

# ‘A Man’s House is his Art’: the Walker Art Center’s *Idea House* Project and the Marketing of Domestic Design 1941–1947

Alexandra Griffith Winton

*Idea Houses I and II, two houses built by the Walker Art Center in Minneapolis in 1941 and 1947, were the first functional modern homes built by an American museum. The houses were conceived and built during an extreme housing shortage brought on by the Great Depression and exacerbated by the Second World War. Unlike commercial model homes of this period, these houses were designed by architects retained by the Walker, with furnishings and home products selected by the curatorial staff. Rather than product placement, the purpose of the exhibitions was to promote awareness and appreciation of modern home design by presenting the houses as source material for visitors’ own potential building projects: literal houses of ideas. Through these exhibitions, the Walker also sought to re-imagine the museum experience as an active, participatory event, free of the elitist associations of the conventional museum, and in these cases focused on housing, the most pressing issue of the day. This paper examines the interrelated museological and architectural aspirations of these exhibitions in the context of the housing crisis of the 1940s. These twin goals of providing quality home design advice and reinventing the museum experience are what made the project popular in its day and interesting now. This paper examines the houses both as museum exhibitions and as houses, and investigates the complex interplay of commerce and the museum that is perhaps essential to discussion of the Idea Houses, considering that the overwhelming commercial influence on home design and furnishings was what inspired the project in the first place.*

**Keywords:** domestic display—Federal Housing Administration—home decoration—*Idea House*—marketing—Walker Art Center

A man’s house is his art—at least a house is the nearest to art that most men will ever come. A few men paint or model, a few more are architects, a few are designers, and a few collect the works of the others. Of course, a great many men appreciate art, but they do not actually participate in its creation. In his house, however, it is the rare man who can avoid entanglement with those decisions and selective acts which characterize the work of an artist.

Daniel S. Defenbacher, ‘A Man’s House is his Art’,  
*Everyday Art Quarterly*, no. 5, 1947

## Introduction

In 1941, the Walker Art Center of Minneapolis, Minnesota, built and exhibited *Idea House*, America’s first museum-sponsored, fully functional modern exhibition house, created to present ideas on home building in a domestic environment. The Walker followed *Idea House* in 1947 with a post-war iteration of this same project, *Idea House II*, which garnered national media attention and the interest of other

museums. *Idea House* predates by several years both the *Art and Architecture Case Study House* project and the Museum of Modern Art's 'House in the Museum Garden' series. In addition to the two inhabitable and completely furnished houses constructed on museum grounds, at least six other *Idea Houses*, intended for a suburban subdivision, were planned but never built. *Idea House I* was demolished in 1961 to make room for the Tyrone Guthrie Theater, designed by Minnesota modernist architect Ralph Rapson. *Idea House II* was demolished in 1969 as part of a Guthrie expansion.

Bracketing the ends of the Great Depression and the Second World War, the Walker Art Center's *Idea House* exhibitions synthesized aspects of the production and consumption of home design, borrowing techniques of salesmanship from advertising and industry in order to convince its visitors of the relevance and importance of design to their lives. The form of this unusual sales pitch was the most potent symbol of the American Dream: the single-family house.<sup>1</sup> By assuming the format of the model home, *Idea House* attempted to disrupt its conventional role, encouraging viewers to borrow from a range of solutions, rather than accepting a prepackaged, standardized home design. These dwellings created a participatory consumer spectacle of the type experienced in World's Fair exhibitions and commercial model home developments, in which visitors were introduced to a variety of modern architectural concepts, materials and techniques, as well as the most up-to-date home appliance technology. In contrast to those types of home displays, however, the *Idea House* goods and materials were selected by museum curators. The houses themselves were designed by architects retained by the Walker, rather than by commercial sponsors. While they took the conventional form of model homes, I shall argue that the *Idea Houses* were in fact polemical exercises in reform—household and museological. Aimed at activating the art museum as a relevant social and cultural institution for the widest possible population, and raising the quality of home design and technology by serving as exemplars, *Idea House* traversed the bounds of art, politics, and business in new and innovative ways. The very structure of the *Idea House* exhibitions, with their extensive didactic information and immediate physical access, encouraged visitors to involve themselves actively in the thoughtful design

and furnishing of their own homes, at the same time transforming their museum experience. These projects reflect a period of American history in which the spheres of government social policy, economics and architecture were inextricably entwined, and housing was a priority of the government as much as of commercial entities. Discussion of the project is complicated by its role as a museum exhibition, and its architectural and museological methods are arguably inseparable. The twin goals of providing quality home design advice and reinventing the museum experience are what made the project popular in its day and interesting now. It is necessary to treat the houses both as exhibitions and as houses, and the interplay of commerce and the museum is perhaps essential to discussion of the project: the overwhelming commercial influence on home design and furnishings was what inspired the project in the first place.

The summer of 2000 saw the reincarnation of *Idea House II*, or at least a portion of it, inside the Walker Art Center galleries. As part of a larger exhibition called 'The Home Show', the Walker recreated the living-room of *Idea House II* and opened it up for visitors to explore. The *Idea House II* re-creation joins those for the Case Study House Project (1989) and Le Corbusier's 1925 Pavilion de L'Esprit Nouveau (2000) as important modern interiors partially reconstructed within the context of a museum exhibition.<sup>2</sup> This generally thoughtful and considered re-creation of the 1947 living-room in a museum dedicated to contemporary art poses a number of questions about the evolving interpretations of twentieth-century design and architecture within current curatorial practice, and highlights the shifting significance of this material from 1947 to the present day.

Perhaps the most remarkable aspect of this re-creation is how much of the material from *Idea House II* is still manufactured today. The Walker's Summer 2000 calendar brochure states:

A partial re-creation of the house's main living space serves as a focal point in the exhibition galleries, featuring historically accurate materials and furnishings by such design luminaries as Charles and Ray Eames, Alvar Aalto, Isamu Noguchi, Walter von Nessen and George Nelson.

All the furnishings were purchased new from Knoll, Herman Miller and other makers. Eva Zeisel's 'Town and Country' dinnerware was also reintroduced



Fig 1. Living-room of *Idea House II*, recreated for the ‘Home Show’, Walker Art Center, 2000

shortly before the exhibition opened, in a Zeisel-authorized reproduction, and was featured in the living-room [1]. In her essay ‘The Exhibitionist House’, architecture historian Beatriz Colomina writes:

Manufacturers have played a crucial role in promoting modern architecture throughout the century: the discourse around the modern house is fundamentally linked to the commercialization of domestic life. In the end, all the different forms of exhibition were really advertisements.<sup>3</sup>

At the beginning of the twenty-first century, the fruits of this persistent promotion and advertisement of modern design were clearly evident in ‘The Home Show’, but it is no longer the manufacturers but the designers who are on display: ‘good design’ is now a branded entity, and its designers are described as ‘luminaries’. While in the original *Idea House II* literature, scant mention was made of any particular designer, here they are celebrities.

