Review Article

House Vision: Architects and Industry Awakening 'House' Desires and Visualising New Ways of Living

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The design of the detached house has been at the core of architectural developments in post-Second World War Japan and the subject of a lively discussion among architects about what makes a good home at a particular moment.[1] Alongside the continuous production of houses, architects actively proposed new ways of living that contrasted with what was increasingly becoming a uniform housing stock based on mass fabrication. For decades, the architect-designed house and the accompanying debate saw multiple trends, moving from architects' social involvement in the immediate post-war years to a deliberate making of artistic houses in the 1960s. However, the intensification of neoliberal policies after a decade of severe economic crisis in the 1990s drove architects towards social involvement once again, initiating a housing trend based on sharing, renovation and re-use of the existing housing stock. This essay will highlight the work of the *House Vision* think-tank and full-scale building exhibitions – initiated in 2011 by Japanese designer and art director Kenya Hara – as one response to the socio-economic and political conditions after the neoliberal turn. Similar to the efforts of independent architects in recent decades, *House Vision* aims to generate awareness in society about alternatives to mainstream housing options. Yet what makes this initiative different is that it is not an individual effort but a collaborative project between designers and industries to push the latest technologies in home electronics, energy and mobility devices into new architectural forms.

Japan's post-war housing policy

Using a model of state-driven economic development, Japan experienced a rapid industrial recovery after the Second World War that would go down in history as the economic miracle. Between the start of the Korean War in 1953 and the Oil Crisis in the early 1970s, Japan transformed itself from a country whose cities had been reduced to ashes into an industrial giant. Central to this economic recovery was Japan's post-war housing policy. Through the introduction of long-term, fixed, low-interest mortgages provided by the Government Housing and Loan Corporation (GHLC) on standard lending conditions, the government actively supported home ownership.[2] As a result, the construction sector turned into Japan's principal industry. Simultaneously, government bureaucrats and politicians configured housing as an essential component of a 'middle-class consciousness' (*chūryū ishiki*) and designated the home as the place to 'support and nourish the central project of economic growth and prosperity'.[3] The full-time housewife (*sengyōshufu*) at home was as much part of the mythology of the 100 million-strong middle-class (*ichioku sō chūryū*) as the salaried man (*sararīman*) devoted to his company, all with the prospect of climbing the housing ladder towards home ownership.[4]

Individual architects profited from government policy as it provided them with clients in search of homes that represented an entirely new image of house and home for a post-war society. Influenced by the 1947 Japanese Constitution that promoted democracy, a common understanding arose among architects that architecture in post-war Japan should be democratised.[5] In the belief that house design could bring about a revolution – showing what Japanese society could be in the near future – architects enthusiastically started to design basic shelters in the form of minimum houses. The initial response of architects to the demand for 4.2 million housing units immediately after the Second World War was to explore rational building methods that could speed up the construction of prefabricated dwellings. Soon architects started to experiment with the design of prototypes for minimum houses intended for mass production.[6] Just as architects in other countries involved in the war repurposed wartime and production technologies, architects in Japan collaborated with former war industries.[7] When the use of experimental prototypes for mass production stalled due to a lack of building materials and shortcomings in technical know-how in the 1950s, attention shifted to the design of individual houses embracing the new post-war family ideology of a couple-centred family. Efficient housing plans for limited floor areas predicted the future housing condition of a nuclear family living in a micro-urban space.

Technological innovations and the booming economy in the 1960s made it possible for the prefab housing industry to develop.[8] The driver behind the success of this industry was a middle-class desire for home ownership. Once people demanded more luxury in the late 1960s, house manufacturers set out to remove the temporary, cheap and homogeneous character from their prefab structures. By applying decorations and exotic foreign building styles, some superficial variations on the initially simple boxy houses started to appear. However, in the transformation from a minimal box with modernist aspirations to colourful 'shortcake houses'[9] with postmodern connotations, independent architects lost interest in what had started as assembling industrial products and stopped actively collaborating with the prefab industry. This split marked the start of a sharp division in Japan between the independent artist architect who strove for differentiation, a humanised dwelling space and anarchy, and a housing industry that focused on mass sales based on a notion that the same house layout would fit all.

The Neoliberal Turn

Japan's economic miracle ended with the bursting of the asset bubble in the early 1990s. What followed was a period of severe economic crisis, a 'lost decade' in which the government explicitly started to promote neoliberal policies. During the Nakasone administration (1982–1987), these policies took form in the privatisation of state-owned enterprises, such as the Japan National Railways, and barely influenced daily life.[10] However, starting with the Koizumi administration (2001–6), neoliberal policy gradually unfolded and started to have an impact on society. Through deregulation of the labour laws, Prime Minister Junichiro Koizumi and his cabinet removed the main pillar of Japan's post-war housing system – a system based on salaried and secure lifetime employment – causing work and life to become much more precarious. In addition, with the abolition of the system of GHLC mortgages in 2007, home ownership became limited to those accepted under the strict conditions of private banks. A direct consequence of these policies was the shift from a society based on home ownership to one of private landlords.[11] The neoliberal restructuring of the labour market, together with the promotion of individual responsibility introduced by the Koizumi administration and the global financial crisis in 2008, caused what anthropologist Anne Allison has described as a 'liquefying' of Japan.[12] What was once a close-knit society based on lifetime employment and family values, changed into a relationship-less or bondless society (*muen shakkai*). Since companies were allowed to fire people in response to market conditions, it created job insecurity that destabilised the male bread-winner employment system and pushed women into the workforce. With little welfare compensation from the government, and no family to fall back on, the Japanese saw an increase of alternative employment systems such as net-café refugees (homeless people who sleep in twenty-four-hour Internet or manga cafés), freeters (non-regular workers aged fifteen to thirty-four in low-wage jobs) and NEETs (people who are Not in Employment, Education or Training).[13] All of these issues came on top of an already precarious situation involving a rapidly ageing population, a declining birth rate and increasing social polarisation.[14]

