

“Smallness” in Japanese Houses: From Postwar to “Post-postwar” Architecture

CHO Hyunjung*

Abstract | Interest in small houses has been one of the most striking features of Japanese architecture since the 1990s. Widely considered a uniquely Japanese phenomenon, small houses have proved to be a successful brand of contemporary Japanese architecture. Their radically small size, particularly when compared with houses in the West, affirms the image of “small Japan,” a stereotype mutually produced by Japan and the West. In this article, I interpret this “smallness” neither as essential to Japanese culture nor an optimal strategy, considering Japan’s limited urban spaces, but a strategically produced and reproduced discursive system. Japanese architects have never taken smallness for granted; they actively produce discourses of smallness in order to pursue the kind of architecture that might fulfill roles and identities at historical junctures in Japanese society. Comparing the early postwar trend toward minimal houses with the more recent “small-house syndrome,” I uncover the distinct characteristics of postwar and “post-postwar” Japanese architecture. Following the Asia-Pacific War, experimentation with small houses idealized an American-style, modern life distinct from outdated feudal customs. The 1990s saw a shift from postwar to post-postwar architectural theory and practice that triggered the production of diverse, ecological, and community-oriented small houses. Following the 2011 Great East Japan Earthquake, architects reimagined the implications of smallness in a context of strengthened nationalism in a post-disaster society; rather than its physical size, smallness came to signify a superior and moral Japanese value for overcoming Western-centric modernism. In other words, architects now emphasize smallness as a bulwark against the tide of globalization, preserving the identity of Japanese architecture, a form of leverage granting Japanese architecture international competitiveness, and a kind of wisdom Japan might offer the rest of humanity.

Keywords | small houses, minimum dwelling, 9-*tsubo* house, Kuma Kengo, Atelier Bow-Wow

* CHO Hyunjung (ustay76@kaist.ac.kr) is a specialist in History of Japanese Art and Architecture and Assistant Professor at the School of Humanities and Social Sciences, Korea Advanced Institute of Science and Technology (KAIST).

Introduction

Interest in small houses has been one of the most striking features of Japanese architecture since the 1990s.¹ Considered uniquely Japanese, variously and experimentally designed small houses have become a brand successfully representing contemporary Japanese architecture. Their radically small size, particularly in comparison with those in the West, reveals Japan's active engagement with the Western stereotype of "small Japan." It is in this context that one may also interpret the "smallness" ubiquitous in architectural exhibitions introducing Japanese homes to the West, including *Minihäuser in Japan* (2000) and Atelier Bow-Wow's *Small is OK* (2002).²

Japan's small houses are often understood in terms of essentialism, i.e. an innate Japanese ability to "lighten" and "shrink." Ever since Japan's interaction with the West began in earnest with the Meiji Restoration, smallness has been a prominent characteristic of Japan, Japanese people, and Japanese culture. Historically, many have regarded Japanese smallness as abnormal and inferior with regard to its Western counterpart, while others such as Roland Barthes (1983) portrayed smallness as an exotic charm. Korean scholar Yi Ŏ-ryŏng evaluated the Japanese ability to design small as a secret of the nation's postwar prosperity within a larger discourse of Japanese cultural uniqueness known as *Nihonjin ron* (Yi Ŏ-ryŏng 2008).

Essentialist approaches appear all the more persuasive, especially with respect to architecture. Designing small is broadly conceived as a natural and effective response to the country's geographical and social conditions, e.g. limited land space, mountainous terrain, extreme urbanization, and cramped urban settings. More recently, one explains the small-house boom within Japan's specific context, referring to its complex social, economic, and cultural conditions, such as legislation and regulation, inheritance taxes, postwar housing policies, and the "my home myth." Of course, not everyone evaluates Japan's small houses

1. I use various Japanese terms referring to "small house"—such as *chisana ie* (small house), *shōjūtaku* (mini house), *kyōshō jūtaku* (narrow house), *kokumin jūtaku* (national house), *saishōgen jūkyō* (minimum dwelling), and *9-tsubo hausu* (9-tsubo house)—depending on the context. *Chisana ie* (small house) is the most common, neutral term used by both architects and the general public. Terms such as *shōjūtaku*, *kokumin jūtaku*, and *saishōgen jūkyō* emerged during the postwar era in architecture magazines. Others, such as *kyōshō jūtaku* and 9-tsubo house, have been regularly used since the 2000s.

2. Organized by architect Hannes Rössler in Munich in 2000 and featuring designs by Japanese architect and small-house specialist Nishizawa Taira, FOBA, and Atelier Bow-Wow, *Minihäuser in Japan* caused an international sensation. Atelier Bow-Wow held an exhibition entitled *Small is OK* in 2002 in Switzerland at Fribourg's Centre d'Art Contemporain Kunsthalle.

favorably. In the 1980s, as Japan emerged as a global economic power and trade frictions intensified, Japanese small houses were disparagingly referred to as "rabbit hutches," implying that they were too small to meet the requirements of human living.³ This manner of contemptuous Western gaze also resonated within Japan. Both architects and laypersons began to criticize the poor condition of Japan's housing as incommensurate with the status of a power of the nation's economic stature. The term "rabbit hutch," however, did not simply signify the small size of Japanese houses; it criticized the mindless uniformity of mass-produced houses. In the 1990s, however, as architects began to present unique designs combining smallness with individuality and diversity, small houses served as laboratories for experimenting with innovative design concepts (Nuijsink 2012, 23-29; Pollock 2015; Igarashi 2012, 289-90).

In this article, I seek to understand smallness in Japanese architecture not simply as an essential aspect of Japanese culture or an optimal response to prevailing material restrictions, but a strategically produced and reproduced discursive system. In the postwar period, discourse on small houses in the field of architecture manifested in two particular periods: the immediate postwar period until the 1950s, and the 1990s until the present. While the task of reconstruction defined the former period, economic stagnation and the 2011 Great East Japan Earthquake defined the latter. Japanese architects have thus called upon smallness in times of crisis, attempting to regenerate an architectural culture. Considering this dynamic, I historically explore the manner in which the meaning of smallness has emerged and changed according to architects' encounters with prevailing historical conditions. In particular, I compare the recent small-house syndrome with the early postwar minimal house boom, attempting to discern the specific tasks and issues of post-postwar Japanese architecture.

