster the biological growth of the nation. It was largely successful. As Murakami Sachiko noted in her Shūkan Asahi article, already by 1958 almost a million people lived in *danchi* built by local municipalities and the Japan Housing Corporation. For its part, the Japan Housing

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⁷³⁰ Unlike dwellings built under the Public Housing Law (1951), which included those of the wooden type, the JHC almost exclusively built apartments of reinforced concrete or concrete block. Moreover, whereas *danchi* built under the Public Housing Law were constructed by municipalities or prefectures in which they were situated, *danchi* built under the Japan Housing Corporation Law (1955) were constructed nationally. The key difference is that the JHC is a legally authorized public corporation. The Public Housing Law provides for the construction and administration of public housing, including *danchi*, but it was a regulatory framework without corporate form.

⁷³¹ See also, Neitzel, The Life We Longed For, 25.

Corporation selected for middle-income people who were upwardly mobile members of the population capable of contributing to society through childrearing and professional work. 732 The Corporation's large-scale apartment projects functioned as demographic filters and demographic pumps, sifting out aspirational members of the postwar public and enabling them to live a modernized lifestyle. In the safe space of the apartment complexes, parents could raise their children as citizens-in-training. Children of the danchi, as much as laboring danchi housewives and their financially supportive husbands, were primed by the pedagogy of the projects for smooth incorporation into the business of the postwar nation: raising human capital and expanding Gross National Product (GNP).⁷³³ People dwelling in public apartments were made to live economically as they imagined a future in which growth was itself an end. Public apartment complexes were not a flash in the pan of postwar housing, but concrete structures that persisted for decades in the built environment. They have a duration and durability, a temporal and physical presence that attests to their significance beyond the number of units produced. Many of these apartment complexes still exist today. While some residents resisted the state's arrogation of the right to structure everyday life in the postwar era, many tacitly participated in this project, returning to the confines of the *danchi* day after day. 734 The repetition of the performance of

People moving into housing projects established under the Public Housing Law (1951) were also upwardly mobile, but of lower income. The JHC invested in making and marketing its apartments as a cut above Public Law housing in order to justify the higher monthly rents. However, it should be noted that both the Public Law housing and the apartments built by the Japan Housing Corporation were both considered *danchi*.

⁷³³ The "period of high economic growth" (*kōdo keizai seichō*) was associated with a rise in personal income following Ikeda Hayato's 1960 Income Doubling Plan and the expansion of Gross National Product. By the early 1970s, this economy-first approach to national wealth was heavily criticized. Cf. Asahi shimbun keizai-bu, *Kutabare GNP: kōdo keizai seichō no uchimaku* (Tokyo: Asahi shimbun sha, 1971).

⁷³⁴ See Neitzel, *The Life We Longed For*, 48. The so-called "daikon offensive" refers to a protest in which people dumped radishes in front of the JHC offices in Tokyo in response to the construction of the Tokiwadaira Danchi in 1956. *The Ruined Map* (1967) by Abe Kōbō can be read as a social critique of the *danchi*. It centers on the search for a *danchi* husband who has gone missing. The book was adapted to film in 1968 by Teshigahara Hiroshi. See also Franz Prichard, *Residual Futures: The Urban Ecologies of*

everyday life—the cyclical nature of the return—drove normalization: a process of making all the same, while at the same time making all quotidian. It was precisely the diurnal functioning of the *danchi* as a machine for living that made the once novel appear mundane. As activities were repeated again and again, day after day, residents became habituated to the built environment. An awareness of the strangeness of everyday life that greeted residents like Matsuki Sadako, who moved into the experimental Takanawa Apartments in 1948, was transformed into an everyday affair by the 1970s.

What a "machine for living" refers to in the context of the present study is not only the partitioning and equipping of the space of the apartment to promote the reproduction of labor power, but the structuring of the entire apartment complex for the promotion of biopower. Public apartment complexes were a principle means by which the state generated national life in the postwar era, encouraging the creation of economically and biologically active citizen-subjects.

Danchi were part of an ideology of life in which the state materially expressed its right to "make live and let die," as opposed to ordering people to their deaths as it had done in the recent war.

Public apartment complexes functioned as a scalar apparatus of dwelling that enabled the creation and maintenance of national life from cradle to grave. As Japan Housing Corporation literature demonstrates, danchi were conceived of as spaces that modernized both the dwelling and the community in service of biological reproduction on a massive scale. The inclusion of markets, schools, healthcare facilities, playgrounds, and daycare centers as part of the residential complex made these preferential sites for care—public housing complexes enabled the rearing and educating of children in an instant community of similarly endowed families that could

Literary and Visual Media of 1960s and 1970s Japan (New York: Columbia University Press, 2019). See also Neitzel, The Life We Longed For, 109-110.

⁷³⁵ Michel Foucault, "Society Must Be Defended:" Lectures at the Collège de France, 1975-76, trans. David Macey (New York: Picador, 2003), 241.

invest in the next generation of citizens. The *danchi-zoku* (people who inhabited the apartment complexes) were not only those who could afford the fruits of modern production, they were also the model citizens of postwar Japan.