The triple disaster of the Great East Japan Earthquake added a cataclysmic event to an already liquefying Japan. The earthquake hit north-eastern Japan on 11 March 2011, and its subsequent tsunami and meltdown of the Fukushima Daiichi Nuclear Power Plant killed thousands of people and caused significant material damage to buildings and infrastructure. The problems resulting from the disaster were of such enormity that they not only affected the Tohoku area, they also shook the personal values of family and friendship across the entire country, prompting larger questions about the meaning of work and life.[15] Consumption patterns naturally followed suit. The economic struggles of the lost decade of the 1990s and the Great East Japan Earthquake brought to the surface a feeling of enough-ness (*mō jūbun*), which reflected itself in a change in consumption pattern from material things (*mono*) to non-materialistic values (*koto*). As sociologist Atsushi Miura has described, consumption patterns in Japan moved from a 'third stage' into a 'fourth stage' of consumer society.[16] In this 'fourth stage' people no longer valued personal consumption in which the individual came first. Instead, priority was given to the *sharing* of goods in a much larger society.

Micro-resistance to neoliberalism

The lost decade and the Great East Japan Earthquake (3.11) prompted Japanese architects to rethink their professional outlook. As a result of the everyday reality of a post-3.11 Japan, the newly designed detached house, for the time being, lost its role among architects in favour of social concerns. The *mō jūbun* mentality triggered the demise of the dream of home ownership and consequently the rise of alternative living arrangements. Architects readily adopted their social duty of shared living, do-it-yourself and renovation as alternatives to the custom-designed, new-build home. Many architects envisaged themselves playing a central role in the realisation of a creative solution for the disaster-hit area. Starting with big questions such as 'What is architecture?' and 'What can we architects do?', architects teamed up with other professionals to refine their questions into the larger planning issues of 'Where should we head towards – rebuilding the Tohoku area or all of Japan?' and assigned themselves a social role.[17]

The responses from architects tied in with the much larger discourse around the importance of social bonds (*kizuna*), calling for a humanistic recovery in which designers no longer believed in a grand modernist slogan like 'form follows function'. Philosopher Yoshiyuki Sato, in the context of the Japan Pavilion at the 2016 Venice Biennale, called the bottom-up struggles of architects 'a micro-resistance to neoliberalism'.[18] Interest among architects had shifted from fashion and aesthetics to more fundamental and primitive matters. New forms of collective living, the recycling of the existing housing stock, and renewed interest in local materials and production systems led to collaborative efforts between designers who envisaged a recovery of Japan. Emblematic of