*Idea House II* was created first and foremost by a museum as an exhibition dwelling and, in re-creating it in part, it is necessary to examine that definitive aspect in greater detail. By relying on modern samples of the original furnishings, rather than now-valuable period pieces, the exhibition enabled visitors to interact freely with the furnishings and accessories within the living-room. In encouraging this close, tactile interaction between visitor and object, the exhibition shared a strong participatory element with its antecedent. However, significant additional elements of the original project’s context and content were left out. No price list or manufacturers’ ad-

resses or other references to the objects’ roles as consumer items were displayed. Instead, didactic labels listed the objects’ original dates and manufacturers and, where relevant, the producers of re-issued items. Viewers would have benefited from learning the prices of some of these objects in 1947, if only to target their historical perspective on the contrast between the goals of the original *Idea House* project, to promote reasonably priced modern homes and furnishings, and the current status of these same furnishings as design icons. In 1947, the cost of an Eames LCW was around \$25, which would be \$185 today, while a new one costs around \$550 from an authorized retailer, and an original chair from 1947 could bring thousands at auction.<sup>4</sup> This is key information in helping the viewer to contextualize this object and its complex history, incorporating both its curatorial and commercial identities.

In its general uneasiness with engaging with these works as consumer items, either historically or in their current manifestation as desirable design icons, the ‘Home Show’ installation reflected not the exemplary, consumer-oriented goals of the original project, but was instead a formally accurate display of historical design—a period room. The apparent transparency of the original *Idea House* project, in which the museum attempted to act as a conduit for good design, created a museum-sanctioned consumer spectacle beneficial to both consumer and manufacturer at a time when both affordable housing and maintaining a productive consumer economy were national priorities. The decision to focus on the form and objects of *Idea House II* in this re-creation, rather than its original consumer orientation, reflects both the increasing distance today between the average visitor and the architect-designed home advocated by the *Idea House* curators, and the increasing historical importance of the designers of this period.

### *Idea House I*: a groundbreaking domestic dwelling project in the American Midwest

The Walker Art Center began in 1875 as the Walker Art Gallery, a private institution created to exhibit the collection of local lumber baron Thomas Barlow Walker. Noted for its Old Master paintings, Chinese jade and Napoleonic memorabilia, the collection was

housed in a Moorish-style Victorian mansion in downtown Minneapolis. In 1927 the Gallery moved into a new building at its present location. In January 1940, the gallery, renamed the Walker Art Center, became one of over 100 civic arts centres across the United States operated under the auspices of the Federal Arts Project (FAP) of the Works Project Administration, Franklin D. Roosevelt's massive federal programme to employ the many unemployed Americans during the Depression. Daniel S. Defenbacher, an architect by training and a veteran administrator of the FAP, was named as its director. Bringing to the Walker the FAP mandate to employ artists and foster creativity and interest in the arts among the general population, he immediately reorganized the institution, radically transforming it into a centre for contemporary art and design. From 1940 until 1943, when the FAP ceased operation and administration of the Walker reverted to its board of trustees, the Center employed as many as sixty-five artists, conducted free classes for students of all ages, offered public lectures and demonstrations and mounted exhibitions. In its first year as a WPA civic centre, the Walker received over 110,000 visitors, and instructed over 3,000 students.<sup>5</sup>

As director of the Walker, Defenbacher sought to re-imagine the role and mission of the art museum, seeking to activate its cultural influence by rendering its projects relevant to the lives of people who did not feel welcome in a traditional museum. Recalling the philosophies of John Cotton Dana at the Newark Museum earlier in the century, he perceived the museum as a 'a repository for the possessions, the glorious relics, the intimate triviatia of dead and mysterious ancestors', in stark distinction to the Art Center, which sought to make art in all its forms, including industrial design and advertising, relevant to 'human meaning and contemporary experience'.<sup>6</sup> Among his earliest and most influential projects was *Idea House*, a project that would illustrate Defenbacher's premise that, 'As a consumer, every man uses art . . . His medium he obtains from stores, manufacturers, and builders. His composition is his environment.'<sup>7</sup>

In October 1940, Defenbacher wrote to a local building materials vendor to solicit in-kind contributions to the Walker for an upcoming project. In conjunction with a three-part exhibition entitled 'American Living', the museum planned a fully

functional, completely furnished house, as Defenbacher believed that models and drawings were no longer a sufficient means of experiencing the spatial and material innovations of modern design. This exhibition house, called *Idea House* because it was meant to present multiple ideas about home design, materials and decoration, was designed by local architects Malcolm and Miriam Lein and built on a plot behind the Walker on its landscaped grounds. It opened to the public in June 1941. *Idea House* ran from June through November, after which the museum planned to use the house as a classroom and laboratory for design and home decorating programmes. Defenbacher explained:

The exhibition home has been designed by architects who have been retained in the Art Center staff for this purpose. The house exemplifies up-to-date 'open-plan-ning' and 'multiple use of space'. The major feature in planning has been to obtain the maximum spaciousness within the cubic content of the average five room house. The house will be so-called modern in appearance, but will not have the box-like character, which so many people dislike . . . The house will be open to the public day and evening and on Sunday for six months. We will provide guards and attendants at all times. We will charge 10 cents admission to the house until our investment has been returned to us. After that, admission will be free.<sup>8</sup>

Targeting vendors and manufacturers of home building supplies and furnishings, Defenbacher promoted the economic and public relations benefits of contributing goods to the exhibition, while at the same time he attempted to protect the institution from the potential taint of commercialism, writing, 'We are an educational institution interested only in giving the layman information and ideas. We are, therefore, unrestricted by the need for commercial exploitation which accompanies the average model home plan.'<sup>9</sup>

The Walker's choice of a single-family house, rather than a model apartment, reflected a longstanding American interest in home ownership, especially the free-standing private house in suburban surroundings.<sup>10</sup> *Idea House* (subsequently referred to as *Idea House I* to distinguish it from the 1947 *Idea House II*) was built at a time when the economy was just beginning to recover from the Great Depression, and there was deep general concern over America's impending involvement in the Second World War. The Depression years saw housing starts plunge dramatically from the boom years of the 1920s, and

financial duress was so widespread that, by 1933, 49 per cent of the national home mortgage debt was in default and each week there were more than 1,000 home foreclosures.<sup>11</sup>

The Hoover administration addressed the housing crisis in 1931 with the President's Conference on Building and Homeownership, which advocated long-term mortgages as a means of stimulating home ownership, but it was not until the Roosevelt administration that the government took direct action in the area of housing policy.<sup>12</sup> By 1934 the situation was so dire that Congress passed the National Housing Act, intended to provide some relief for both the general population and the real estate industry. The Federal Housing Administration (FHA), founded as part of this Act, sought to stimulate home ownership by offering, together with cooperating banks, long-term mortgages covering up to 80 per cent of a home's value. This was in contrast to prevailing mortgage practices, which demanded from 40–50 per cent of a home's value in down payment, with the principal due within as few as three years. Additional home improvement and modernization loans were also available through the FHA, allowing borrowers to renovate their homes or purchase major appliances they otherwise could not afford. It was a successful programme, and by 1938 the housing industry appeared to rebound, with as many as one in eight American home-owners participating in the FHA loan programmes. US Census Bureau statistics indicate that home-ownership increased significantly from 1930 to 1950, and Minnesota consistently ranked among the states with the highest home-ownership rates.<sup>13</sup>