For residents in the Japan Housing Corporation's baby factories, everyday life was organized around homemaking and childcare. The provision of in-unit bathtubs and space for a washing machines meant that tasks formerly performed in communal settings outside the home were privatized at the same time as labor was economized. ⁷³⁶ The centrality of the dining kitchen provided housewives with a culinary hub from which meals could be produced efficiently. Steel doors eliminated the need for a rusuban (home guardian) who remained in the house to protect it from theft and unwanted intrusion. Housewives were busy in their modernized homes, but they could spare just enough time to take their children to school, see that they got medical care in the community clinic, and watch them as they played on the concrete jungle gyms distributed throughout the housing complex. If danchi men were made responsible for paying for the house, it was danchi housewives who were made into certified mechanics of the modern home. Fulltime housewives (sengyō shufu) inhabited the dwelling-machine more than anyone. They were trained by new living guides on operating modern apartments, which yearly seemed to increase in complexity as they promised ever greater efficiency and more leisure time. Housewives, as home labor, instantiated the combination of head and hand (mental and physical tasks) as they helped construct a postwar domesticity.

The conceptualization of a public apartment complex (*danchi*) in toto as a machine for living refers to Le Corbusier's statement that "A house is a machine for living in. Baths, sun, hot water, cold water, controlled temperature, food conservation, hygiene, beauty through

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⁷³⁶ Economized in the sense of reducing trips to locations beyond the apartment (e.g. carrying children to bath houses, pumping the water, etc.).

proportion."737 It is also a reference to the later work of Henri Lefebvre, who, speaking of housing projects in France in his Critique of Everyday Life, extended Le Corbusier's thought by observing that "Apartment buildings are often well-constructed 'machines for living in,' and the housing estate is a machine for the upkeep of life outside work."⁷³⁸ Splitting the distance between these two theorizations, one arrives at the understanding that an apartment complex is a machine of machines that functions continuously with the objective of supporting human life. As discussed in the preceding chapters, these machines for living were not designed merely for "the upkeep of life outside work," but functioned within a postwar politics of housing—they were constructed for the upkeep of the nation and the production of a preferential public for the postwar era. Public housing complexes were also economic machines. As Peter Tillack has observed, logics of Fordism and Talorism ran deep in the danchi as "the 2DK layout...was premised on the integration and rationalization of the facilities of a 'core form' (koa gata) centering on the flow of water to kitchen, bathroom, and toilet...the purpose of such groupings was to increase the efficiency of the housewife's labor."⁷³⁹ Describing the commingling of equipment and services, this massing of machines, Lefebvre envisioned the apartment complex as constitutive of "a 'milieu' with an existence and life of its own [that acts] as a mediator

⁷³⁷ Le Corbusier, *Toward an Architecture*, trans. John Goodman (Los Angeles: Getty Research Institute, 2007), 151. Cf. Neitzel, *The Life We Longed For*, 9. I am here also in conversation with the work of Petter Tillack whose "Concrete Abstractions: Gotō Meisei's Hapless Danchi Dwellers and Japan's Economic Miracle," *Positions: Asia Critique 23, no. 2* (May 2015): 231-257, also connects Le Corbusier's statement that "a house is a machine for living in" to *danchi* apartments. While Tillack shows that Isoda Kōichi criticized the ability of *danchi* to be a hometown, I have presented the perspective of the state, municipalities, and the Japan Housing Corporation who, while creating the *danchi*, produced literature and historicized their own products within a story of the postwar nation. The production of the *danchi* refers not only to the construction of concrete apartment blocks but the *danchi* imaginary and the pedagogical manuals that instructed people on how to live. In addition, I put the emphasis on machines (plural) noting how there is an imbrication of machine like objects that construct the *danchi*, e.g. the unit of the apartment and the superstructure that is the *danchi* tract.

⁷³⁸ Lefebvre, *Critique of Everyday Life Vol.* 2, 78-79.

⁷³⁹ Tillack, "Concrete Abstractions," 236.

between nature and human beings." The central question Lefebvre asked about housing projects (things that constituted a mechanized social environment) was "Will they be able to provide a new humanism?"⁷⁴⁰