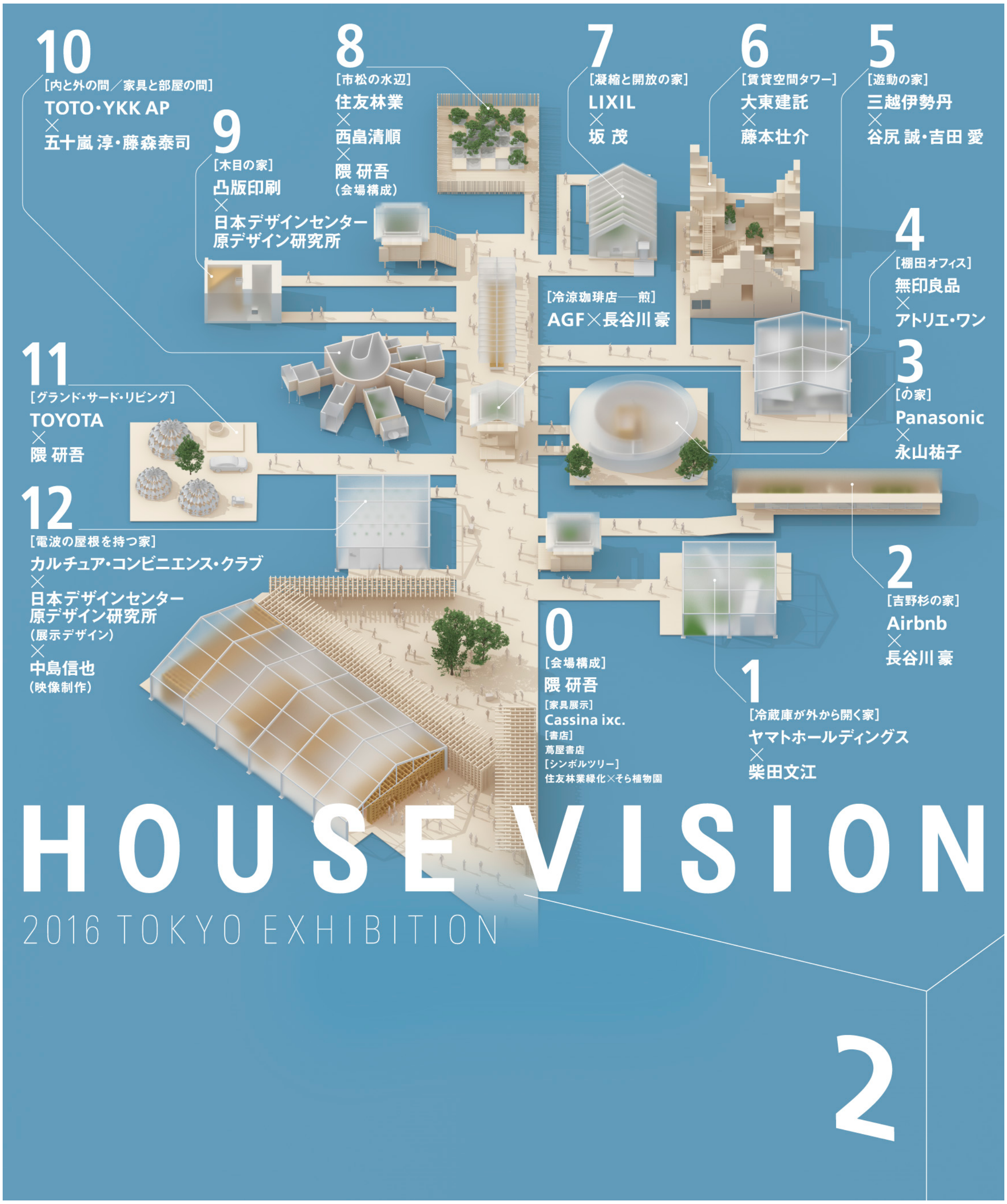

Fig. 1: Poster of House Vision 2 2016 Tokyo Exhibition. This exhibition addressed the question of how we can bring together and re-connect individuals, urban and rural areas and fragmented technologies. Source: House Vision.

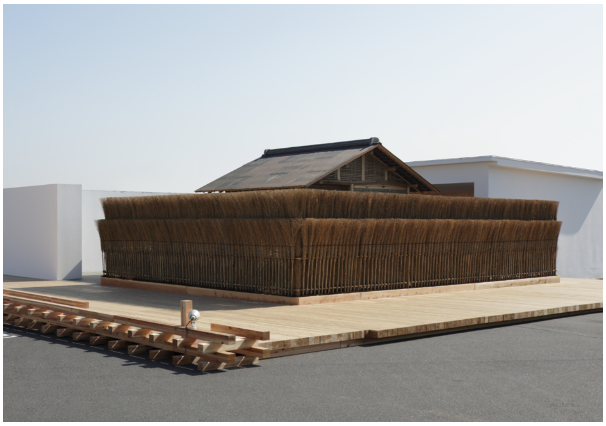

Fig. 2

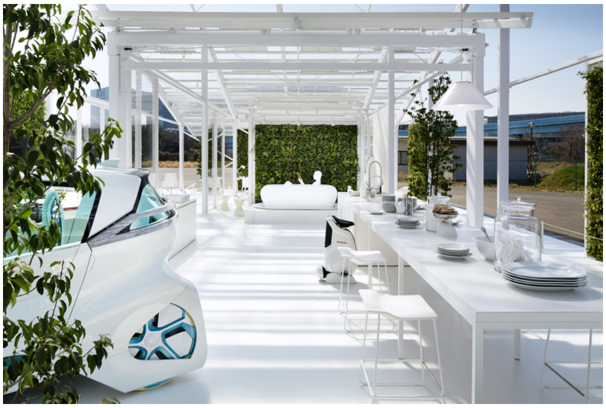

Fig. 3

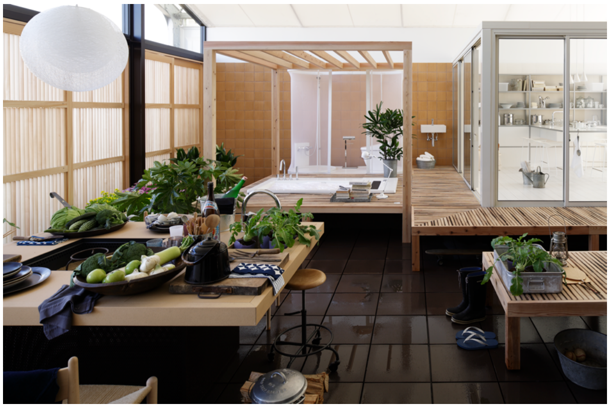

Fig. 4

Fig. 2: House Vision 2013 Tokyo Exhibition. In House of Suki, artist Hiroshi Sugimoto and Sumitomo Forestry use tools and techniques found in the traditional Japanese tea house as a material for the future. Photo: House Vision.

Fig. 3: House Vision 2013 Tokyo Exhibition. Power generation and storage, heat circulation, electric vehicles, home life and the city are seamlessly connected in Sou Fujimoto and Honda's collaborative design of House of Mobility and Energy. Photo: House Vision.

Fig. 4: House Vision 2013 Tokyo Exhibition. Toyo Ito and Lixl rethink happiness in daily life through releasing the house in Japan from the restricting floorplan based on n number of bedrooms, a living and dining-kitchen (nLDK) floorplan that was introduced in post-Second World War Japan. Photo: House Vision.

this mentality change is Toyo Ito's call to fellow architects to break away from introversion and abstraction and instead create a viable relationship with nature, away from modernism. Looking at the ruins of the disaster-stricken area of Tohoku in 2011, he projected the future direction of architecture:

> The media often uses the phrase 'beyond assumption' for the disaster, meaning that its force was beyond structural requirements. But I can't help sensing a more fundamental disruption between our norm and the reality. I think we design things in a mechanical manner as a 'complete machine', complying with nature defined in quantities or abstract definitions … I think our task now is to rethink how we 'assume' design conditions, rather than reviewing the conditions. We need to start by questioning the way we relate to nature. The people or community we always argue for in our architecture – aren't they just an abstracted scheme?[19]