Among the Roosevelt Administration's highest priorities was the modernization of American households as a means of improving the national standard of living. Electrification was key to this ambition. New electrical standards were reinforced through FHA loans, which required adherence as part of their lending policy. As Ronald Tobey has shown, Roosevelt's goals in standardizing building codes and providing electricity in even the most rural areas were not simply to improve infrastructure. To Roosevelt, home-ownership and high standards of living were key weapons in fighting feelings of rootlessness across a country gripped by severe economic depression and increasing levels of poverty. In this context, the encouragement of home-ownership

and the modernization of housing stock and building codes can be seen as social programmes aimed at providing stability for the American family. New Deal building programmes, including the FHA, enabled home ownership, maintenance and modernization, encouraging families into suburban areas with inexpensive land.<sup>14</sup>

From its inception, the FHA exerted a powerful influence over the appearance of the homes it helped finance. In a series of leaflets called *Technical Bulletins*, the FHA issued direct design and construction advice to homebuilders, with titles including *Modern Design and Mechanical Equipment for the Home*.<sup>15</sup> The former addressed the meaning of 'modern' as understood by the FHA, defining it as a primarily pragmatic use of space, an economic use of materials and judicious application of technology. This was outlined in distinction to faddish designs with stylistic features having nothing to do with the structure or function of the house. Well-planned modern homes, the guide explained, would receive high ratings from FHA evaluators, while 'modernistic' homes would not. The latter booklet addressed new appliances for the home, including dishwashers. Another booklet, *Technical Bulletin 4: Principles of Planning Small Houses*, prescribed building standards and design principles by illustrating sample homes, establishing standards to which FHA homes would adhere for decades. This booklet was continuously updated and expanded. In its 1940 iteration, it presented a revolutionary design that allowed for variations in plan and materials within a standardized single-storey, one-family house footprint. In spite of the innovative plan, the elevations illustrated in the guide featured conventional details, with small windows and pitched roofs. This house, which became known as the FHA 'minimum' house, was designed to provide the most efficient use of space with the greatest economy of means [2].<sup>16</sup>

While the FHA programmes succeeded in stimulating home ownership, the war effort almost immediately diverted the resources of the federal government, as well as those of the building trades, to creating housing for defence workers. The National Defense Housing Program began operation in 1940, and two years later private housing construction ceased almost entirely.<sup>17</sup> Thus, *Idea House I* was conceived against a backdrop of receding economic depression, the Federal Government's

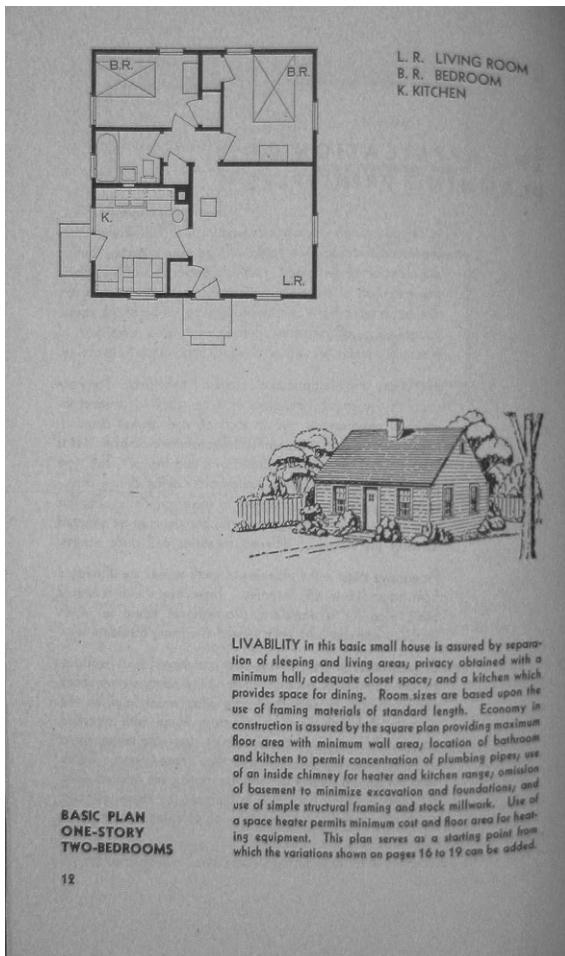


Fig 2. Excerpt from *Technical Bulletin 4: Principles of Planning Small Houses*, 1940

increasing involvement in aspects of domestic construction and increasing restriction in home building opportunities for the private citizen.

Model home exhibitions were extremely popular even during the Depression, and among the types of 'average model home' projects from which Defenbacher sought to distinguish *Idea House I*, were a number of demonstration dwellings sponsored by industry and housing exhibitions at highly popular World's Fairs and expositions.<sup>18</sup> General Electric (GE) sponsored the 'House for Modern Living' competition in 1935, in which contestants received a list of GE products to be included in their entries. Chicago's 'Century of Progress' exhibition of 1933-4 featured a number of single-family prototypes, each

designed to take advantage of mass-production techniques. For example, George Fred Keck's 'House of Tomorrow', sponsored by Century Homes, Inc., was designed to feature new building products and household appliances, with floors by US Gypsum, glass by Libby-Owens-Ford and metal furniture by H. W. Howell.<sup>19</sup> Other model homes sponsored by building materials manufacturers included the Stran-Steel House, the Armco-Ferro Enamel House, the Lumber House and the Common Brick House.<sup>20</sup>

At the 1939 World's Fair in New York, the 'Town of Tomorrow' showcased 15 single-family house designs sponsored by at least fifty-six building product manufacturers.<sup>21</sup> According to official fair documents, architects participating in this project were instructed that the town should appear 'neither traditional nor modernistic in design. It should be *modern*.'<sup>22</sup> Visitors to the 'Town of Tomorrow' received a guide to the products featured in the houses, as a means of stimulating consumer interest and education in home design and construction, and 'assisting prospective home builders to obtain more value for their money'.<sup>23</sup> The estimated construction costs for the fifteen designs that comprised the 'Town of Tomorrow' ranged from around \$5,000 to over \$35,000.<sup>24</sup> With the average FHA home costing around \$5,199 in 1940, this range reflects an effort to provide realistic examples for middle-class consumers, as well as fantasy showpieces.<sup>25</sup>

Among the other exhibits of interest to homeowners were the Home Building Center, where makers of building supplies showcased their goods; the Home Furnishing Building, for the display of furniture and decorative items, and the Consumer's Building, which offered Fair-goers advice on budgeting home construction and repair, as well as the Consumer's Union of the United States, Inc. display, which sought to 'dramatize the need of consumers for reliable and objective information on the products that competing manufacturers ask them to buy'.<sup>26</sup> In contrast, Fair president Grover Whalen promised manufacturers, 'direct, planned and simultaneous contact with great masses of consumers', who would be guided and influenced by the displays. Elsewhere, visitors could experience Norman Bel Geddes' futuristic vision of domestic and urban life in America in 1960 in his popular 'Futurama' exhibition for General Motors.<sup>27</sup>