The Japan Housing Corporation answered definitively in the affirmative. The 1961 pamphlet, An Introduction to the Japan Housing Corporation, stated explicitly that "A new image of humanity takes shape around collective housing as the new form of the Japanese dwelling."⁷⁴¹ Especially during the first ten years of operations, culminating with the publication of the Corporation's ten-year history covering the period from 1955-1965, the JHC was heavily involved in imagining and portraying life in its complexes. More ambitious than A Plan for Youth, the Corporation's film Nihon no jūtaku (Houses of Japan, 1957) situated concrete apartment complexes within a deep history of the nation. 742 Opening with an establishing shot of Mount Fuji, followed by a panoramic of the archipelago's topography intended to simulate a prehistoric pastness, the film proceeded from thatched-roof dwellings constructed in connection to wet-rice agriculture to the Corporation's concrete apartments built in the postwar-present. A scene filmed within the JHC offices shows a throng of architect-planners hunched over their desks drawing lines that establish the space of residential tracts. Kanō Hisaakira, the first president of the Corporation presides god-like over a model danchi, while a flock of suited bureaucrats surround him like so many technocratic angles. A scene toward the end of the film shows a clinic at the Hikarigaoka Danchi. The camera zooms in on the face of a child who is receiving medical care. He is held by his mother and a nurse while a doctor probes his chest with

⁷⁴⁰ Henri Lefebvre, *Introduction to Modernity: Twelve Preludes*, *September 1959-May 1961*, trans. John. Moore (London; Verso, 1995), 118.

⁷⁴¹ Nihon jūtaku kōdan sōmu-bu kōhō-ka, *Nihon jūtaku kōdan no go annai* (Tokyo: Nihon jūtaku kōdan, 1961). 28.

⁷⁴² Nihon jūtaku kōdan, *Nihon no jūtaku*, 1957. Film made by Shinriken eiga. For a synopsis, see "Nihon no jūtaku," *Jūtaku* (August 1957), 36.

a stethoscope. In the closing sequence, a conjugal couple looks from a balcony to the children playing below. They raise their arms in joy as a plane flies overhead. Rather than raining fire, it films everyday life in the housing complex. *Nihon no jūtaku* conveys that Japan Housing Corporation *danchi* are the epitome of civilization, the present and future of housing in Japan, complexes in which Japanese populace of the postwar era can find their footing.⁷⁴³

For Lefebvre, a house was not just a shelter for people who already were, but a domestic creation that reflected the lifeways of the species that inhabited it. Thinking the relationship between organisms and their dwellings was fundamental to grasping the meaning of the image. The type of housing built revealed the nature of the organism that produced it. As an example, he observed that a seashell is constructed when "a living creature has slowly secreted a structure." Despite a difference in form between the creature itself and the thing created, the two were intimately related. Approaching a politics of housing, Lefebvre went on to say that "it is precisely this link, between the animal and its shell, that one must try to understand. It summarizes the immense life of an entire species, and the immense effort this life has made to stay alive and to maintain its own characteristics." But what of life in an instant community? One in which thousands of dwelling units were constructed rapidly by labor other than that which was meant to inhabit them. Can a collection of high-rise apartment blocks "mediate between man and nature, between one man and another?" As related by Richard Plunz in A History of Housing in New York City, Nathan Straus, an administrator for the United State Housing Authority,

⁷⁴³ The film was screened before the emperor and intended to be distributed through schools as an educational film. See "Nihon no jūtaku," *Jūtaku* (August 1957), 36.

⁷⁴⁴ Lefebvre, *Introduction to Modernity*, 116.

⁷⁴⁵ The residents of Japan Housing Corporation apartments, for instance, did not necessarily participate in the construction of dwellings. The Japan Housing Corporation Labor Union has received comparatively little scholarly attention. For a collection of the union's journals from 1957-1971, see *Hiroba shukusatsu ban* (Tōkyō: Nihon jūtaku kōdan rōdō kumiai, 1971)

thought not. Speaking at the inauguration of the Clason Point Gardens project completed in the early 1940s, Straus stated that "men and women were not intended to live in tall, crowded buildings and that children can best enjoy a happy and healthy childhood if, instead of being crowded into even the best six, eight, and ten-story buildings, they are enabled to live amid [amenable] surroundings."746

What Lefebvre pointed toward with his question was not just the overt form of the housing community or its absolute height and density, but the way in which it was structured and by whom. Foregrounding the means of production was critical in assessing the apartment complex's ability to function as a technology for everyday life and as a thing that could mediate between people. The seashell was produced by the very creature that was meant to inhabit it, setting up a contrast between the beauty of the shell and the "slimy and shapeless" form of the organism that labored to create it. 747 Epitomized by the Japan Housing Corporation, the construction of public apartment complexes was a corporate affair. It was premised on the separation of head and hand (the architects in the offices and the construction workers on the site) and the mass production of equipment and furnishings, such as cylinder locks and stainless steel sinks. These houses were not secreted by an organism, so much as they were constructed by an organization whose raison d'etre was the coordination of state capital, blue-collar labor and a technocratic bureaucracy with the express purpose of producing dwellings for a middle-income constituency. The barrack-like layout of the multistory blocks reflected the logics of the industry

⁷⁴⁶ Richard Plunz, A History of Housing in New York City (New York: Columbia University Press, 2016), 240. Clason Point Gardens was a low rise, low density project that could be compared to a highrise projects like the Queensbridge Houses in New York City, composed of six-story Y-shaped structures. Straus is not necessarily anti-planning. He is critiquing residential verticality and the separation of living space from the ground.