House Vision initiative

In the context of a liquefied Japan that nurtured a profound interest in the quality of life, Kenya Hara launched the platform *House Vision*. In his role as art director of Japan's retail company Muji (*Mujirushi Ryōhin,* or *No Brand Quality Goods*), Hara has revolutionised the way the Japanese thought about customising their own houses. By stripping decorations from a wide variety of household and consumer goods, Muji has become well-known for its simple yet valuable products that stimulate customers to arrange the interior of their houses more freely. Building on Muji's success in raising what he calls people's 'life literacy', Hara started to focus on the house as the key to understanding societal problems in Japan.[20] *House Vision* was brought to life as a series of workshops and symposia involving various types of industries and talented designers in order to create a future for Japanese cities and industries.[21] Together, they started to discuss problems inherent to contemporary Japan, ranging from a rapidly ageing society, to the outward migration of young people from rural areas and the growth of alternative families, to the new reality of second-hand buildings.[22] By capturing 'home' as a place 'to blend various possibilities, such as energy, movement, electric appliances, mature marketing or aesthetic resources', *House Vision* aspires to visualise the potentials of Japanese industries.[23] The role of companies in this collaborative project is not that of a sponsor advertising its own products. They should, according to Hara be drivers of innovations that can give concrete form to unexplored possibilities. Companies cannot do this alone. Their technological know-how is complemented by the creativity of architects as a means to develop ideas about the house that could not be imagined without synergy between the two parties.[24] The launch of *House Vision* correlated with the changing role of the designer in a post-3.11 society. The general feeling of 'enough-ness' became even more profound after the Great East Japan Earthquake and affected product designers as much as it did architects. For Hara, the responsibility of a designer was no longer one of 'creating beautiful forms or clear identification for brands' but rather one of 'visualizing the possibilities of new industries' and adding value to a product.[25] Likening design to the 'education of desire', Hara uses the design approach of introducing inspirational examples and alternatives as a means of making people aware of their latent desires. Thus, when people learn about their house-desires, they will open their eyes to alternative housing models and imagine the house as an extension of their personalities. Hara refers to this as 'maturation of living literacy'; awaken in people the possibility that they can create their own living environment.[26]

House Vision exhibitions

In a bid to connect the results from the workshops and symposia to society, Hara started to expand the *House Vision* project with building exhibitions

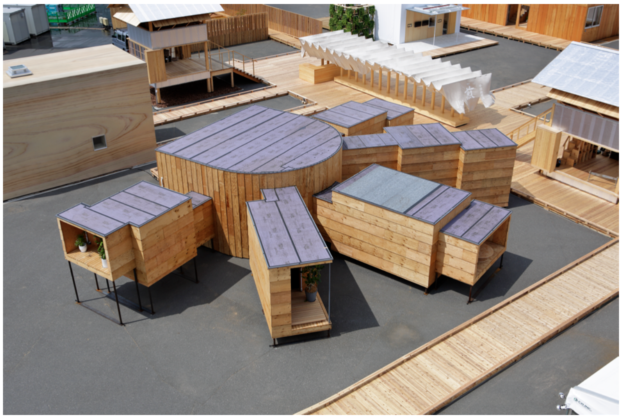

Fig. 5

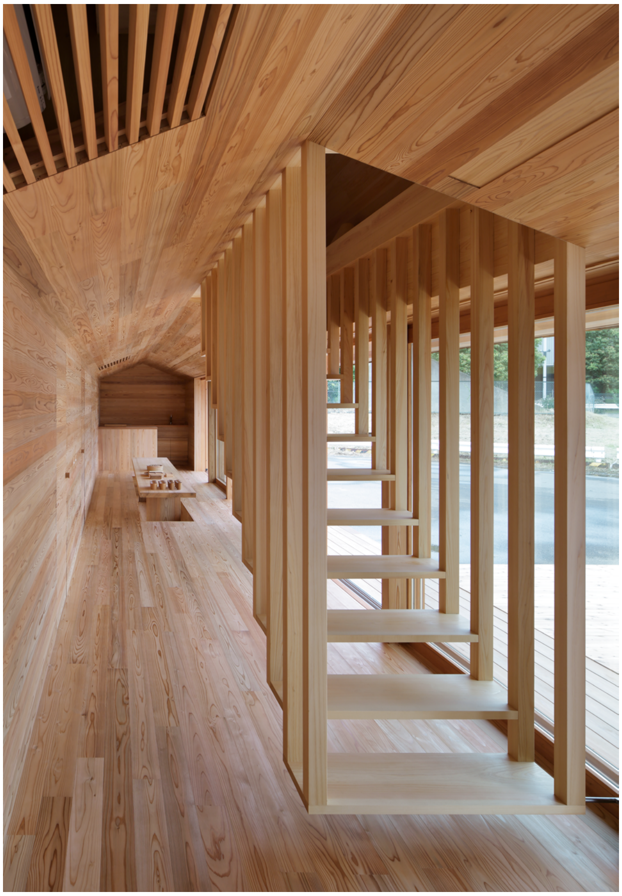

Fig. 6

Fig. 5: House Vision 2016 Tokyo Exhibition. Architect Jun Igarashi, furniture designer Taiji Fujimori and Toto produced a house in which windows becoming openings with depth, producing unfamiliar spaces between what we usually think of as inside and outside. Photo: House Vision.

Fig. 6: House Vision 2016 Tokyo Exhibition. Go Hasegawa and Airbnb's Yoshino House envision the future of the house with a strong guest-host relationship. The bookable Airbnb property is managed by the village of Yoshino and merges a community centre (downstairs) with a guesthouse (upstairs) as a way to strengthen local culture. Photo: House Vision.

where people could experience the architectural proposals. Since paper architectural models would not allow architects' creativity to be properly introduced to a non-architect audience, all house proposals were shown as full-scale models. The first attempt to share the ideas formulated in *House Vision* with the public was the 2013 Tokyo Exhibition [Fig. 1]. This featured full-scale model homes at an open-air exhibition site in Tokyo's Odaiba area. Here, car manufacturer Honda, telecommunications company KDDI, housing and wood corporation Sumitomo Forestry, toilet manufacturer Toto, the water and housing products company Lixil, and bookshop Tsutaya Books, alongside Muji, among others re-invented the house using the overall theme of 'designing a home with a new common sense' (*atarashii jōshiki de ie o tsukurō*).