Across the North American continent, San

Francisco's Golden Gate International Exposition, also held in 1939, featured over twenty-six demonstration dwellings in an exhibition organized for the fair by Exposition Model Homes Tour, Inc. Rather than constructing these houses within the perimeters of the fair grounds on Treasure Island, the organizers scattered them throughout the Bay area. A bus tour took visitors to each of the houses, which ranged in budget from around \$5,000 to over \$20,000. The houses built for the 'Golden Gate' international exhibition represented a variety of styles, with homes that referenced historical styles, 'modern' homes and homes described by Talbot F. Hamlin in *Pencil Points* as 'livable, simple, designed for their needs and without any fore-ordained style choice'.<sup>28</sup> The exposition also featured a Home and Garden Building, a hall displaying a variety of consumer products, located on the fairground itself. As if to emphasize the organizers' ambivalence about architectural styles, just outside this hall was a stainless steel prefabricated housing prototype, as well as a Colonial Revival-style house.<sup>29</sup>

*Idea House I* reflected the agenda of the FHA 'minimum house': a small house with the most logical planning and use of technology, but without extraneous decorative features, understanding 'modern' as a measure of technology and living standards rather than an aesthetic categorization. It also adapted aspects of these earlier commercial exhibitions: the permanent, functional dwelling, and the emphasis on consumer outreach, with a host of didactic materials available to visitors. However, it refocused these initiatives in a new way. Unlike these earlier model home exhibitions, in which the architect was typically chosen by the sponsor with product placement and sales as the primary goals, *Idea House I* was not sponsored directly by industry, nor was it designed to showcase specific products or materials. Rather, it was intended to introduce the concept of architectural planning and the use of modern materials to the general public in a way that would prepare them for their own building programmes.<sup>30</sup>

Construction on *Idea House I* began in January 1941, and this rare wintertime building project in the bitterly cold Minnesota climate was chronicled in weekly updates in the local paper.<sup>31</sup> The house's location adjacent to the Walker at the intersection of two busy Minneapolis streets also conspicuously showcased the project, and the Walker placed a sign



Fig 3. *Idea House I* under construction, 1941, Malcolm and Miriam Lein, architects

on the construction site identifying the project and announcing its planned public opening [3]. Built of a kiln-dried timber frame sheathed in weather-treated composite board, the house was designed with the extremes of the Minnesota climate in mind. Like the FHA 'minimum house' of 1940, the house's relatively open plan relied on sliding partitions to delineate interior spaces. While the plan of *Idea House I* was compact and open in the manner of the 'minimum house', the exterior, with its huge windows and asymmetrical roofline, were a departure from the small windows and conventional pitched roofs of the FHA's illustrated designs. It comprised a living room, bedroom, kitchen, guestroom/study, bathroom and service rooms. The foyer led directly into the living area, and a glass-walled partition between this area and the living space helped keep the cold out during the winter months. The living area featured large expanses of weather-proof windows that slid horizontally to open and close and could be removed easily for cleaning. A separate entrance led out from the living area into the landscaped museum grounds. In consideration of the long, dark winters, the large windows allowed in maximum sunlight, while the overhanging eaves helped keep the interior cool in the summer. The room even featured bright yellow curtains that provided a 'sunlight cheerfulness at night' [4].<sup>32</sup>

The bedroom and adjacent study, which was designed to function as a guest bedroom when needed, were located off the living and dining area, away from the service rooms. They were delineated by a leather-clad sound-proof sliding screen that partitioned the sitting area from the sleeping area.

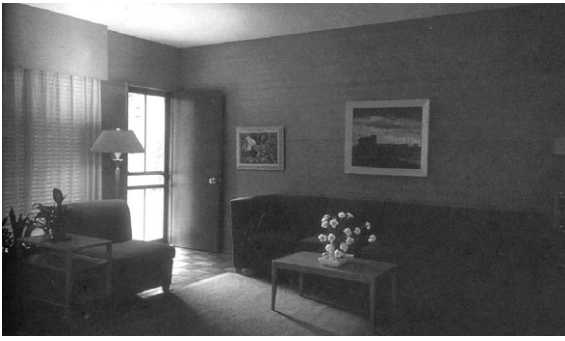


Fig 4. Living Room, *Idea House I*, 1941

The kitchen exemplified efficiency and the latest in technology. Featuring stainless steel walls and ceiling, the kitchen boasted all-electric appliances, including a Westinghouse refrigerator and dishwasher and a Frigidaire cooking range. Adjacent to the kitchen was a utility room, a relatively new multipurpose room-type that typically housed appliances such as an automatic washing machine.<sup>33</sup> The bathroom was placed between the living area and the bedroom and was designed to be hygienic and easy to clean, using the most up-to-date fixtures. The second floor of *Idea House I* consisted solely of an enclosed sun room, and exploited extensive use of glass for maximum solar exposure.

One of the most striking aspects of the interior was the bold use of colour throughout. The overall colour scheme included bright red, French blue, chartreuse, beige and rust. Its application was not confined to painted surfaces. Furniture was also upholstered in bright, solid colours, with a few striped items included for contrast. The bathroom featured blue linoleum with a coral border on its floors, walls and ceiling. Within the constraints of a tight budget, the architects of *Idea House I* employed colour as an inexpensive, visually dramatic means of delineating spaces. This may well reflect the influence of the FHA's *Technical Bulletin 2: Modern Design*, which recommended the materials be used, 'efficiently, economically, and directly, boldly eliminating decorative features and relying on texture and colour of materials together with skilful arrangement of masses and openings to produce a good aesthetic effect'.<sup>34</sup>

Stylistically, *Idea House I* reflected a general ambivalence towards modernist design, which in domestic architecture was understood as the 'box-like structures so many people dislike', as Defenbacher

explained in his letter to potential vendors. It was devoid of typical modernist characteristics such as a flat roof or use of industrial materials. Filled with modern conveniences, hygienic appliances, and employing economical use of materials and space, however, it reflected the FHA definition of 'modern'. It exhibited a stylistic reticence based on the desire to appeal to the greatest number of people, and an emphasis on modernity as a measure of living standards. By 1940, 64 per cent of American homes with electricity had refrigerators, and the promotion of home technology is shared among all these projects.<sup>35</sup> Additionally, the FHA considered overtly modernist homes to be risky loans, perhaps providing the Walker with an incentive to present a house that visitors could more realistically mine for 'ideas'.<sup>36</sup>

Despite its status as a WPA art centre, the government offered very little, if any, funding to the Walker for the construction of *Idea House I*.<sup>37</sup> The museum had almost no budget to construct the house, leaving Defenbacher to solicit materials and goods from local businesses.<sup>38</sup> The majority of the low-cost, locally produced goods and materials used in *Idea House I* were donated by local suppliers. Many of these businesses also donated supplies to the Walker's exhibition on civil defence, 'America Builds for Defense', held in the autumn of 1940, organized by Miriam Lein. As Miriam Lein recalled, 'We just used the same people that had been wonderful about the civil defense [exhibition]. I would call them and say, "We're building this model house. Will you supply the material?" "Why sure." It just rolled along.'<sup>39</sup> All the furniture for *Idea House I* came from a single retailer, New England Furniture. It is not clear from the exhibition archives if this was a curatorial decision based on the quality of their merchandise, or one of convenience. Either way, this example suggests that, in spite of the intentions of the Walker to display the best examples of home equipment, the goods displayed to a certain extent reflected both local availability and the exigencies of a very limited budget.<sup>40</sup>