747 Lefebvre, *Introduction to Modernity*, 117.

that built them—quantitative rationalization.⁷⁴⁸

If the form of the apartment helped establish a critique of everyday life, what was the essence of that critique? In his "Notes on the New Town (April 1960)," Lefebvre aimed to interrogate the literal newness of planned communities, particularly recently built multistory apartment complexes in France. The Having arrived in Mourenx (a community located in southwestern France near the border with Spain), Lefebvre climbed a hill in order to get a bird's eye view of the "brand-new housing estate, where a water tower is being built." From this high perch, his assessment of the housing in Mourenx was uncomfortably similar to the Japan Housing Corporation's assessment of its own projects that very same year. Speaking of the new town apartment complex, Lefebvre recalled Marx saying that "In place of naturally grown towns [big industry] created the modern, large industrial cities which have sprung up overnight." For its part, the Japan Housing Corporation observed that "As soon as the danchi apartments are built the move-ins begin. A town of 1,000 units or 2,000 units rises in a single day. Yesterday nobody knew each other. Then, in an instant, they came together and created a new community." Said differently, danchi are instant communities.

While it is possible to emplot the construction of rapidly built postwar apartment

⁷⁴⁸ The construction of large-scale apartment complexes is predicated on economies of scale. It is an economy-first form of housing production.

⁷⁴⁹ Lefebvre is less concerned with the with the history of the new town planning movement that engages with the work of Robert Own and Ebenezer Howard and more concerned with the literal newness of the new town and the form of community composed of multistory apartment buildings. For an in-depth discussion of new town planning in reference to projects in Japan see Michelle L. Hauk, "Postwar Residential New Towns in Japan: Constructing Modernism" (M.A. thesis, Washington University in St. Louis, 2015), https://openscholarship.wustl.edu/samfox_arch_etds/1/.

⁷⁵⁰ The water tower signifies the need for the special provision of services to the new community. The Japan Housing Corporation *danchi* also used water towers.

⁷⁵¹ Lefebvre, *Introduction to Modernity*, 122.

⁷⁵² Honjō Masahiko, "Atarashii nihon no sumai," in *Umarekuru jūtaku to toshi* (Tokyo: Nihon jūtaku kōdan). 28.

⁷⁵³ Rapidly constructed and consciously planned residential spaces that presuppose the form community that they are intended to represent.

complexes within a longer history of construction, planning, and urban social formations, as the present study has done, it is also crucial to recognize that these instant communities are, in a sense, historical tabula rasa. 754 Looking at the new town, Lefebvre remarked that "Here I cannot read the centuries, not time, nor the past, nor what is possible."⁷⁵⁵ These new towns, ensconced in their rectilinear concrete shells, were not organically created edifices that embodied "the forms and actions of a thousand-year-old community."756 They were planned residential spaces that presupposed the very community that they were intended to produce. People arriving from elsewhere were remade in the modern domestic image. In Japan, these people from elsewhere were given a name that itself referred to the form of the community they instantiated: danchizoku (the danchi family). 757 As Tillack observes, contemporary critics in Japan like Isoda Kōichi and Gotō Meisei registered a concomitant phenomenon, "the loss of one's 'hometown' (kokyō)," and called those people who experienced this loss the *furusato sōshitsusha*." In his writing, Abe Kōbō captured the sense of alienation induced by the apartment complexes's industrialized form by describing them as "human filing cabinets" in his 1967 novel *The Ruined Map*. 758 These are the critiques leveled at an instant community that is also a machine for living: loss and alienation. The Japan Housing Corporation sought to invert this critique, arguing that it was precisely the newness of place and the potential to bring thousands of families into association that gave danchi their social power. Cognizant of the newness of its projects, the Japan Housing Corporation capitalized on an awareness of the way in which its housing projects were radically

⁷⁵⁴ The rapidity of building speaks to the way in which the Japan Housing Corporation was able to establish entire communities of hundreds or thousands of units in a single year, as opposed to the kind of organic community that Lefebvre observes, which evolved over hundreds of years.

⁷⁵⁵ Lefebvre, *Introduction to Modernity*, 119.

⁷⁵⁶ Lefebvre, *Introduction to Modernity*, 116.

⁷⁵⁷ See Murakami, "Atarashiki shomin 'danchi-zoku.""

⁷⁵⁸ Tillack, "Concrete Abstractions," 239-240.

decontextualized from surrounding communities, both spatially and temporally. As Gotō's work suggested "the subjective effects of such radically contingent spatial dislocations are clearly conveyed [by the] assertion that being a danchi tenant was analogous to being a citizen."⁷⁵⁹ Enabled by its corporatized structure, the Japan Housing Corporation invested in manufacturing an ideology of dwelling for the postwar era that did not depend on prior forms of domestic association. Its focus was on a public that would be, rather than a public that was. To be a *danchi* resident was to participate in a national project of becoming. As suggested by Tanigawa Shuntarō, the *danchi* paved over prior nature and preexisting *kokyō* (hometowns) by transmuting spirits of the forest into sprits of concrete. Metaphorically, this represented the replacement of prior forms of community with the *danchi* model. Housing Corporation to write a new story of dwelling for the postwar era on the blank slate of the public projects.