Artist Hiroshi Sugimoto collaborated with Sumitomo Forestry to produce something new based on forestry and timber. As an artist known for putting traditional Japanese aesthetics in a contemporary context, he designed a house using traditional Japanese wood aesthetics infused with new energy for future usage. [Fig. 2] The 'new common sense' in his House of Suki is the aesthetics of a traditional Japanese tea ceremony house. Instead of adding high-tech features, Sugimoto focused on preserving the woodworking skills that are close to becoming extinct. He applied existing craftsmanship to materials or elements that differed from those used in the Japanese tea house, producing things like solid camphor flooring and a natural hedge made from bamboo brooms.

Architect Sou Fujimoto teamed up with car manufacturer Honda to produce the House of Mobility and Energy, a three-layered nested structure with a seamless energy cycle. [Fig. 3] The house generates its own energy through solar panels and natural gas, stores it locally and uses it to power Honda's personal mobility devices. Two and four-wheeled moveable robotic stools and electric cars run on smart energy, in and out of the house, effortlessly connecting its residents within the house and between the house and the city. Fujimoto successfully visualised this potential of personal mobility in architectural form. Contrary to a conventional dwelling that strictly separates inside from outside, this house is an open structure that reformulates the relationship between the house and the city. Configured as three differently sized house-shaped frames nested in each other, the house is experienced as multiple gradations between interior and exterior. Electric vehicles driving into the outer layer of the house dissolve the border between inside and outside.

Toyo Ito recalls in his proposal a 'new common sense' Japanese lifestyle in which residents regain direct contact with soil, rain and natural scents. His Beyond the Residence: Imagining a House for the Nostalgic Future designed in collaboration with Lixil combines the pleasures of outdoor living with the comfort of a highly controlled indoor space. [Fig. 4] Moveable wooden louvres spanning the front façade of the house allow light and wind to freely enter the house. The Earthen Room behind the louvres, containing a garden, veranda, outdoor bath and stove, invokes a lifestyle akin to the *doma* [earth floor] in a traditional Japanese house, neither strictly inside or outside. By contrast, the highly controlled indoor spaces of living room and soundproof hobby room, equipped with the latest technologies such as self-heating tiles, ensure a comfortable indoor climate that is lacking in traditional Japanese houses. As such, people can enjoy the best of both worlds. The house stems from Ito's idea of 'simple happiness'. For the architect, simple happiness derives from living in a rich environment that allows people to choose between various options according to their mood. The behaviour of residents is 'much like that of a dog, freely deciding where in the house it will take a nap.'[27] The second Tokyo exhibition, in 2016, started from the societal challenge of Japan's rapidly declining birth rate