The Postwar Minimum Dwelling Experiment

In the immediate aftermath of the war, faced with the urgent task of post-conflict reconstruction, architects focused on house design. Architectural print media played a significant role in perpetuating this trend. In 1946, the prestigious architectural magazine *New Architecture* (*Shin kenchiku*) launched a yearlong special series on housing, advocating the alleviation of the postwar

3. The term "rabbit hutch" first appeared in a March 1979 European Economic Commission document, which described Japan as a "nation of workaholics who live in rabbit hutch-like houses" (Yoshii 2016, 16).

housing crisis and the establishment of a new housing culture.⁴ National housing design contests hosted by the magazine called on architects to design houses consisting of a floor space of twelve or fifteen *tsubo*.⁵ This specific standard of house size addressed a series of construction regulations enacted following the war. In May 1946, the Temporary Construction Restriction Law limited the floor space of newly built houses to fifteen *tsubo* (49 m²); restrictions were relaxed to eighteen *tsubo* (59 m²) the following year. Moreover, the Housing Finance Public Corporation Act, passed in 1950, limited loan-financed houses to between nine and eighteen *tsubo*. In response to such legislation and austere social conditions, postwar housing units were considerably smaller than those constructed prior to the war.

The representative small houses of the immediate postwar years included Ikebe Kiyoshi's (1920-79) 3D Minimum House (*Rittai saishōgen jūkyo*, 1950) and Masuzawa Makoto's (1925-90) Minimum House (*Saishōgen jūkyo*, 1952). First of all, Ikebe's 3D Minimum House (figure 1) was the third house in a numbered series (totaling ninety-five) that he continued over his lifetime, with the aim of standardization and industrialization of house design. It was a systematically constructed, two-story, modular wooden house. Despite its compact size, the architect could remove any feeling of confinement through the use of a *fukinuke* (open ceiling) in the living room. Lacking a front hall, one would directly encounter a modern kitchen, dining room, and living room upon entering. Ikebe designed the house to appeal to women/housewives, the emerging subject of the postwar home (Ikebe 1950, 203-209). He asserted that his design would ultimately contribute to women's emancipation by rationalizing housework and improving sanitary conditions.

Like Ikebe's design, Masuzawa's Minimum House (figure 2) was a tiny detached house (49.5 m²). With financial assistance from a Japanese Housing Finance Agency contest, Masuzawa built the one-room personal residence. The Minimum House shared much in common with Ikebe's design. Composed of modules, Masuzawa's house included a modern kitchen and a bathroom with a flush toilet, and also lacked a front hall. The *fukinuke* facilitated air circulation, while a large window maximized light. Overall, the house was compact, but it offered a sensation of openness (figure 3). Masuzawa's drawing, in which a child is riding a tricycle in the yard while a housewife cheerfully carries some drinks

4. Issues featured in the 1946-49 *New Architecture* special series on housing included special editions on postwar housing (January 1946), prefabricated houses (May 1947), new housing (January 1948), and the national housing contest (November/December 1948), with other issues related to small houses (March, April, and June 1949).

5. A *tsubo* is Japanese unit of measurement approximately equivalent to 3.306 square meters.



Figure 1. Ikebe Kiyoshi, 3D Minimum House, 1950, courtesy of Ikebe Kiyoshi Architectural Design Office (left)

Figure 2. Masuzawa Makoto, Minimum House, 1952, courtesy of Masuzawa Architects & Associates (center)

Figure 3. Masuzawa Makoto, Minimum House Interior, 1952, courtesy of Masuzawa Architects & Associates (right)

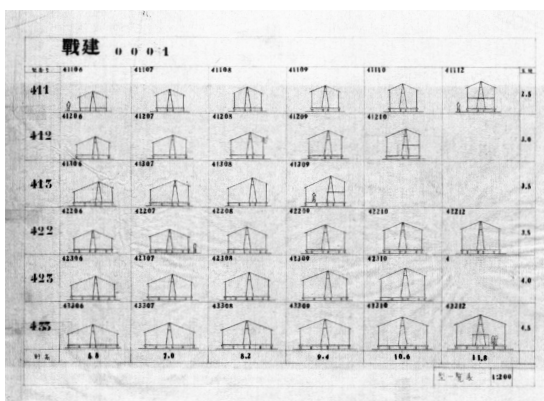
to her husband and a guest on the second floor, reflects the prevailing aspiration toward the new lifestyle of the American nuclear family.

As implicit in the use of the term "minimum house," Ikebe's and Masuzawa's homes drew on modernism's interest in the "minimum dwelling."⁶ Modernist architects made it their social mission to break free of architecture for the privileged few and to supply affordable housing for the masses using industrial materials and new construction methods such as standardization, modularity, and prefabrication. With the minimum dwelling serving as the theme of the 1929 Congrès Internationaux d'Architecture Moderne (International Congress of Modern Architecture, or CIAM), which called for improving the living standards of workers and the poor, interest among architects in rational, effective, factory-made minimum houses began to increase. The concept of the minimum dwelling was introduced to Japanese architecture in the wartime and immediate postwar years, as seen in Sakakura Junzō's (1901-69) prefab military shelters and Maekawa Kunio's (1905-86) prefabricated housing project, named PREMOS.

Postwar minimal houses by Ikebe and Masuzawa, however, not only embodied modernism's universal theme of mass-produced minimum dwellings, but also manifested the distinctly new values and lifestyle of postwar Japanese society. Nishiyama Uzō's (1911-94) *House of the Future: A Story of Dwelling Style* (*Korekara no sumai: jū yōshiki no hanashi*, 1947) and Hamaguchi Miho's (1915-88) *The Feudalism of Japanese Houses* (*Nihon jūtaku no hōkensei*, 1949) provided the theoretical basis for the postwar experiment with minimum dwellings.

6. See Teige (1932) for a historical discussion of modernist architecture's "minimum dwelling."

Figure 4. Sakakura Junzō,
List of types, Wooden Prefab
Housing, 1941-45, courtesy of
the Japanese National
Archives of Modern
Architecture, Agency for
Cultural Affairs



Nishiyama was a leftist architect who became interested in improving the living conditions of the poor and laborers in the early 1940s. As a criterion for a modern minimal housing unit that could serve as a national dwelling model, Nishiyama promoted the principle of separating eating and sleeping facilities. In *House of the Future*, published after the war, he outlined ten tenets for the homes of “New Japan,” proposing to build “houses that could eschew outdated concepts and adapt to the needs of the people of a civilized nation.”