Many vendors sought to place sales representatives on site for the duration of the exhibition. As an alternative, the Walker briefly considered hiring one or two people to provide information to visitors on all the various goods within *Idea House I*, but came up with a solution that offered businesses the opportunity to promote their wares and visitors the chance to visit the house without being overwhelmed by

salespeople. *Idea House I* was extensively documented in an illustrated insert in the *Minneapolis Tribune and Star*, published in conjunction with its opening.<sup>41</sup> While this insert resembled an editorial feature article, it was in fact a paid advertisement organized by the Walker to coincide with the public opening of *Idea House I*. In addition to descriptions of each area of the house, the insert contained dozens of advertisements for companies and goods included in the house, including Anderson Windows, linoleum installers, mill workers, a variety of electronic houseware manufacturers and the local electricity utility, Northern States Power Company. Upon leaving the house, all visitors received a copy of the insert and an envelope filled with promotional literature from the vendors of appliances and goods featured inside the house [5]. Each envelope also contained an information request form, permitting visitors to ask for even more detailed information on services and items of their choice. In this way, the visitors could view and experience the house without immediately apparent commercial intervention, yet they still had access to all pertinent information about any item or product displayed in the house, and the vendors benefited from the exposure afforded by the exhibition.<sup>42</sup>

The Walker's success in soliciting materials and goods for *Idea House I* was due in part to its manipulation of its unique position between the consumer and producers, through which it sought to shape visitors' tastes in goods, and its willingness to use sales methods such as the advertorial format of the explanatory guide, a technique that, as Kate Forde has shown, was increasingly employed by American advertisers from the late 1920s.<sup>43</sup> Rather than selling goods, however, the Walker claimed it was selling its 'ideas', and the implications of these ideas were highly appealing to businesses with real goods to sell. The museum appeared to possess what the trade desperately needed: an already established clientele, specifically interested in building modern homes. This was reflected not only in the ease with which the Walker was able to solicit materials, but also in the advertising placed by contributing vendors in the *Tribune and Star* insert. Typical of these, the local Westinghouse appliance dealer took out a full-page notice enjoining readers to visit *Idea House I* to see for themselves their latest product, the 1941 model 'Martha Washington' refrigerator:



Fig. 5 Commercial brochures for Bendix washing machines and Lumite window screens from the Explanatory Guide to *Idea House I*, 1941

The *Idea House* has, and every house needs, Westinghouse for better living. On your visit to the *Idea House*, see for yourself the results of Westinghouse engineering skill, scientific research—and modern design . . . See the 'Martha Washington' today, in the Walker *Idea House*—the refrigerator that looks as good as it is!<sup>44</sup>

Significantly, the guide concedes that building costs rendered *Idea House I* beyond the reach of most prospective builders. At around \$7,000 for construction alone, without land, appliances or furnishings, it was considerably more expensive than the average FHA-sponsored new home.<sup>45</sup> The guide sidesteps this rather substantial obstacle to its viewers' ability to build their own *Idea House*-style homes by reinforcing that it was not meant to represent a real house, but instead it incorporated as many ideas as possible into its design, claiming, 'This house is *not* a model or ideal for any particular family group. It is a *House of Ideas* which may be applied to any home of any price.'<sup>46</sup>

In spite of its prohibitive expense, *Idea House I* proved exceptionally popular with the general public, and by the end of its exhibition in the fall of 1941, 56,000 people had visited the house, of whom 9,666 requested product information.<sup>47</sup> There is no evidence indicating that *Idea House I* was used, as Defenbacher originally suggested, as a laboratory for the museum's home design programmes after it closed to visitors in 1941. It is not clear from exhibition documents why the house closed, or

whether attendance was high enough to pay for building the house, as Defenbacher had initially hoped, though the Second World War, which America entered immediately following the attack on Pearl Harbor on 7 December 1941, undoubtedly contributed to its closing. *Idea House I* was subsequently used as staff housing, and the Walker continued to honor requests to visit the house throughout the 1940s.

### *Idea House II*: a post-war ‘House of Ideas’

Beginning in the fall of 1945, Defenbacher, curator Hilde Reiss and Assistant Director William Friedman began planning another full-scale domestic architecture exhibition, *Idea House II*.<sup>48</sup> While *Idea House I* addressed housing issues of the pre-war period, with its economical use of materials and space and of the latest appliances, *Idea House II* faced a different set of housing issues. Most important was the extraordinary post-war housing crisis exacerbated by returning veterans and their families, and the concomitant explosion of tract housing developments of varying quality across America.

Defenbacher’s decision to continue the *Idea House* project at this time was logical and practical, considering the nationwide preoccupation with housing and the severity of the post-war housing crisis. Millions of families and young married couples were forced to live with relatives, in temporary military housing converted into emergency housing and even in converted chicken coops and barns.<sup>49</sup> The government sought to stave off potential political instability and unrest provoked by the housing crunch by providing substantial financial benefits to returning soldiers. The Serviceman’s Readjustment Act, commonly known as the GI Bill of Rights, took effect in 1944. Providing funds for veterans’ education and affordable housing were the bill’s highest mandates. Under the auspices of the FHA in 1946, the Veterans Administration established the Veterans’ Emergency Housing Act, under which veterans were exempt from down payments on certain loans [6]. While GIs qualified for home loans, the programme did not remedy the underlying housing shortage, which was exacerbated by inflation and shortages of essential building materials.<sup>50</sup> By some estimates, the

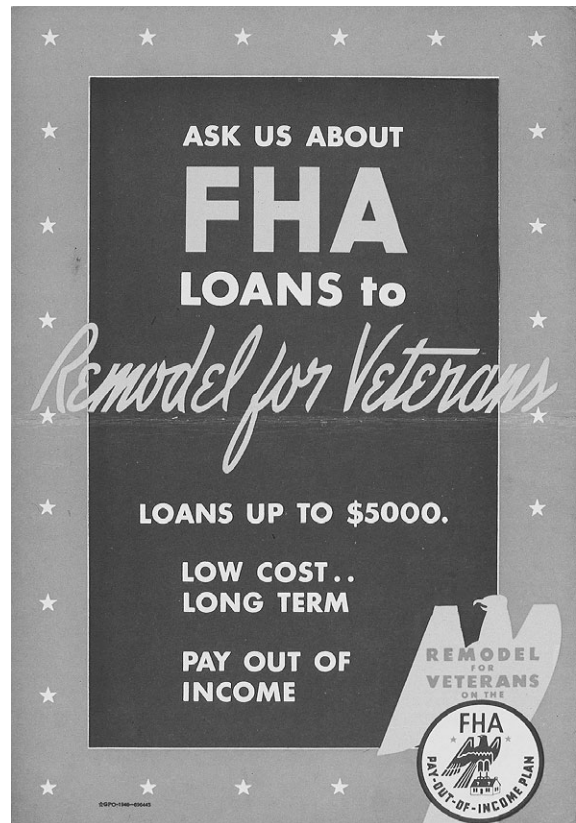


Fig. 6 FHA poster, ‘Remodel for Veterans on the Pay-out-of-Income Plan’, 1946

number of housing units needed in 1946 alone exceeded the total number built from 1940 to 1945.<sup>51</sup>