The Japan Housing Corporation produced new hometowns (*atarashii furusato*) by imagining a future for *danchi* residents that would establish, paradoxically, a sense of pastness in a place in which there was none.⁷⁶¹ By imagining a futurity for apartment communities, everyday life in the present became the corner stone of a past that would later be remembered. The residents' relation to the *atarashii furusato* (new hometown) was not only one of affect or a matter of location, but a temporal condition. The dimension of time was crucial in creating the

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⁷⁵⁹ Tillack, "Concrete Abstractions," 240.

⁷⁶⁰ Nihon jūtaku kōdan, *Nihon jūtaku kōdan jūnen shi* (Tokyo: Nihon jūtaku kōdan, 1965), 6.

⁷⁶¹ Because this is not an organic community, there is no deep time of the community, yet. The project of making it a *furusato* imparts it with this connection to a deep time, but instead of referring to a sense of pastness that was, the JHC imagined a future to which the *danchi* communities would be the past. In other words, it claimed the past by projecting the future. As Neitzel notes, "the *danchi* generally represented the antithesis of home in films and novels. They were depicted as places devoid of history, devoid of culture, indeed, devoid of life." Neitzel, *The Life We Longed For*, 111-112.

quality of *furu* (古; old), which would enable one to "read the centuries." The Japan Housing Corporation did not intend to leave its tenants unmoored in time and without a sense of history, which is why it spilled wells of ink producing three massive corporate histories marking ten, twenty, and twenty-five years of operations, in addition to pamphlets and marketing materials that worked to position its projects within a history of housing in Japan. It made this historicization available to the very tenants who inhabited the apartment complexes. For this reason, histories written by the Japan Housing Corporation, while robust, are neither neutral, nor objective, because they have an ideological function that cannot be dissociated from the facts and figures they present. The production of a *danchi* imaginary co-existed with the production of the actual apartment units themselves with the intent of imbuing that which lacked firm historical grounding with a sense of place in time.

Postwar public housing projects in Japan, as instant communities, necessitated an imaginary that could provide not only a blueprint for history, but a sense of similitude. Housing projects existed at such a scale that it was unlikely residents would ever meet most of their neighbors, much less form close personal ties with them. They were the antithesis of more vernacular communities like Miyamoto-chō, which Theodore Bestor details in *Neighborhood Tokyo* (1989).⁷⁶² The rapid construction and new spatial form of large-scale apartment complexes challenged preexisting frameworks for conceiving of people and place in the city. In Tokyo, *danchi* defied the familiar conceptualization of the *shitamachi* and *yamanote*, the working class quarters and the patrician enclaves, or the low city and the high city as Edward Seidensticker has described it.⁷⁶³ Large-scale apartment complexes imposed a new type of socio-spatial distinction

⁷⁶² Theodore C. Bestor, *Neighborhood Tokyo* (Stanford, Calif.: Stanford University Press, 1989).

⁷⁶³ Edward Seidensticker, Low City, High City: Tokyo from Edo to the Earthquake (New York: Alfred A. Knopf, Inc., 1983).

and demanded a new vocabulary for describing it. In its first few years, the Japan Housing Corporation referred to the apartment complexes it constructed as kōdan jūtaku (lit. corporation housing). After Murakami's 1958 article, the Japan Housing Corporation also began using the word danchi more in its marketing materials. The word acquired a polyvalent meaning similar to shitamachi and yamanote, denoting a physical area (a space) and connoting the type of people that lived there. Danchi was an institutionally agnostic word that established a comparability based on form. 764 It was a word used by municipalities, housing associations, the Japan Housing Corporation and the popular press to describe large-scale apartment communities. Those who lived in these apartment complexes were related to each other in terms of their danchi-ness, existing in confraternity with the many other families who resided in similar complexes throughout Japan. In this, the word danchi functioned to organize an identifiable segment of the postwar public in a similar way that word nation organizes the national community for Benedict Anderson. It signified a structure and an imaginary that connected fundamentally dissimilar individuals who share a common space. As Anderson says, the nation "is an imagined political community...It is *imagined* because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion."⁷⁶⁵ This imagining of community that Anderson describes helps address Lefebvre's question of whether or not apartment complexes can serve a mediating function, and if so, what is the nature of that mediation.

Public housing in Japan served as an interface between the state and the resident population by projecting an image of the public that it was designed to produce. As discussed in

⁷⁶⁴ Unlike kōdan jūtaku (公団住宅) which referred explicitly to JHC built houses and apartments.

⁷⁶⁵ Benedict R. Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, (London: Verso, 2006), 6.