Hamaguchi’s influential *The Feudalism of Japanese Houses* also criticized traditional Japanese houses from a gendered perspective, describing how they contributed to the operation of the feudal and patriarchal family system. This pioneering female architect thus aimed to design houses conducive to women’s liberation and gender equality. To this end, she argued for removing the authoritative presence of *tokonoma*⁷ and the front hall, while modernizing the kitchen, a female space, and moving it from the cold, dark northern end of the home to its heart. Nishiyama and Hamaguchi’s ideas were systemically adopted by the Japan Housing Corporation (Nihon Jūtaku Kōdan), which was founded in 1955 and played an important role in establishing the essential unit formula of postwar public housing known as nLDK.⁸ One can understand these architectural efforts of the postwar years within their historical context, which was defined by the effort to establish a new nation based on democracy and equality by erasing the twin stains of militarism and patriarchy.

Postwar minimum houses, including Ikebe and Masuzawa’s designs, were

7. A hollow space decorated with scrolls or flower arrangements.

8. “nLDK” refers to a housing unit layout in which L stands for living room, D for dining room, K for kitchen, and n for the additional number of rooms in a given property.

widely circulated in a series of magazines and gained attention as exemplary designs representing modernism's emphasis on rationalism and efficiency.⁹ Here, the implication of smallness advocated by these houses became associated with novel postwar values such as democracy and gender equality. Such values contrasted with the irrationalism and feudalism embodied by the large houses of the traditional ruling aristocracy and samurai elites. The anti-traditionalism of minimum housing can be understood within the specific socio-political context of the immediate postwar years, when Japanese tradition was associated with feudalism and imperialism.

"A House is a Work of Art" and Criticism of Small Houses in the 1960s and 1970s

One can see the initial experiments with small houses as an attempt to establish a form of modern housing suitable for the American-style nuclear family amid the chaos and crisis characterizing the immediate postwar period.¹⁰ However, as postwar reconstruction projects neared completion in the late 1950s, architects began to lose interest in houses. While the Japan Housing Corporation came to monopolize the supply of standardized collective housing, large-scale construction companies such as *Sekisui* and *Daiwa* emerged in the private detached-housing market using industrial methods and uniform designs for mass production. Meanwhile, even those architects who were still interested in house design now shifted from offering standardized prototypes suitable for mass production to social criticism or artistic expression. Accordingly, some architects challenged the concept of smallness, which was associated with emphatic modernism, functionality, rationalism, and uniformity.

Architect Shinohara Kazuo's (1925-2006) famous 1962 article published in *New Architecture*, "A House is a Work of Art," demonstrated such a new approach to housing design (2012b, 79-85). In the article, Shinohara criticized mainstream architectural culture for its factory-like emphasis on functionality and efficiency, advancing the concept of the house as art. In another article written around the same time, he asserted, "The larger the house, the better," distancing himself from the small-housing boom of the 1950s and the "technicism" dominating mainstream architectural circles in the 1960s,

9. For research on postwar minimalist housing, see Nanba (1999).

10. Regarding the establishment of postwar housing culture in the early postwar period, see Funo (1995, 161-73).

represented by the Metabolist movement (Shinohara 2012c, 67-76). For Shinohara (2012a, 75), large houses might have been lacking in practicality, but they could retain a “symbolic core,” a space full of meaning, prioritizing human over technical needs. Furthermore, he argued that the “useless space” of large houses might serve as a lens for viewing small houses from a new perspective. His advocacy of large houses signified a return to the flexible and open traditional house, and the dwelling spaces abandoned in modernism’s call for functionality and denial of Japanese tradition. Shinohara (2012d, 107-25) reiterated this point when he lamented how, in seeking to shed feudalistic dwelling customs, postwar housing had also done away with the subtle echoes of Japanese tradition.

In the 1960s and 1970s, Shinohara designed a series of aesthetic homes based on his non-utilitarian approach to housing, and provoked quite a response among architects emphasizing functionality. His work was greatly influential on a later generation of architects who attempted to criticize mainstream architectural culture by designing “irrational” houses. One can understand the emergence of Andō Tadao (1941-) and Itō Toyoo (1941-) in the 1970s—when housing design offered an appealing alternative to young architects as the construction industry stagnated following the oil shock—in terms of Shinohara’s influence. Examples of such unconventional experimental house design include Andō’s famous Row House in Sumiyoshi (*Sumiyoshi no nagaya*, 1976), in which an empty courtyard was inserted in the center of a narrow concrete house, and Itō’s early U-house (1976), which emphasized empty, undifferentiated hallways without specific functions. Eschewing the rational and efficient use of space characteristic of the modernist minimum dwelling, these architects adhered to Shinohara’s principles by designing spaces full of meaning and symbolism. For them, the house was a self-sufficient microcosm disconnected from the outside, serving as the frontline of resistance against the chaos of the commercialized and bureaucratized city. Amid a wave of commercialism in the 1980s, however, large, decorative postmodernist architecture became influential, and experiments with housing design lost their vitality as a medium of social criticism. Amid the economic bubble, Andō and Itō moved away from house design and ventured into large-scale public projects.

The Return of “Small-House Fever” in the 1990s

The house re-emerged as a central topic in the architectural field in the mid-1990s as Japan went into economic recession and the social system that had buttressed the postwar era fell into crisis. As the bubble economy collapsed and

the so-called "lost twenty years" of economic stagnation began, architects encountered fewer and fewer opportunities to engage in large-scale projects, and began to focus on small-scale housing design.¹¹ Unlike the immediate postwar period, there were no legal restrictions on size. However, architects tended to view small houses as a viable solution to the unfavorable social changes of the time, including the economic recession, an aging population, an increase in single-member households, a declining birthrate, and the associated burden of inheritance taxes. This is not to say, however, that the small-housing boom in the 1990s was simply a product of pragmatism. One can also understand it in terms of a desire for new values, sensibilities, and lifestyles for overcoming the limitations of postwar society.