While *Idea House I* attempted to suggest solutions to American consumers preoccupied with economic hardship and impending involvement in war, *Idea House II* sought to prescribe housing ideas for a general public refocused on a critical housing shortage. This was coupled with a bewildering number of new construction materials, home appliances and, for the first time in decades, a surfeit of discretionary income.<sup>52</sup> In its conception, *Idea House II* was a direct response to the rapid proliferation of standardized housing developments responding to this shortage, of which Levittown, James Levitt’s factory-built housing development begun in 1946–7, is the best known.<sup>53</sup> These developments were popular because they were very inexpensive and quickly built. The price of the earliest Levittown home was \$6,990, against an average family income of \$4,119.<sup>54</sup> While a variety of exterior details and paint colours differ-

entiated their exteriors, each Levittown house possessed identical plans. With easy payment plans and guaranteed FHA loan approval, developments such as Levittown offered convenient, quick solutions to families in need of homes.<sup>55</sup> Locally, the real estate section of the *Minneapolis Tribune* published the syndicated Architects Home Plan Institute 'Plan of the Week', standardized plans for small homes for which readers could purchase the blueprints for five dollars.<sup>56</sup> This section also featured advertisements for prefabricated homes, such as the 'Low Cost Permanent Home', described as 'Standard construction, FHA and GI loan approved, and union-made'. The cost of this house was \$2,489, not including insulation, sheetrock or flooring, but the vendors offered to help buyers locate these 'hard to find' items.<sup>57</sup>

All these elements provoked the Walker to pursue *Idea House II*. The exhibition's press release emphatically describes the urgent need for good housing design:

The excessive demand for housing has opened flood gates for cheap construction, impossible designs, shoddy materials and indiscriminate taste. Many buyers and builders will accept anything that will approximately keep out the worst weather. Bad house architecture is more plentiful today than can be excused even by current extreme conditions.<sup>58</sup>

Like its predecessor, *Idea House II* was not meant to be a model home, nor a prescription for prefab development. It was, literally, a house of ideas, where visitors could come and absorb new concepts in design, building materials, furnishings and technology, and apply them where and how they wished in their own homes, preferably with the aid of an architect. As with *Idea House I*, plans of the house were never made available for purchase.

The Walker again needed funding for this next experimental and expensive programme. This time, the project was made financially possible by a unique collaboration between the museum and a local bank, Northwestern National Bank, specifically its Home Institute unit. Additional funding was provided by the local gas utility, Minneapolis Gas Light Company. Northwestern Bank founded its Home Institute shortly after the Second World War as a response to both the critical housing shortage and rising consumer confusion over the financial costs and practical application of new building materials.<sup>59</sup>

The Institute charged no membership fees and had no requirements of its members other than that they intended to build a new home or remodel an existing structure. The Home Institute pledged to assist its members in budgeting their building projects, with a special emphasis on understanding the uses and managing the expenses of new building materials. In a remarkable slippage between banking institution and library, the Institute also provided a comprehensive reference collection of over 100 volumes on building, remodelling and decorating, as well as an extensive collection of wallpaper, fabric and paint samples. Interior design specialists were on hand to assist customers in devising plans and budgets for their home projects.

The design brief for *Idea House II* was a modest house for a family of four that provided flexible use of public spaces, afforded privacy for all family members and used readily available materials, with minimum specialized building materials or techniques. *Idea House II* was designed by Reiss, Friedman and Malcolm Lein, who together with his wife Miriam had designed the original *Idea House*. It opened to the public in September 1947 and remained on view for six months. Measuring 19,000 cubic feet, this split-level house featured an open plan, with private living spaces delineated by folding partitions. The house was built using straightforward gypsum board construction and readily available building materials such as concrete block, plywood and glass [7–8].

The living room was the largest and most flexible space in the house, and the museum's didactic materials referred to it as a four-in-one room: in it a family could eat, play, work or entertain. It featured extensive expanses of WindoWall™, a prefabricated product somewhere between a traditional window and a curtain wall, which helped the small space feel more integrated into the exterior garden. The room was furnished with the most progressive furniture designs of the day, including Eames dining and lounge chairs from Herman Miller, Knoll Planning Unit sofas, a Saarinen Grasshopper chair also from Knoll, lighting fixtures designed by Walter von Nessen and built-in storage units by George Nelson, called StoraWall™ [9]. While many of these furniture designs are today icons of mid-twentieth-century design, in 1947 they were new, untested products by designers largely unknown to the general public. *Idea House II* inventories typically cite only the furniture manufacturers,

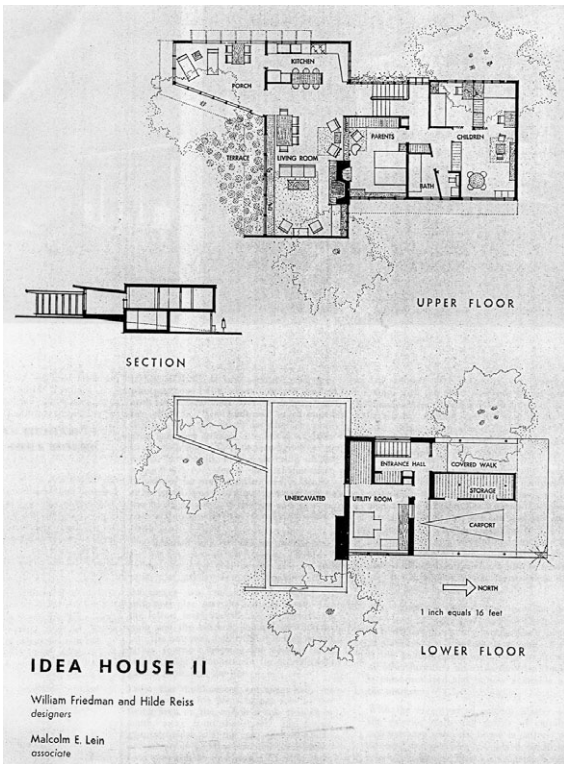


Fig 7. *Idea House II* plan, William Friedman and Hilde Reiss with Malcolm Lein, architects



Fig 8. Exterior, *Idea House II*, 1947



Fig 9. Living-room, *Idea House II*, 1947

not the designers' names.<sup>60</sup> Unlike *Idea House I*, numerous manufacturers supplied the furnishings. Several of these designs exploited technologies or methods developed as part of the war effort: the Eames's moulded plywood furniture evolved from their work creating splints for the US Army, and George Nelson claimed that his early modular storage designs came from observing stacked ammunition storage in fighter planes.<sup>61</sup>

The kitchen could be opened to the living-room or cordoned off with a sliding screen. It was a compact space, featuring all the latest home appliances, including a dishwasher. While more and more households possessed these appliances, and women became increasingly important consumers of home equipment, there are indications that new technology could actually add to a homemaker's stress. In September 1947, the month *Idea House II* opened, an article appeared in *McCall's* entitled 'So you are learning to cope with your range and refrigerator'. It advised readers on the most efficient uses of these

appliances, suggesting that many were unfamiliar with how best to use them. By reinforcing the importance of a newly equipped kitchen, and emphasizing the anxiety it might cause, this *McCall's* editorial intersected with the publication's considerable consumer appliance advertising in a manner that reinforced both the role of *McCall's* as a homemaker's reference and the advertisers' agendas of promoting goods.<sup>62</sup> By offering advice ostensibly free of commercial subtext, *Idea House II* sought to calm just these types of consumer anxiety.