Chapter 4, the Japan Housing Corporation was particularly adept at imagining a model public. Marketing materials and corporate histories portrayed *danchi* residents as preferential members of the postwar community. Conjugal couples kept tidy, modern homes while raising active, able bodied children who could participate in a society organized around economy rather than empire. If the imperial project had forced people outside the archipelago and encouraged them to settle in places like Manchuria, Korea, Hawaii, and California, postwar domestic projects were concerned with restructuring life within the home islands of Hokkaidō, Honshū, Shikoku, and Kyūshū. Rather than turning people into cannon fodder and human bullets, as Nishiyama had described bodies committed by the state to an empire at war, public housing provided people with a base for national socio-economic competition. In the 1950s and the 1960s, danchi set a high standard of the possible. They exemplified a life filled with novel consumer goods like refrigerators, televisions, and washing machines that enabled nuclear families to live independently of lodgers, domestic servants, and relatives. 766 If large-scale apartments were characterized as "human filing cabinets" and historical tabula rasa, critiques of so-called organic communities and places with claims to history were equally scathing. It was not clear to postwar planners in Japan that organic communities with a definite sense of pastness offered a better alternative. As Tange Kenzo observed in the Houses and Cities of Tomorrow lecture series in the late 1940s, people in Tōhoku (the northeast of Honshū) appeared to be trapped in a feudal past and lacked a spirit of development; their built environment was not modernized and neither was their sense of motivation. These were not the preferential public of postwar Japan. If the people of Tōhoku did not get their act together, Tange argued, they would be a drag on national prosperity. What Tange pointed toward was the relationship between the home and the community. Both needed to be

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⁷⁶⁶ Neitzel, *The Life We Longed For*, xx-xxi.

reformed. The partner of the modernized home was the planned community.

As imagined by Hani Susumu, the manufactured space of the *danchi* was a direct threat to informal community arrangements and alternative lifeways. The bataya buraku portrayed in the film She and He (1963) represented the residential Other, the sheltering of people who were seen as non-productive members of society.⁷⁶⁷ From the standpoint of the *danchi*, these *buraku* dwellers appear like Tange's people of Tōhoku: their community is not modernized and they lack the spirit of development. Yet, the difference does not reside solely in structures of feeling. Hani intimates that the lack of investment in the buraku (both the people and the homes) is what brings it into such a stark contrast with the rationalized built environment of the neighboring danchi. Hani portrays the situation of the buraku residents as even more dire than that of the people in Sendai. Whereas Tange believed that Tōhoku was capable of correction and rehabilitation, the seemingly non-productive people in Hani's film are subject to elimination. Deemed a nuisance to the *danchi*, the *buraku* residents are forcibly dehoused—their homes are destroyed without regard for their lives or property. Facing such wonton destruction, the buraku community disintegrates and people are scattered to the wind. Hani's film exposes that it is not just the way people feel about their neighbors that matters, but that disparity in investment and a demand for domestic security creates unevenness in the built environment. Superior modern homes for a superior public heightened the inferiority of other forms of dwelling and the people who inhabited them. In supporting the construction of large-scale apartment complexes, the state funneled yen into creating spaces for housing wage workers and their families, while implicitly betting against the less able and economically disadvantaged members of the population. The

⁷⁶⁷ As depicted in the film, the *bataya buraku* is an informal community composed of makeshift dwellings and people without defined occupations. Some could be considered ragpickers or recyclers who make a living by picking through the detritus of the neighboring apartment complex (*danchi*).

danchi were not just for any public, they were for a preferential postwar public, a segment of the population that the state hoped to nurture and to make live, while letting non-productive others perish.

In the eyes of postwar planners, modernizing homes and communities was part of a conscious effort to produce modernized subjects. The familiar dichotomy between home ownership and rental apartments misses the mark where this modernization is concerned. 768 While the majority of *danchi* were for rent, they were intended to provide a scaffolding for citizens that would allow them to climb out of substandard living conditions, such as the shared rooms depicted in the film A Plan for Youth (1952).⁷⁶⁹ While home ownership might have been a worthy goal, this was preceded by the need to modernize citizens through their dwellings, and more broadly through the form of their community. As Tange observed, while Japan was a modern nation not everyone appeared to be modernized. Domestic modernization was not inevitable, and especially in the first few decades after the war, modern homes were not readily available throughout the archipelago. Creating homes that could enable economic life was part of a processual politics of housing that aimed to gradually update the built environment as better technologies became more available. As discussed in Chapter 5, modernization was an openended project, rather than an absolute condition. Even the Japan Housing Corporation, an early postwar leader in modern home construction, noted that by the early 1970s the 3LDK apartment (three-rooms plus living room and dining kitchen) had eclipsed the 2DK (two-rooms plus dining kitchen) as the expected standard of living for the "standard family" of a husband, wife and two

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⁷⁶⁸ The majority of Japan Housing Corporation apartments for rent, but some were made available for ownership on an installment basis. JHC apartments can be seen within the frame of postwar home modernization. They were a supplemental measure to provide readily available housing in and around urban areas, not a totalizing program to replace owned units with rental units in the city.