"Small-house fever" has progressed in two general directions since the 1990s. The first pertains to a revival of modernism, emphasizing functionality and efficiency in lieu of the decorative and ostentatious postmodernism that came into vogue during the economic boom of the 1980s. There emerged renewed interest in the compact design of postwar minimal houses. First, Nanba Kazuhiko (1947-), a former pupil of Ikebe Kiyoshi at Tokyo University, launched a historical re-evaluation of Ikebe and his 3D Minimum Dwelling (Nanba 1999). Since the mid-1990s, Nanba (2006) has proposed a "Box House" (*Hako no ie*) series (figure 5) by relying on Ikebe's study of industrialization and modularization. Nanba promoted his Box House as an "eco-house" that minimized both space and energy waste, and which thus was conducive to enduring the economic stagnation. Masuzawa's Minimum House was also reimaged under the title of the "9-*tsubo* house."¹² The display of Masuzawa's house at a 1998 Shinjuku art exhibition triggered a 9-*tsubo* house boom. Designer Koizumi Makoto (1960-) actually erected a 9-*tsubo* house remake of Masuzawa's house (1999) in Tokyo (figure 6),¹³ which marked the first of many 9-*tsubo* house models catering to the various needs of owners and building sites.

Both the Box House and 9-*tsubo* House were commercialized as customizable products stimulating middle-class desires for small but distinctive houses in urban centers. The Box House was selected by homeware brand Muji as a model for its "editable" one-room housing project (Nanba 1999, 86-93), and the 9-*tsubo*

11. For a discussion of Japanese architecture in post-bubble years, see Daniell (2008).

12. For a discussion of the 9-*tsubo* house boom in the 2000s, see Igarashi (2003, 184-93).

13. Hagiwara Shū and his wife, Hagiwara Yuri, the owners of the first 9-*tsubo* house "Sumire Aoi House," published books upon the house's completion that each became bestsellers and served to increase public interest in urban small-scale housing (Hagiwara Shū 2000; Hagiwara Yuri 2001). Revised versions of the books were published in 2006 and 2010, respectively.

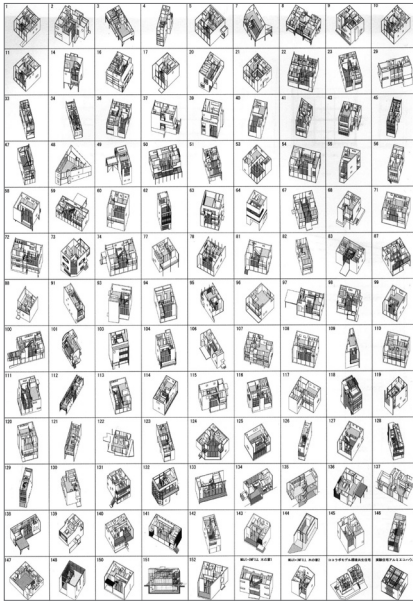


Figure 5. Nanba Kazuhiko, Box-House Series, 1995-present.

© Kazuhiko Nanba+Kai Workshop (left)

Figure 6. Koizumi Makoto, 9-*tsubo* House (Sumire Aoi House), Tokyo, 1999.

© Koizumi Studio & Koizumi Douguten (right)

House became a customizable house through an internet-based company.¹⁴ If the minimum dwelling had served as the prototypical home for the emerging nuclear family in the postwar period, the small houses of the 1990s responded to the collapse of nuclear family model and the emergence of diverse family systems and their different demands and tastes. The small-house fever of the 1990s reflected alternative modes of living that can be described as minimalism. The popularity of the Muji house and the 9-*tsubo* House, for instance, revealed a desire for a simple and minimalistic life style, which was closely related to the idea of shared living, environmental friendliness, and DIY.¹⁵

The second direction tried to carry on the critical perspective of post-modernist architecture. Rather than completely rejecting postmodernism, this tendency embraced the spirit of postmodernism, with its emphasis on everyday urban contexts and the demands of users. A representative example of this was Atelier Bow-Wow, an architectural firm founded by married architects Tsukamoto Yoshiharu (1965-) and Kaijima Momoyo (1969-). Atelier Bow-Wow belonged to the so-called “generation born too late” of architects educated and

14. Boo-Hoo-Woo.com, established by Okazaki Yasuyuki, commercialized the 9-*tsubo* house.

15. A consumer goods retailer that emerged in the 1980s expressing an aversion to commercialism, Muji created a new market by advocating a new lifestyle represented by minimalism (Morrison et al. 2010).

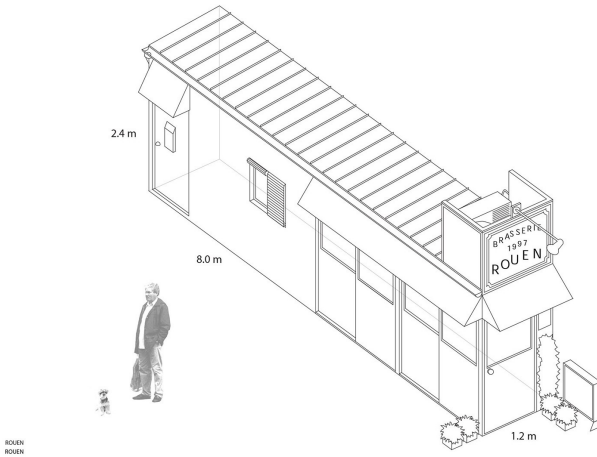


Figure 7. Atelier Bow-Wow, excerpt from *Pet Architecture Guidebook*.
© Atelier Bow-Wow

inspired by postmodernism during the booming 1980s, but who had little chance to actually construct buildings when beginning work in the economically stagnant 1990s (Igarashi 2018, 199). It was not through design itself that these architects leapt to international fame, but through a series of ethnological projects pertaining to Japanese urban spaces. Based on their urban research, Atelier Bow-Wow published books including *Made in Tokyo* (*Meido in Tokyo*, 2001) and *Pet Architecture Guidebook* (*Petto ākitekuchā gaidobukku*, 2001). With reference to classic publications on postmodern architecture, such as *Learning from Las Vegas* (1972), *Architecture without Architects* (1964), and *Delirious New York* (1978), Atelier Bow-Wow captured Tokyo's vibrant urban environment, playfully intervening in a city already built. The group concentrated on unique and super-mini structures, which it referred to as "pet architecture," situated on cramped, leftover pieces of land nestled throughout corners of the city (figure 7). Pet architecture is not a masterstroke filling the pages of the architectural textbooks but an anonymous, "second-rate" B-architecture, i.e. *dame* architecture, unconstrained by conventional aesthetic norms (Kajima, Kuroda, and Tsukamoto 2001, 9). Therein the stipulation of smallness with the term "pet" did not simply refer to size but to anti-elitist and anti-authoritarian postmodern values such as anonymity, "everydayness," post-authoritarianism, lightness, cuteness, humor, affordability, and so forth.