The living quarters were on the upper level. In one of the most significant contrasts between the 1941 and 1947 *Idea House* projects, *Idea House II* featured distinct, specific areas for children. The plan featured room for two children's sleeping areas, with folding partitions for privacy, and a shared study and play area [10]. The house had only one bathroom, which was



Fig 10. Children's study, *Idea House II*

typical for new house construction at the time.<sup>63</sup> The bathroom featured a large, prefabricated fixture manufactured by Standard Fabrication and sold as the Stanfab Unit Bathroom, which functioned as a bathtub, sink, baby bath, and toilet.<sup>64</sup>

While *Idea House II* was not especially innovative when compared with influential modern homes of this period, such as the Eames's Case Study House 8 in Los Angeles (1945–9), it was not necessarily intended to push the boundaries of modern architecture. Instead, it represented a moderate, modern home to which visitors could relate as both reasonable and attainable, using readily available home building materials, rather than the many industrial materials used in the Eames house.<sup>65</sup> It was also markedly more innovative than other local model homes. For example, the St Paul 'Home Show', just across the Mississippi river from Minneapolis, featured a model house valued at \$15,000, which was given away in a jingle-writing contest at the end of its exhibition in September 1947. With its low profile, hipped roof and small windows, this house by contrast emphasizes *Idea House II*'s more progressive elements, such as the rambling split-level plan and sloping roof [11].<sup>66</sup>

In terms of cost, *Idea House II* was even more prohibitive than its predecessor. While original estimates were around \$11,000, the completed project came in at well over three times that amount. According to a private-sector study published in November 1947, the average cost in Minneapolis of building and furnishing a typical six-room house with one bath, excluding land costs, was \$11,700. The cost



Fig 11. St Paul 'Home Show' model home, 1947

of *Idea House II*, in spite of its organizers' efforts to use standard building methods and inexpensive materials, was well out of the range of the average home buyer.<sup>67</sup>

### Public reaction to *Idea House II*: 'How Livable is a Modern House?'

In order for *Idea House II* to succeed, either conceptually or financially, it needed a wide audience, and so the Walker launched an extensive publicity campaign with the opening of the house in the autumn of 1947. Just as in the first *Idea House*, visitors received an information packet filled with promotional materials from manufacturers featured in the house. Both Northwest National Bank and Minneapolis Gas Light Company participated in extensive direct mail campaigns, including *Idea House II* promotional stuffers in bank statements and gas bills.<sup>68</sup> The Walker, together with the *Minneapolis Morning Tribune*, sponsored a letter-writing competition for readers interested in experiencing life in a modern house. Four distinct family types were sought out to spend a weekend at *Idea House II*: a young married couple with no children, a couple with young children, a working couple with teenage children, and a couple with a teenage child at home and another away at college. Hundreds of contestants wrote in, describing their current living circumstances and their interest in modern housing design. The winners of the competition, all white and middle-class, largely reflected the homogeneous population of Minnesota at the time.<sup>69</sup>

One of the winning entries did not meet any of

these original criteria, yet made a compelling case for inclusion. Lois Miller, Helen Tully and Dorothy Vine wrote to the Walker, explaining that the competition organizers had left out a sizeable and important classification, the ‘large army that falls under the three girls who share an apartment’ group, and expressed keen interest in *Idea House II*. In their cheerful, forthright demand to be included in this exploration of modern living, these young working women also articulated the growing importance of women, often with their own incomes, as active critics and consumers of modern design. As Misses Tully, Miller and Vine wrote in their competition letter, ‘We have no in-laws or teen-age children, in fact we don’t even have husbands. . . . Don’t you think you’re overlooking a major factor in your household cross-section? We buy food and subscribe to the papers and pay our phone bills just like any family . . . and we know what we want in the way of comfortable living.’ [12]<sup>70</sup> Of particular interest to these women were the comfort and convenience afforded by household appliances such as dishwashers, and enough closet space and hot water to accommodate all three of them with ease, all luxuries in the post-war housing crisis.

Helen Tully worked in public relations and became especially enthusiastic about promoting *Idea House II*. She corresponded with Defenbacher both during and after her stay there the weekend of 9 November 1947. In another letter, Miss Tully applied all her professional experience to *Idea House II*, and suggested an extensive publicity campaign, including a short film on the house. Using her professional perspective, she keenly articulated the advantages to manufacturers of advertising their participation in the project, stressing that the unusual concept of a museum-sponsored exhibition house offered unique promotional opportunities. While Defenbacher acknowledged her ideas, it does not appear that he implemented them.<sup>71</sup>

*Idea House II* received a great deal of national coverage from both popular and trade publications. One minor mention of the project in the *New York Times Magazine* on 2 November 1947 produced over 400 requests to the Walker for information.<sup>72</sup> *McCalls’s* secured exclusive consumer rights to cover *Idea House II*, and published an article on the house in its January 1948 issue. The article introduced the project to a nation of magazine readers, and



Fig 12. Lois Miller, Helen Tully and Dorothy Vine in living-room of *Idea House II*, 1947

the Walker was subsequently inundated with requests for information from readers across America. *Progressive Architecture* held exclusive trade publication rights for coverage of the project, and featured an extensive, illustrated article on it in its February 1948 issue, exposing *Idea House II* to architects and designers around the world.<sup>73</sup>

In the fall of 1948, *Life* arranged for the Stensruds, a local family with two young children, to live in the house for a week, and document their reactions to the design, furnishings, appliances and other aspects of *Idea House II*. The ensuing article, ‘How Livable is a Modern House?’, offered a frank assessment of the design programme and furnishings by an average American family, published in a widely read general interest magazine.<sup>74</sup> The lead sentence of the article indicates a healthy scepticism of modern architecture’s photogenic appeal: ‘Modern architecture makes handsome movie sets, offices, hotel lobbies, and photographs, but how is it for year-round living?’ With photographs of the Stensruds in their own home contrasted with their *Idea House* stay, the article voiced the family’s general enthusiasm for *Idea House II*, but they indicated that they preferred adapting some of its features to their own house to moving to an entirely new modern home. They particularly liked the interaction of interior and exterior spaces made possible by the enclosed porch and WindoWall™, easy to clean linoleum floor surfaces and all the built-in storage; they did not like asymmetrical arrangement of furnishings, or the exposed cinder block fireplace in the living-room.