Fig. 7

Fig. 8a

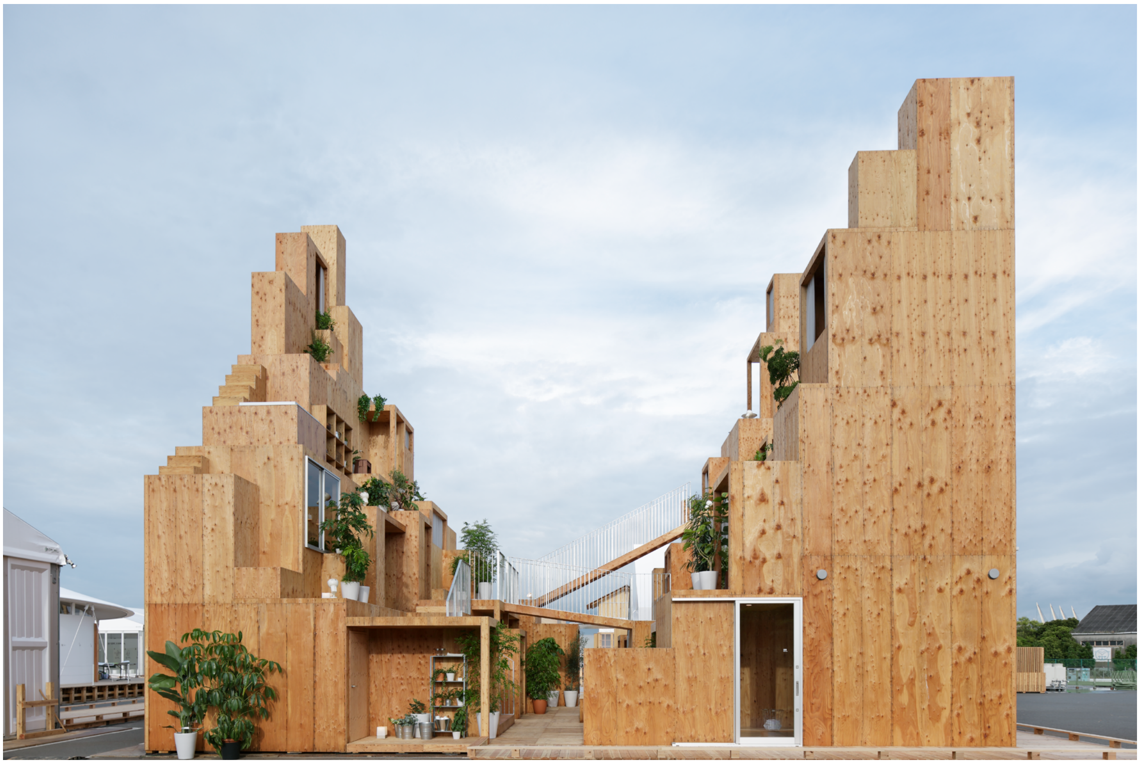

Fig. 8b

Fig. 7: House Vision 2016 Tokyo Exhibition. Daito Trust Construction and architect Sou Fujimoto redefined the standard Japanese rental apartment with luxuriously generous shared spaces. Photo: House Vision.
Fig. 8a, b: House Vision 2016 Tokyo Exhibition. Rental Space Tower advances collective living in Japan using a complex scheme of private and public spaces. Photo 8a: SFA Photo (courtesy of Sou Fujimoto Architects). Photo 8b: Nacása & Partners Inc (courtesy of House Vision).

and the rise of alternatives to the post-war nuclear family. For decades, the Japanese housing industry has catered to the house for the nuclear family, but the recent increase in single-person households renders this image of the house obsolete.

In response to families 'splitting up into individuals that freely come and go', Hara introduced the theme of *House Vision 2* under the heading 'Co-dividual: Split and Connect/Separate and Come Together' (*wakarete tsunagaru/hanarete atsumaru*).[28] The proposals investigate how the house can reconnect individuals. One of the twelve full-scale homes on display was the collaboration between Japan's famous door-to-door delivery service company Yamato and industrial designer Fumie Shibata. House with Refrigerator Access from Outside makes full use of Yamato's extensive logistics system through the introduction of not merely door-to-door deliveries but multiple deliveries such as 'from factory refrigerator to private refrigerator', and 'from dry cleaner to private closet'. The house features all kinds of storage devices that allow delivery services to access the house, without making residents dependent on delivery times.

For architect Go Hasegawa, co-dividual implied the building of communities.[29] Together with Airbnb, the online hospitality service, he designed a large house made from local cedar wood that contains rentable accommodation as well as an event space for the local community. Through the combination of these two different functions, Yoshino-sugi Cedar House – relocated to its final destination in rural Yoshino after the *House Vision* exhibition – aims to provide travellers with a deeper understanding of Yoshino culture. [Fig, 6]

Residential leasing and management company Daito Trust, together with architect Sou Fujimoto, aspired to redefine the typical rental apartment in Japan. In contrast to the standard apartment in which residents tend to isolate themselves, Fujimoto proposed a form of collective living that invited residents to connect with their neighbours. By reducing the private spaces to an absolute minimum and maximising its collective spaces, Rental Space Tower [Fig. 7, 8a, 8b] provides residents with an urban luxury unheard of in standard Japanese apartments; large outdoor bathing facilities, cooking in a royal-sized outdoor kitchen, and the possibility to grow their own vegetables.

Conclusions

More than generating revolutionary housing ideas, *House Vision* was set up with the ambition of introducing to society realistic alternatives to the existing housing market. During the post-war era, Japan experienced rapid economic growth that was largely propelled and sustained by the white-collar salaryman, his lifetime employment and the dream of home ownership. Government and industry pushed the housing market towards 'the house for the nuclear family', which subsequently became the default housing option. However, recent socio-economic and political changes, such as a lingering recession, a declining birth rate, and the rise of alternative families, have rendered this housing mythology obsolete. It is at this breaking point that *House Vision* was launched. Using his philosophy of 'educating people about their own desires', Kenya Hara challenged people to open their eyes to alternative housing models and imagine the house as an extension of their own personalities. The emphasis is not on the final product called a house, but rather on raising awareness among the public about the possibility of choosing a housing scheme that better fits their lifestyle. Merely displaying small architectural models will not do the job of delivering exclusive architectural ideas to audiences beyond architectural circles. Full-scale open-air exhibitions are indispensable in providing a first-hand experience of what an alternative housing scheme might entail. The proposals that architects and companies have drawn up in *House Vision* demonstrate a range of future scenarios for the house. On the one hand, proposals are high-tech and integrate the latest mobility and energy sources using new architectural vocabulary. On the other hand, proposals look back to the past to find inspiration for the future. These reinterpretations of traditional Japanese aesthetics and lifestyles are adapted to meet twenty-first-century levels of comfort. Since *House Vision* starts from crucial societal problems, the proposals are likely to find an audience. Although the initiative does not differ substantially from the decades-long endeavours of individual architects in Japan to present alternatives to mainstream housing, significant media coverage and government support might make *House Vision* more successful in planting the actual seeds of change.

Notes

The larger context in which House Vision is presented in this article is part of the author's PhD dissertation and rewritten with funding from Cecelia Segawa Siegle Prize.
House Vision Exhibitions: Director: Kenya Hara; Planning & Coordination: Sadao Tsuchiya; Production/Execution: Nippon Design Center, HARA Design Institute.