⁷⁶⁹ From the government's perspective, these are a submerged population that have the right spirit but not the right homes or form of community necessary to succeed in the postwar era.

children. By the mid-1980s the JHC hoped to increase the floor area of the 3LDK even more, from 80m² to 100m². Sequential improvements in the standard of living were tantamount to the regular obsolescence of previously improved standards. While feudalism is often used as a pejorative to refer to a time in the past that is opposed to the modern present, obsolescence describes the process by which past production is rendered inferior to present production in a way that is imminent to the production process itself. Even if public housing was modern it was never fully modernized; the already produced was continuously slipping backward into the past as new products appeared on the market. The standard of living was not an objective point that could be reached, but a moving target that forced people to imagine their next destination shortly after they arrived at the first.

As the last President of the Japan Housing Corporation, Sawada Yasushi was in a position to reflect on twenty-five years of the organization's history. On the eve of the Corporation's legal dissolution on October 1, 1981,⁷⁷⁰ he observed that the JHC had built more than 1,000,000 units, developed more than 26,000 hectares, and managed more than 1,000 *danchi* (tracts) throughout the archipelago.⁷⁷¹ Sawada was also keen to point out that beyond these numbers, the Corporation's achievements were measurable through indirect means, such as the social development of its residents. He identified what could be termed the *danchi* generation, remarking that "even the children who grew up in the danchi have already become full-fledged members of society."⁷⁷² Looking back from 1981, it was possible to conceive of a segment of the population that had relied on the *danchi* to mediate their passage from infancy to adulthood. The

⁷⁷⁰ On October 1, 1981 the Japan Housing Corporation was dissolved and the new organization was named Housing and Urban Development Corporation (住宅・都市整備公団) which reflected the merger of Japan Housing Corporation and Land Development Corporation.

⁷⁷¹ Nihon jūtaku kōdan, *Nihon jūtaku kōdan shi* (Tokyo: Nihon jūtaku kōdan, 1981), yobun.

⁷⁷² Nihon jūtaku kōdan, *Nihon jūtaku kōdan shi*, yobun.

children had played in *danchi* playgrounds, gone to *danchi* schools, and been fed and clothed by the *danchi* marketplace. For Sawada, the JHC *danchi* had facilitated the social reproduction of the national public.

When the Japan Housing Corporation (JHC) was nominally disbanded and reincorporated as the Housing and Urban Development Corporation following its merger with the Land Development Corporation in 1981, the symbol $j\bar{u}$ ($\dot{\pm}$) was retired as the sigil of Corporation-built public housing. While some of the early postwar *danchi* were beginning to show their age by the 1980s, their story was far from over. Even today, the eulogy for *danchi* has yet to be written. The Urban Renaissance Agency, the institutional successor to the Japan Housing Corporation and the Housing and the Urban Development Corporation, still manages more than 1.5 million units of housing, including thousands of apartments originally built by the Japan Housing Corporation. Like the Interstate Highway System in America, *danchi* in Japan can be seen as a form of infrastructure stretching from one end of the archipelago to the other.

Danchi provided a structure for residential life in the same way that the interstate highway system provided pathways for automobiles. Both of these were state sponsored projects that intervened into national space, structuring how people moved and lived. Why do American freeways make a strong point of comparison to danchi apartments in Japan? Because they represent a similar kind of solution to problems of the human condition at the scale of the nation. The affinity is more than skin deep. Concrete is only part of the story. As observed in Overdrive: L.A. Constructs the Future 1940-1990, "By 1940, there were over one million cars on L.A.'s roads. Residents' embrace of motorized living resulted in the need for a new transportation network unimpeded by surface-street congestion." Funded by a 1947 gasoline tax and the Federal-Aid Highway Act of 1956, the interstate highway system responded to a crisis of transit

and became permanently imbedded as critical infrastructure.⁷⁷³ As *Overdrive* implies, these freeways are objects of fascination that while often taken for granted have a deep impact on the structure of everyday life. Aerial photographs of apartment complexes like the Hibarigaoka Danchi, which capture form (serialized rectilinear blocks) and scale (scores of buildings sweeping across farmland and towering above adjacent dwellings), are similar in character to photographs of "The Stack," the iconic interchange in Los Angeles where the sclerotic concrete arteries known as the 101 and 110 freeways intersect as they pump cars throughout the heart of the Southland. In the 1950s and 1960s, these roadways were associated with mid-century modernism's quixotic attempt to make the California of tomorrow as a perfect blend between the power of industry and the spectacle of consumerism. Freeways emerged as outlets that could channel suburban angst and the need for speed.⁷⁷⁴ New concrete highways spreading throughout America represented unlimited freedom and escape from the drudgery of settled life. As of 2021, the time of the future as imagined by people in 1950, Los Angeles motorists are daily driven to despair as they idle on congested freeways and dodge accidents that remind them of the tribulations of the commute rather than manifest destiny. Modern freeways have become modern deathways.