Investigating various examples of pet architecture scattered through the city influenced Atelier Bow-Wow's design practices. Rather than adhering to simple, box-type structures, the practice flexibly reflected the specific features of building sites and the needs of residents in their home designs. Atelier Bow-

Wow was just as interested in the complex and dynamic interactions between houses and surrounding urban spaces as it was in the house itself. For these architects, smallness also referred to the organic manner in which a city operates, where finely divided parts are created and relate to one another in a bottom-up fashion.¹⁶ Growing interest in urban contexts was not restricted to Atelier Bow-Wow's work, but prevailed in 1990s unique houses. Examples included Nishizawa Ryue's (1966-) Moriyama House (1995), which divided a residential space into several small buildings and rendered the area between the buildings as public spaces, and Fujimoto Sōsuke's (1971-) House N (2008), which emphasized the spaces mediating the private home and the public city.

Although the two directions of small-house fever in the 1990s, respectively characterized by the revival of postwar modernism and the perpetuation of critical postmodernism, may appear incompatible, they were congruent insofar as they each sought to abandon the ostentatious spectacle of 1980s postmodernism. Architects in both groups thus endeavored to construct affordable and efficient residential spaces, taking full advantage of given conditions and limited resources, maintaining a practical attitude focusing on residents' real living concerns rather than overbearing and decorative exteriors, using rational, suitable, and low-tech building methods rather than high-tech ones, and responding to new lifestyles and variegated residential cultures. Of course, rather than unambiguously adhering to modernism or postmodernism, many architects specializing in housing design opted for a "middle way" or even entirely new directions. Despite such diversity, architects working on small houses in the 1990s shared a common sensibility—an attitude of gently enduring given circumstances and playfully and flexibly navigating the economic recession. This tendency was best captured in Atelier Bow-Wow's exhibition title *Small is OK*.

Small Architecture after 3.11

Following the tsunami and nuclear disaster that struck Japan's Tohoku coastal area on March 11, 2011, small designs were granted moral legitimacy and economic justifiability. Mikuriya Takashi (2011) designated the Great East Japan Earthquake (hereafter 3.11) as a historical turning point marking the end of the

16. In 2010, *Tokyo Metabolizing*, a Venice Biennale Japan Pavilion exhibition organized by Atelier Bow-Wow architects Kitayama Koh, Tsukamoto Yoshiharu, and Nishizawa Ryue, portrayed metropolitan Tokyo as a superposition of innumerable small interacting fragments (Kitayama, Tsukamoto, and Nishizawa 2010).

postwar system sustaining Japanese society since defeat in the Asia-Pacific War and the beginning of "post-disaster" society. Likewise, architects have tended to view 3.11 as a decisive event accelerating a "post-postwar" sensibility, reinvigorating the tasks, issues, and visions of the field.

Architects promptly responded to the earthquake's extensive harm to buildings. Two days after the disaster began, the Japan Institute of Architects (JIA) established the Headquarters for Disaster Investigation, Relief, and Support, and began to investigate damage to buildings. In early April, a group of architects established online-based Archi+Aid to organize sporadic relief efforts through activities such as publishing, exhibitions, and archiving.¹⁷ The majority of their activities were concentrated on the field of temporary minimum houses as a form of "crisis architecture." Examples of such efforts included Ban Shigeru's PPS (paper partition system) for protecting victims' privacy in public refuge shelters, GK Design Group's QS 72 project, implementing origami principles to maximize installation speed and portability, and the Home for All, a small-scale pavilion series that included contributions from famous architects such as Itō Toyoo, Sejima Kazuyo, and Yamamoto Riken (figure 8).¹⁸

Excluded from official disaster relief and reconstruction processes, architects



Figure 8. Itō Toyoo, The Home for All, Rikuzentakata, 2013

17. Archi+Aid's activities are described in detail in *Kenchiku nōto* (Architectural note) 9 (2013).

18. Regarding architects' responses to the Great East Japan Earthquake, see Itō (2014).

had to settle for participating in volunteer work and locally commissioned projects and contests. Nonetheless, 3.11 served as an impetus elevating the international status and visibility of Japanese architecture. At the 2012 Venice Biennale, the Japanese pavilion featuring “Home for All,” directed by Itō, received the grand prize. The following year, Itō won the prestigious Pritzker Architecture Prize. Ban Shigeru, who worked on a disaster-related theme, became an unprecedented successive Japanese recipient of the Pritzker Architecture Prize in 2014. Of course, his reception of this award was not only for his post-3.11 relief work; it acknowledged his lifelong volunteer activities since 1994, consulting for the UN Refugee Agency and disaster relief designs built all over the globe, including in Kobe, Rwanda, Australia, and Tahiti. Recently, Japanese architecture has seemed to emphasize its privilege and role in the international community as architecture from a “disaster state” and to advocate for the need to deal preemptively with architectural problems demanded by impending crises worldwide.

Perhaps the most important figure who turned architectural values emphasized in the wake of 3.11—such as efficiency, functionality, lightness, low-tech, and community—into a cohesive discourse of “smallness” has been Tokyo University professor and renowned Japanese architect Kuma Kengo (1954-). In his *Small Architecture* (*Chiisana kenchiku*, 2013) published immediately after the disaster, Kuma (2016a, 78) declared that the earthquake had been “divine retribution for the big architecture” that had proliferated in postwar Japan. In the name of big architecture, he said, Japan had asserted the necessity of nuclear power and pushed construction out to the shoreline without considering natural conditions. Kuma’s diagnosis, reminiscent of Ishihara Shintarō’s (1932-) description of the disaster as a “divine punishment” for Japan’s descent into “mammonism,” called for a comprehensive—not simply material—renewal of architectural culture. In his book, Kuma was relentlessly critical of mainstream architectural culture for adhering to the logic of economy in terms of large scale and quantity, attacking its obsession with environmentally destructive building materials such as concrete, postwar housing policy modeled on the American system and its concocted “my-home” myth, and structural contradictions in a national economy propped up by housing mortgages.