1. For an investigation of the recent history of the single-family house in Japan as a product of intense theoretical examination and architectural experimentation see Cathelijne Nuijsink, 'What is a House? Architects Redesigning the Domestic Sphere in Contemporary Japan, 1995–2011' (PhD dissertation, University of Pennsylvania, 2017).
2. For a detailed account of how the housing system in Japan has driven the expansion of home ownership as a means of facilitating the formation of a middle-class society, see Yosuke Hirayama, 'Reshaping the Housing System: Home Ownership as a Catalyst for Social Transformation', in *Housing and Social Transition in Japan*, ed. Yosuke Hirayama and Richard Ronald (London: Routledge, 2007), 15–46.
3. Amy Beth Borovoy, *The Too-Good Wife: Alcohol, Codependency, and the Politics of Nurturance in Postwar Japan* (Berkeley: University of California Press, 2005), 8. Scholars in the social sciences and humanities have extensively analysed the shift from the hegemonic post-war image of the standard nuclear family life to new patterns and lifestyles. Emiko Ochiai, *The Japanese Family System in Transition: A Sociological Analysis of Family Change in Postwar Japan* (Tokyo: LTBC International Library Foundation, 1997). Chizuko Ueno, *The Modern Family in Japan: Its Rise and Fall* (Melbourne: Trans-Pacific Press, 2009). Richard Ronald and Allison Alexy, *Home and Family in Japan* (London: Routledge, 2011).
4. As social scientist Yosuke Hirayama has explained, home ownership was touted as an indispensable component of middle-class life identity and completed the picture of the normative family. Both the government and businesses supported the housing system as beneficial to the country's economic growth. While the government provided housing loans, corporations granted company men lifetime employment and the prospect of climbing the housing ladder with a gradually rising income. Hirayama, 'Reshaping the Housing System', 20–22.
5. Architecture critic Ryuichi Hamaguchi, in his 1947 book *Architecture of Humanism: Reconsideration and Prospects of Japanese Modern Architecture* [in Japanese], considered Japanese modern architecture – as developed in Japan between the Meiji Era and the Second World War – as a deviation from the right course, calling it nationalistic, dedicated to the ruling class and lacking a human dimension. In its place, he proposed that Japanese architects embrace the spirit of functionalism as embedded in international modernism, as its functionalism contained a humanist spirit that tried to reach many people. Hamaguchi's writings formed the roots of a common understanding that architecture in post-war Japan should be democratised and greatly inspired his Japanese contemporaries to turn to functionalism. Ryūichi Hamaguchi, 「ヒューマニズムの建築 ： 日本近代建築の反省と展望 」*Hyūmanizumu No Kenchiku* (Tokyo: Ondorisha, 1947).
6. Examples of prototypes for minimum houses intended for mass production are Junzo Sakakura's A-frame building system and Kunio Maekawa's PREMOS.

Architect Kiyoshi Ikebe stood out in the second category of individual houses embracing the new post-war family ideology of a couple-centred family. Ikebe developed nearly a hundred case study houses that included experiments with industrialised elements based on a simplified version of Le Corbusier's Modulor. Ken Oshima, 'Postulating the Potential of Prefab: The Case of Japan', in *Home Delivery: Fabricating The Modern Dwelling*, ed. Barry Bergdoll and Peter Christensen (Basel: Birkhäuser, 2008), 33.

7. One well-known example of an architect who was convinced that former military production methods should be reused for a new purpose was Buckminster Fuller, who designed the temporary dwelling of Dymaxion Dwelling Machine (1944–46). For this and more examples, see Jean-Louis Cohen, *The Future of Architecture Since 1889* (London: Phaidon, 2012), 293, and Jean-Louis Cohen, *Architecture in Uniform: Designing and Building for the Second World War* (Paris: Hazan, 2011).
8. Ken Oshima, 'Postulating the Potential of Prefab', 34.
9. The architect Osamu Nishiyama coined the term 'shortcake houses' to ridicule the look of commercial houses, in his book「笑う住宅」*Warau Jūtaku* [Houses that Laugh] (Tokyo: Chikuma Shobo, 1995), 37.
10. Forrest and Hirayama have argued that, although Japan already sympathised with neoliberal policies in Britain and the United States in the early 1980s, it was not until the mid-1990s that such policies were actively implemented in Japan. Ray Forrest and Yosuke Hirayama, 'The Uneven Impact of Neoliberalism on Housing Opportunities', *International Journal of Urban and Regional Research* 33, no. 4 (2009): 998–1013, doi:10.1111/j.1468-2427.2009.00903.x.
11. Ray Forrest and Yosuke Hirayama, 'The Financialisation of the Social Project: Embedded Liberalism, Neoliberalism and Home Ownership', *Urban Studies* 52, no. 2 (2015), 239.
12. Anne Allison introduced the idea of 'liquidity' in the context of Japan but the notion finds affinity with sociologist Zygmunt Bauman's concept of 'liquid life', which he defined as 'precarious life, lived under conditions of constant insecurity'. Anne Allison, *Precarious Japan* (Durham: Duke University Press, 2013). Zygmunt Bauman, *Liquid Life* (Polity Press, 2005), 2.
13. Richard Ronald and Allison Alexy, 'Continuity and change in Japanese homes and families', in Ronald and Alexy, *Home And Family*, 10–11.
14. *The Statistical Handbook of Japan 2018* shows that both the birth rate and death rate have dramatically declined since 1950, while the aged population (sixty-five years and over) marked a record high in 2017, constituting 27.7 percent of the total population (one in every four persons). (Tokyo: Statistics Bureau, Ministry of Internal Affairs and Communications Japan, 2017), https://stat.go.jp. For an account of how Japan's demographic changes affect the country's system of social stratification and inequality, see Sawako Shirahase, *Demographic Change and Inequality in Japan* (Melbourne: Trans-Pacific Press, 2011).
15. Political scientist Richard Samuels was quick to consider the impact of the triple disaster on the Japanese government and society, arguing that two decades of economic malaise in combination with 3.11 had disrupted the Japanese system and consequently resulted in 'national soul-searching'. Richard J. Samuels, *3.11: Disaster And Change In Japan* (Ithaca: Cornell University Press, 2013).
16. Sociologist Atsushi Miura described the social changes in Japan from a consumption perspective, explaining that Japan around 2005 gradually moved from a 'third stage' into a 'fourth stage' of consumer society. Atsushi Miura,「第四の消費 ： つながりを生み出す社会へ」*Daiyon no shōhi : tsunagari o Umidasu Shakai e* (Tokyo: Asahi Shimbun Shuppan, 2012), translated by Dana Lewis as *The Rise of Sharing: Fourth-Stage Consumer Society in Japan* (Tokyo: International House of Japan, 2014).
17. Some notable collaborative projects came into being after the disaster: Hitoshi Abe and Yoshiharu Tsukamoto joined forces and formed the Relief and Recovery Network *ArchiAid* to overcome the limitations of an architect's individual endeavours. *ArchiAid* envisaged a collaboration between architects, (international) professionals, local experts and students