As described by Norimitsu Onishi in a 2017 article for the New York Times titled "A Generation in Japan Faces a Lonely Death," *danchi* built by the Japan Housing Corporation that

⁷⁷³ Getty Research Institute and J. Paul Getty Museum, "Overdrive L.A. Constructs the Future 1940-1990: Urban Networks," n.d., accessed May 17, 2021,

https://www.getty.edu/art/exhibitions/overdrive/urban_networks.html. The exhibition was held at The J. Paul Getty Museum in Los Angeles from April 9 - July 21, 2013.

⁷⁷⁴ Depicted magisterially by James Dean as Jim Shark riding a 1949 Mercury through the streets of Los Angeles in Nicholas Ray's *Rebel Without a Cause* (1955).

remain in the present have become filing cabinets for the elderly. They are no longer portrayed as part of a plan for the youth of the nation, but as spaces where a withdrawn sate is letting people die. These lonely deaths are symptomatic of the limit of danchi as projects addressed to life. In Michel Foucault's conceptual framework, these lonely deaths are part of the "gradual disqualification of death," the point at which life slips through the grasp of the state as it gasps for its last breath. The closing of schools attached to danchi and the shuttering of shops intended to support growing families are indicative of the mismatch between the *danchi* built environment and the condition of contemporary residents. Early postwar danchi were designed as communities of care for the young, not the elderly. The built environment was premised on able bodies. Danchi are expansive housing tracts that require walking to points of transportation, and many of the apartment blocks built in the 1950s and 1960s are four and five-story buildings without elevators. 776 As Foucault went on to observe, "death—which has ceased to be one of those spectacular ceremonies in which individuals, the family, the group and practically the whole of society took part—has become, in contrast, something hidden away. It has become the most private and shameful thing of all (and ultimately, it is not so much sex as death that is the object of a taboo)."777 Intended to support the formation of political subjects at the beginning of life, the *danchi* as machines for living malfunction in death.

While Foucault observed that "death becomes, insofar as it is the end of life, the term, the

⁷⁷⁵ Norimitsu Onishi, "A Generation in Japan Faces a Lonely Death," *The New York Times*, November 30, 2017, sec. World, accessed October 23, 2019, https://www.nytimes.com/2017/11/30/world/asia/japan-lonely-deaths-the-end.html.

Multistory concrete apartments built at five-floors or less did not require an elevator. Elevators were discouraged for cost-saving reasons. The fifth floor was generally considered less desirable and rents were slightly less because walking up and down five-flights of stairs was considered an inconvenience to residents.

⁷⁷⁷ Michel Foucault, "Society Must Be Defended:" Lectures at the Collège de France, 1975-76, trans. David Macey (New York: Picador, 2003), 247.

limit, or the end of power too," Huwy-Min Lucia Liu has argued in "The Civil Governance of Death: The Making of Chinese Political Subjects at the End of Life," that crematoria as "nationalized funeral institutions" became sites of subjectivation mediating between the Chinese Communist Part (CCP) and the citizens under its purview. As Liu notes, "Under the civil governance of death, the state attempted to govern death not only as it concerned hygiene but also as a means of shaping ideas of citizenship...the Chinese state attempted to eliminate alternative sources of identity that an individual might have (alternative, that is, to the socialist state)."

The Liu's view, death was not the terminus of state power, but a second chance for the state to grab a hold of the living (the next of kin) through the way in which death rites were performed and organized. Crematoria functioned as machines for processing death, much in the same way that *danchi* functioned as machines for living. They were not merely infrastructure adapted to human life cycles, but active sites of subject formation. The lonely deaths in the *danchi* are indicative of housing's inability to function as a place for the management of death.

The Urban Renaissance Agency which today manages aging *danchi* of the postwar as it builds more modernized apartment units for the next generation of the urban public, faces the task of extending life rather than planning for death. Renovation and revitalization is the preferred solution, rather than the wholesale dismantling of a state driven politics of housing. The *danchi* are not necessarily defunct, but they are seen as in need of being retooled for demographic contraction rather than demographic expansion. While Norimitsu suggests that the *danchi* are being dragged into a necropolitics of housing that they are ill-equipped to handle, revitalization signals a return to housing as a generative biopolitical project. Injecting life back into the *danchi* is a way to offset the eventuality of death. It becomes a way to manage a

⁷⁷⁸ Huwy-Min Lucia Liu, "The Civil Governance of Death: The Making of Chinese Political Subjects at the End of Life," *The Journal of Asian Studies* 80, no. 1 (February 2021): 52.

population in decline, enabling the state to more firmly grasp the people under its purview. The Japan Housing Corporation imagined the beginning of life, but deferred death to its institutional heirs.⁷⁷⁹

⁷⁷⁹ While it is beyond the scope of this present study, a close examination of the present activities of the Urban Renaissance Agency would show how the present housing technologies and housing are being transformed to address the biopolitical legacy of *danchi* apartments as instant communities and machines for living in Japan.

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