As an alternative to “big architecture,” Kuma proposed the concept of “small architecture,” developed from his previous ideas of “weak architecture,” “natural architecture,” and “tri-reductionism”—reducing size, height, and “speed” (Kuma 2004, 2008; Kuma and Miura 2010). Kuma’s small architecture was not necessarily related to a building’s size. Rather, through methods such as “stacking,” “leaning,” “weaving,” and “inflating,” it signified a kind of architecture

consisting of restorable and easily handled units. Notably, Kuma paid close attention to Japanese tradition in order to formulate his architectural theory. First, he modeled small architecture on traditional wooden construction methods. He considered timber as a future-oriented material because it was natural, restorable, and able to blend in ecologically with its surroundings. This stood in contrast to the Western reinforced concrete system, which produces rigid and inadaptible buildings.

Kuma thus emphasized the wooden tradition not only of Japan but also of China and Korea as an alternative to Western-oriented modern architecture. Implicit in this Asian attitude, however, is Japan-centrism. Kuma makes it clear that Japan concentrates and preserves the cultural essence of all of Asia because it is positioned at its fringes (Kuma 2012, 118), a view reminiscent of Okakura Tenshin's (1826-1913) perspective more than a century ago. Amid the threat of westernization, Okakura praised Japan as the "museum of Eastern civilization" preserving the essence of Indian and Chinese culture (Karatani 1994, 33-40).

Alongside traditional wooden construction, Kuma referred to Sen no Rikyū's (1522-91) micro tearoom, which embodied the *wabi-sabi* Japanese aesthetic (figure 9). With his *Taian* (1582) tearoom, Sen no Rikyū not only promoted a distinctly Japanese space at a time of extensive cultural exchange with foreign countries including Portugal, China, and Korea, but also overturned a mainstream culture obsessed with luxurious mansions at a time of material abundance. Comparing the chaos of the *Sengoku* period with the current conditions in the twenty-first century, Kuma (2008, 8-16) argues that the tearoom tradition presents a "weapon against the tide of internationalization." Prior to Kuma, contemporary architects such as Isozaki Arata (1931-) and Andō Tadao had revived tearooms as spiritual spaces for meditation, and Fujimori Terunobu



Figure 9. Sen no Rikyū, *Taian* Tearoom (Kyoto outskirts), 1582

(1946-) also famously advanced an extreme reinterpretation of traditional tearooms in a series of primitive huts in the 2000s. In line with this, Kuma unveiled a pneumatically structured tearoom by adopting an inflation method at a Frankfurt art gallery in 2008. For Kuma, his modern tearoom was like clothing that gently wrapped the body. Furthermore, it could connect our physical being with the vast world around us because it was small (2016a, 75). Here, smallness is a moral value oriented toward symbiotic living; it is open outward, flexibly establishing relationships with the world. It is worth noting that Kuma's advancement of smallness as a morally superior value closely associated with Japanese tradition makes a striking contrast with the anti-traditionalism and Western-oriented universal modernism advocated in postwar minimum housing in the 1950s.

To a certain degree, Kuma's criticism of Western modernism and re-evaluation of Japanese tradition reflect the increasing strength of nationalism in post-disaster Japan. Kuma (2010b, 6-18) goes so far as to argue that Japanese architecture displays the characteristics of mature modernism in a sense that the virtue of true modernism lies in its capability to establish subtle boundaries between buildings, human, and nature, rather than erecting large monolithic buildings. From this perspective, then, architecture worldwide must be—and is indeed being—“Japanized.” Kuma's logic, reminiscent of the discourse on “overcoming modernity” that prevailed in Japan during the war, is able to attain legitimacy in the face of contemporary global problems such as the energy and environmental crises.

The Japanese architectural community recognized his agenda with the 2011 founding of the House Vision, a public forum for architects of different ages to discuss various aspects of housing. In this forum, a house is not understood simply as a physical building, but a site at which technology, energy, lifestyle, economy, and industry intersect. Forgoing frustration over economic stagnation, the architects involved treat an aging society and population decline not as disasters but new opportunities, which means pioneering products, technologies, and industries appropriate to a “mature society.” They see Kuma's conceptualization of smallness, associated with such values as efficiency, relationships, openness, and symbiosis, as necessary for the houses of the future. Naka Toshiharu (1976-), for instance, promoted his concept of “small-economy housing” to expand contacts between residents and the city by including spaces that enable businesses to make use of their hobbies and skills (2013, 72-73). Recently, the House Vision conferences announced the coming of the Greater Asia Era, urging architects from all of Asia to focus on the issues of housing unique to the region, grounded in its indigenous cultures and distinct from the

West (Hara Ken'ya and House Vision 2012, 232).¹⁹ Leadership with respect to this vision has been entrusted to Japan, with its relatively more developed experience of social aging.

Ironically, the unprecedented scale of the New National Stadium (*Shin kokuritsu kyōgijō*, scheduled for completion in 2019), the ambitious main stadium for the 2020 Tokyo Olympic Games, serves as an example of the application of Kuma's smallness theory. The stadium's design has been greatly controversial among international and Japanese architects alike. Iraqi-British architect Zaha Hadid's (1950-2016) design for the stadium was originally selected in an open contest in 2012, but it was eventually rejected when construction costs went over budget. To understand this rather unexpected decision to change designs mid-construction, aside from the nominally cited exorbitant construction costs, one needs to imagine that Japanese society was not comfortable with fact that a foreigner would build a national symbol. Japanese architects voiced their criticism of Hadid's design by focusing on its overwhelming scale, arguing that its size should be reduced to suit the surrounding context.²⁰

The 2015 process of design re-selection was decidedly more closed to foreigners. Despite the format being an international contest, submissions were required to be made in Japanese language.²¹ Ultimately, only Itō and Kuma participated in the contest, and Kuma's concept of "trees and green," emphasizing environmentalism and traditional beauty (figure 10) was selected. What Kuma emphasized most in his design was size. He asserted that "finding an appropriate size was important for the surrounding environment and harmony," contrasting his design with Hadid's (Senda 2018). Kuma's design cut construction costs by close to half, and reduced the height of the structure from seventy to 49.2 meters, although its surface area was reduced only from 78,100 to 72,406 square meters and its capacity remained at 80,000. In any case, by dividing the building into separate sections sized to a "human scale," and introducing natural materials such as trees and grass, Kuma was able to transform the grand

19. Korea does not participate in House Vision.

20. At veteran architect Maki Fumihiko's (1928) symposium held in October 2013 under the title "Thinking about the New National Stadium in the Historical Context of a Shrine's Outer Garden," participants agreed that Hadid's design for an eighty-thousand seat stadium was too large. They argued that the design should be reduced to suit the surrounding environment, characterized by the historical scenery of the outer garden of a Meiji shrine. Regarding the symposium, see Maki and Ōno (2014).