with the aim of revitalizing the affected regions and exploring new ways of providing architecture education. Another new support platform with a social agenda was KISYN no kai, an initiative by five of Japan's master architects, Toyo Ito, Riken Yamamoto, Kengo Kuma, Hiroshi Naito and Kazuyo Sejima. KISYN no kai initiated the collaborative project Home-for-All (みんなの家 *Minna no ie*), public gathering places for the victims of the recent earthquake. Moreover, KISYN no kai provided Ito with the rare opportunity, for an independent architect in Japan, to work as a master planner for the reconstruction of Kamaishi, a regional town destroyed by the tsunami. Taro Igarashi,「3.11からの建築家の動き」'3.11 kara no kenchikuka no ugoki' [Initiatives by Architects Since 3.11], *The Japan Architect* 84 (Yearbook 2011), no. 4 (2012):6.

18. Yoshiyuki Sato,「新自由主義へのミクロな抵抗」'Shinjiyūshugi e no mikurona teikō' [A Micro-Resistance to Neoliberalism] in Yoshiyuki Yamana, Seiichi Hishikawa, Masaki Uchino, and Masatake Shinohara「En [縁]:アート・オブ・ネクサス」*En āto obu nekusasu* [Art of Nexus] (Tokyo: Toto Publishers, 2016), 146–47.
19. Toyo Ito, 'Postscript', in *Project Japan: Metabolism Talks*, ed. Rem Koolhaas and Hans-Ulrich Obrist (Cologne: Taschen, 2011), 697. Ito announced his new design methodology of an architecture that blends with nature in his book *Architecture from that Day Onwards* [in Japanese]. He takes his projects of *Minna-no-Ie* and a reconstruction project for the town of Kamaishi as examples to demonstrate his interests in 'community' and his switch to designing buildings with a social character. Toyo Ito,「あの日からの建築」*Ano hi hara no kenchiku* [Architecture from that Day Onwards] (Tokyo: Shūeisha, 2012). For a recent reflection on the impact of 3.11 on the work of Toyo Ito in the past years and his interest in a renewed relationship between people, nature and architecture, see also Toyo ito, 'Toyo Ito Reconstruction and Ideology', interview by Nikolaus Hirsch, *e-flux* no. 94 (October 2018), https://e-flux.com.
20. According to Hara, people in Japan were not sufficiently literate when it comes to building homes. Educating a desire in people to create a space that suits their own lifestyle is key behind the idea of Muji as well as *House Vision*. http://house-vision.jp
21. The theme of the first workshop, 'Life from Now On', took an entirely different meaning when four days later Japan was hit by the Great East Japan Earthquake. Sadao Tsuchiya.「House Vision の始まり」*House Vision no hajimari* [House Vision 2013 Tokyo Exhibition] (Tokyo: Heibonsha, 2013), 172.
22. Until recently, in Japan it has been the preference to buy things new rather than secondhand, including the home. However, a decreasing population and the 'fourth stage' consumption pattern has put downward pressure on the new-homes market. As part of the growing interest in actively re-using things, Japan accepted the idea of second-hand or used houses and introduced qualitative renovations of the existing housing stock.
23. Cameron Allan McKean, 'Kenya Hara: The Future of Design', *The Japan Times*, 4 January 2014. https://japantimes.co.jp.
24. Kenya Hara and Giovanni Maggioni, 'House Vision: How to Educate Desires', *Abitare* no. 557 (September 2016): 106.
25. Kenya Hara, 'Kenya Hara: The role of the designer is changing', lecture at AGI Open London 2013. *Design Indaba TV*. Published on 29 October 2013. https://youtube.com. See also: McKean, 'Kenya Hara'.
26. Edan Corkill, 'Awakening the Desire for a Home with Personality', *The Japan Times*, 3 March 2013. https://japantimes.co.jp.
27. Toyo Ito. 「住の先へ. 懐かしい未来の家を考える」'Jū no saki e. Natsukashī mirai no ie o kangaeru', in *House Vision 2013 Tokyo Exhibition,* ed. Kenya Hara and House Vision Executive Committee (Tokyo: Heibonsha, 2013), 32.
28. Kenya Hara in the introduction to the exhibition catalogue *House Vision, 2 : 2016 Tokyo Exhibition* (Tokyo: Bijutsu Shuppansha, 2016), 11.
29. Go Hasegawa, Project text on House Vision website, 2016, http://house-vision.jp.

Biography

Cathelijne Nuijsink graduated in Architecture from Delft University of Technology and the University of Tokyo before embarking on a PhD in East Asian Languages & Civilizations at the University of Pennsylvania. In her PhD thesis, *What is a House? Architects Redesigning the Domestic Sphere in Contemporary Japan, 1995–2011* she investigated the recent history of the single-family house in Japan as a product of intense theoretical examination and architectural experimentation. Currently, Nuijsink is a Marie Sklodowska-Curie postdoc researcher at the Institute for the History and Theory of Architecture (gta) at ETH Zürich where she is developing a new methodological and theoretical framework that aims to revise the existing architectural history canon.