21. For a discussion of the controversy surrounding the design and reselection process for New National Stadium, see Igarashi (2016).



Figure 10. Kuma Kengo, New National Stadium, 2019. © Taisei Construction, Azusa Design, and Kengo Kuma Architectural Urban Design Office Joint Venture Consortium (Taisei Kensetsu·Azusa Sekkei·Kuma Kengo Kenchiku Toshi Sekkei Jimusho Kyōdō Kigyōtai)

structure into a work of “small architecture” that was decidedly “Japanese.” As represented by architectural historian Igarashi Tarō’s (2016, 17) analysis, the controversy surrounding the Olympic stadium and selection of Kuma’s design appeared to be a symptom of the “return of Japan” (*Nihon kaiki*). Attempting to subdue the controversy surrounding the stadium, Kuma published a pamphlet justifying his design, the subtitle of which was “Architect Kuma Kengo’s Resolution.” In outlining Kuma’s hope to “express Japan’s maturity” through wooden architecture imbued with the spirit of the times, as much as this pamphlet urged the internationalization of Japanese architecture, it also emphasized re-establishing the character of Japanese architecture amid a tide of internationalization (Kuma 2016b).

Conclusion

The image of “small Japan” is a stereotype of Japanese people and Japanese culture produced through interactions between Japan and the West. However, architects have not only passively absorbed the discourse of smallness; they have actively and strategically produced and reproduced it in order to pursue the kind of architecture that might fulfill the role and identity demanded by a changing Japanese society.

In the immediate postwar period, smallness signified a modern American lifestyle contrasting with outmoded, feudal customs. In the 1990s, small houses became synonymous with a new variegated, ecological, and community-oriented lifestyle. Since the Great East Japan Earthquake, amid intensifying nationalism and a post-postwar reorientation, smallness has been redefined as a Japanese value for overcoming Western-centric modernism. Designating something as "small" no longer signifies passive acceptance of an inevitable condition but a moral and superior value challenging Western size and strength. In other words, smallness is now regarded as a strategy for future survival unrelated to material size. Furthermore, Japanese architects possess the "skill and privilege" to produce small architecture. Thus smallness is portrayed as a bulwark against the tide of globalization, preserving the identity of Japanese architecture, a means of granting it a competitive advantage on the international stage, and a type of wisdom Japan might offer the rest of humanity.

• Translated by Keiran MACRAE

Acknowledgements | This article is the translated version of the author's Korean article "Ilbon ūi sojut'aek kwa 'chagŭm' ūi tamnon: chŏnihu esŏ t'al chŏnihu kŏnch'uk ūro," published in *Ilbon pip'ŏng* [Korean journal of Japanese studies] 20 (2019), with the permission of Sŏul Taehakkyo Ilbon Yŏn'guso [Institute for Japanese Studies, Seoul National University]. The translation and the English editing of this article were supported by (Chae) Hakbong Changhakhoe (Hakbong Scholarship Foundation).

References

- Atorie Wan [Atelier Bow-Wow]. 2001. *Petto ākitekichū gaidobukku* [Pet architecture guidebook]. Tokyo: Wārudo foto puresu.
- Barthes, Roland. 1983. *Empire of Signs*. Translated by Richard Howard. New York: Hill and Wang.
- Daniell, Thomas. 2008. *After the Crash: Architecture in Post-bubble Japan*. New York: Princeton Architectural Press.
- Frearson, Amy. 2013. "Japanese Architects Rally against Zaha Hadid's 2020 Olympic Stadium." *Dezeen*. October 10. <https://www.dezeen.com/2013/10/10/japanese-architects-rally-against-zaha-hadids-2020-olympic-stadium>. Accessed November 18, 2018.
- Funo Shūji. 1995. *Sengo kenchiku no shūen: seikimatsu kenchiku ron nōto* [The end of postwar architecture: Notes on architectural theory at the century's end]. Tokyo:

- Renga Shobō Shinsha.
- Hagiwara Shū. 2000. *9 tsubo hausu* [My 9-*tsubo* house]. Tokyo: Kosaido Publishing.
- Hagiwara Yuri. 2001. *9 tsubo hausu kyōshi kyoku* [9-*tsubo* house rhapsody]. Tokyo: Magajin Hausu.
- Hamaguchi Miho. 1949. *Nihon jūtaku no hōkensei* [The feudalism of Japanese houses]. Tokyo: Sagami Shobō.
- Hara Ken'ya and House Vision [Jikkō iinkai]. 2012. *House Vision: atarashii jōshiki de ie o tsukurō* [House Vision: Let's build a house with new common sense]. Tokyo: Heibonsha.
- Igarashi Tarō. 2003. "Kyū-tsubo hausu kō" [Remarks on the 9-*tsubo* house]. *10+1* 30: 184-93.
- Igarashi Tarō. 2012. "In Focus: Japan's Housing Conditions and Residential Architects." In *From Postwar to Postmodernism: Art in Japan 1945-1989*, edited by Doryun Chong, Michio Hayashi, Fumihiko Sumitomo, and Kenji Kajiya, 289-90. New York: Museum of Modern Art.
- Igarashi Tarō. 2016. *Nihon kenchiku nyūmon: kindai to dentō* [Introduction to Japanese architecture: modernity and tradition]. Tokyo: Chikuma Shobō.
- Igarashi Tarō. 2018. *Contemporary Japanese Architects*. Translated by David Noble. Tokyo: JPIC.
- Ikebe Kiyoshi. 1950. "Rittai saishōgen jūkyō no kokoromi" [The 3D minimum dwelling attempt]. *Shin kenchiku* [New architecture] 25 (7): 203-209.
- Itō Toyoo. 2014. *Naeil ūi kōnch'uk* [Architecture of tomorrow]. Translated by Yi Chōng-hwan. Paju: An gūrap'iksū.
- Kajima Momoyo, Kuroda Junzō, and Tsukamoto Yoshiharu. 2001. *Meido in Tokyo* [Made in Tokyo]. Tokyo: Kashima Shuppankai.
- Karatani Kojin. 1994. "Japan as Museum: Okakura Tenshin and Ernest Fenollosa." In *Japanese Art after 1945: Scream against the Sky*, edited by Alexandra Munroe, 33-40. New York: H. N. Abrams.
- Kitayama Koh, Tsukamoto Yoshiharu, and Nishizawa Ryue. 2010. *Tokyo Metabolizing*. Tokyo: TOTO Publisher.
- Koolhaas, Rem. 1978. *Delirious New York*. New York: Oxford University.
- Kuma Kengo. 2008. "What is a Teahouse." In *Kengo Kuma: Breathing Architecture*, edited by Volker Fischer and Ulrich Schneider, 8-17. Basel: Birkhäuser.
- Kuma Kengo. 2004. *Makeru kenchiku* [Weak architecture]. Tokyo: Iwanami Shoten.
- Kuma Kengo. 2008. *Shizen na kenchiku* [Natural architecture]. Tokyo: Iwanami Shoten.
- Kuma Kengo. 2010. *Kyōkai: sekai o kaeru Nihon no kūkan sōsajutsu* [Kyōkai: A Japanese technique for articulating space]. Kyoto: Tankōsha.
- Kuma Kengo. 2012. *Tsunagu kenchiku* [Connective architecture]. Tokyo: Iwanami Shoten.

- Kuma Kengo. 2016a. *Small Architecture*. Translated by Alfred Birnbaum. London: AA Publications.
- Kuma Kengo. 2016b. *Naze boku ga shin kokuritsu kyōgijō o tsukuru no ka: kenchikuka Kuma Kengo no kakugo* [Why I should create a new national Stadium?: Architect Kuma Kengo's r]. Tokyo: Nikkei BP-sha.
- Kuma Kengo and Miura Atsushi. 2010. *Santei shugi* [Triple-reductionism]. Tokyo: NTT Shuppan.
- Maki Fumihiko and Ōno Hidetoshi. 2014. *Shin kokuritsu kyōgijō, nani ga mondai ka* [New national stadium, what's the problem?]. Tokyo: Heibonsha.
- Mikuriya Takashi. 2011. "Sengo" ga owari, "saigo" ga hajimaru [The "postwar" era is over, the "post-disaster" era has begun]. Tokyo: Chikura Shobō.
- Morrison, Jasper, Fukasawa Naoto, and Hara Ken'ya. 2010. *MUJI*. New York: Rizzoli.
- Naka Toshiharu. 2013. "Chisana keizai" [Small economy]. In *House Vision: 2013 Tokyo Exhibition*, edited by Hara Ken'ya and House Vision, 72-73. Tokyo: Heibonsha.
- Nanba Kazuhiko. 1999. *Sengo modanizumu kenchiku no kyokuhoku: Ikebe Kiyoshi shiron* [Overcoming postwar modern architecture: Essays on Ikebe Kiyoshi]. Tokyo: Shōkokusha.
- Nanba Kazuhiko. 2006. *Hako no ie: eko hausu o mezashite* [Box house: Toward an eco-house]. Tokyo: NTT Shuppan.
- Nishiyama Uzō. 1948. *Korekara no sumai: jū yōshiki no hanashi* [House of the future: A story of living style]. Tokyo: Sagami Shobō.
- Nuijsink, Cathelijne. 2012. *How to Make a Japanese House*. Rotterdam: nai010 publishers.
- Pollock, Naomi. 2015. *Jutaku: Japanese Houses*. London: Phaidon.
- Reynolds, Jonathan M. 2001. *Maekawa Kunio and the Emergence of Japanese Modernist Architecture*. Berkeley and London: University of California Press.
- Rudofsky, Bernard. 1964. *Architecture without Architects*. New York: MoMA Press.
- Senda Shuhei. 2018. "Interview: Kengo Kuma Discusses His Upcoming Projects at Home and Abroad." *Designboom*. July 5. <https://www.designboom.com/architecture/kengo-kuma-interview-07-05-2018>. Accessed November 18, 2018.
- Shinohara Kazuo. 2012a. *Jūtaku ron* [Housing theory]. Tokyo: Kashima Kenkyūjo Shuppankai.
- Shinohara Kazuo. 2012b. "Jūtaku wa geijutsu de aru" [Housing is an art]. In *Jūtaku ron* [Housing theory], 79-85. Tokyo: Kashima Kenkyūjo Shuppankai. Previously published in *Shin kenchiku* [New architecture] 37 (5) (1962): 77-78.
- Shinohara Kazuo. 2012c. "Seikatsu kūkan no atarashii shiten motomete" [A new perspective on living space]. In *Jūtaku ron* [Housing theory], 67-76. Tokyo: Kashima Kenkyūjo Shuppankai. Previously published in *Shin kenchiku* [New architecture] 36 (1) (1961): 105-107.
- Shinohara Kazuo. 2012d. "Ushinawareta no wa kūkan no hibiki da" [What has been

lost is the echo of space]. *Jūtaku ron* [Housing theory], 107-25. Kashima kenkyūjo shuppankai. Previously published in *Kokusai kenchiku* [International architecture] 16 (10) (1962): 25-28.

Teige, Karel. 1932. *The Minimum Dwelling*. Cambridge and London: MIT Press.

Venturi, Robert, Denise Scott Brown, and Steven Izenour. 1972. *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*. Cambridge and London: MIT Press.

Yi Ŏ-ryōng. 2008. *Ch'ukso chihyang ũi Ilbonin* [Smaller is better: Japan's mastery of the miniature]. Seoul: Munhak Sasangsa.

Yoshii Masahiko. 2016. "Nichi-EU-EPA kōshō no ronten: EU Kankoku FTA no keiken kara" [Japan-EU EPA negotiation: Lessons from the EU-South Korea FTA]. *Kokumin keizai zasshi* [National economy magazine] 213 (3): 15-30.