Eager to capitalize on the press and attention *Idea House II* generated, retailers featured it in their

consumer advertising. Eva Zeisel's new 'Town and Country' dinnerware, produced by Minnesota-based Red Wing Pottery, appeared in an advertisement in a local paper for Jacobs & Co. department store. The ad copy assumed that readers would visit *Idea House* and urged them to seek out the dinnerware: 'Red Wing's Town and Country—as featured in *Idea House II*. Look for this gay modern pottery when you visit, and see how well it fits into the modern concept of gracious, informal living.'<sup>75</sup> Upon seeing this advertisement, the Walker's Deputy Director William Friedman wrote to a Jacob's executive, noting that 'Town and Country' was prominently displayed in three of the photographs in the upcoming *McCall's* spread. Friedman suggested that Jacobs & Co. further exploit *Idea House II*'s high profile by featuring the *McCall's* article along with 'Town and Country' in a window display.<sup>76</sup> In March 1948, *Fortune* magazine contacted the Walker to enquire about using *Idea House II* in conjunction with an Oldsmobile car ad campaign. The campaign featured sketches of 'modern-design homes' together with the latest model Oldsmobiles, both of which are described in the ad copy as 'Futuramic'.<sup>77</sup> In this unmistakable reference to Norman Bel Geddes' 'Futurama' pavilion at the 1939 New York World's Fair, two prevailing influences of the post-war period converge in an advertising image: the single-family suburban house and the automobile. 'Futurama', sponsored by General Motors, the parent company of Oldsmobile, propelled visitors on a massive conveyor belt across a large diorama of America in 1960, where families lived in suburban developments, and urban centres dominated by huge skyscrapers were reached by car. While no evidence suggests that either the window display or the car ad were ever produced, these examples emphasize the distinction between the economic climate of the first *Idea House* and the post-war environment of the second. Free from the financial constraints of the depression and the manufacturing restrictions of the war years, businesses actively sought consumers' disposable incomes through novel marketing techniques, much as Helen Tully had predicted, and *Idea House II* suggested such opportunities.

While the house attracted around 35,000 visitors, far fewer than the anticipated 100,000, it generated a great deal of local and national interest from people wanting to build a house, and the Walker received

hundreds of requests from visitors hoping to purchase the plans to *Idea House II*.<sup>78</sup> People who never visited the house saw it in the *McCall's* feature and wrote to the museum with highly specific technical questions. The museum always referred these correspondents to the *Everyday Art Quarterly* dedicated to *Idea House II*, reminding them that it was meant to be a 'house of ideas', not a model house, and recommended the use of a trained architect in generating a house plan specific to individual needs and budgets. *Idea House II* closed permanently to the public in July 1948 and, like its predecessor, became Walker staff housing until its demolition in 1968.

Museums across the country took note of *Idea House II*'s popularity, and many of Defenbacher's colleagues wrote to him inquiring about the logistical considerations of the project. Philip L. Goodwin, a New York architect, MoMA trustee and co-designer with Edward Durrell Stone of the 1939 Museum of Modern Art building, wrote to him in 1948, asking for advice on creating a similar exhibition in New York:

In connection with the Museum of Modern Art here in New York, I have had talks with Mr. Philip Johnson on the subject of erecting a house by some well-known architect in the very small garden attached to our museum. Mr. Johnson informs me that you have done something of this kind recently with astoundingly successful results . . . Would you be good enough to confirm this, and also let me know how long the house stood in the garden, and any other details, such as cost of erection, taxes, etc.? Were you able to sell the house when you had finished with it in the garden, and what was the removal cost?<sup>79</sup>

MoMA did in fact pursue a similar project, and Marcel Breuer's 'House in the Museum Garden' went on view from 14 April to 30 October 1949. Designed as a house for a growing family, Breuer's plan allowed for an expansion to be built over the garage, providing additional space and privacy as the children grew older, and this was the version built for MoMA. Like the *Idea Houses*, Breuer's house was fully furnished and wired for electricity. Materials and contracting work were contributed in kind and listed in the MoMA bulletin dedicated to the project.<sup>80</sup> Much of the furniture was designed by Breuer, including what may have been the world's first remote control television, which retailed for an astonishing \$900.<sup>81</sup> Furnishings and household

items not designed by Breuer were supplied by the Manhattan modern design retailer, New Design, Inc., so that rather than representing a selection of goods curated by museum staff from numerous sources, the interior of the 'House in the Museum Garden' was more closely tied to a specific retailer. Unlike the Walker, MoMA and Breuer did make plans for this house available for purchase, and the dedicated MoMA bulletin included approximate construction costs for various suburban locations around the New York City area.<sup>82</sup>

While many scholars consider the 'House in the Museum Garden', along with the Case Study House project in California, as true harbingers of modern home design in America, both these projects commenced well after the Walker's *Idea House* programme.<sup>83</sup> Despite its original popularity, the *Idea House* project is little known today, for a variety of reasons. First and foremost, MoMA's decision to employ Breuer guaranteed the house's legacy within the history of architecture, whereas none of the *Idea House* architects ever achieved the national prominence Breuer enjoyed. Unlike the *Idea Houses*, Breuer's house survives, having been moved to upstate New York in 1950. Additionally, Breuer's house was designed along the lines of a conventional model home, as a complete house design with plans available for purchase, rather than the almost ephemeral concept of the 'house of ideas'. At least four versions of this house were built throughout the Northeast shortly after the exhibition.<sup>84</sup> Nonetheless, the *Idea House* project, with its fully functional, furnished houses and extensive documentation and cataloguing of items for viewers' benefit, was in all likelihood a direct model for MoMA's more famous endeavour.

## Conclusion

In its conception, the *Idea House* project was intrinsically idealistic, and the very gravity of the housing situation it sought to address precluded its immediate success. Most Americans simply did not have the time or resources to hire an architect, buy land and build a house, especially when large housing developments offered easy financing and rapid construction. Nevertheless, both houses articulated some of the most pressing issues of their time: the dire need for quality

housing, improved living standards through technology and a concomitant definition of 'modern' to indicate this improved standard, and the consumer's importance to both the economy and to good design via purchasing power. As suggested by its name, *The Idea Houses*' real contribution to housing and museum practice took the ephemeral form of ideas.

In discussing *Idea House II*, Defenbacher wrote that 'a man's house is his art', implying that the average home-owner is an active producer of art simply by virtue of furnishing his or her home.<sup>85</sup> The consumption of construction materials, appliances, furnishings and other household items is necessary to this creative act, and both *Idea Houses* served as exemplary illustrations of this concept. Appropriating the methods of commercial home developers and consumer goods manufacturers, the *Idea Houses* intersected the worlds of industry and art institution in a radical manner, creating a curatorial intervention in the conventional experience of the model home. These promotional techniques were not intended to sell specific goods or materials, but rather to promote a collection of ideas about homebuilding and design. The ideological refusal to make either of the *Idea House* blueprints available to the public contributed to the project's eventual obscurity, but it confirms the Walker's dual goals of providing creative and objective suggestions to the visitor/home-owner, and re-imagining the nature of the art exhibition. The high attendance figures of the exhibitions and the national media interest in the houses reinforce both the severity of the housing crisis extant throughout both exhibitions, and the degree to which housing was a national preoccupation. They also suggest that the *Idea Houses* were, in fact, influential to individuals interested in homebuilding, and art institutions seeking innovative ways of both attracting visitors and displaying design.

Alexandra Griffith Winton  
Independent Scholar, New York

## Notes

This paper was originally presented in 2003 at Kingston University's Fifth Annual Dorwich House Conference, 'The Modern Period Room: The Construction of the Exhibited Interior 1870–1950', and I am grateful to fellow participants and attendants of that conference for their comments. Special thanks are due to Jill Vetter at the Walker Art Center Archives, whose generous assist-

ance and deep knowledge of the *Idea House* project helped make this research possible.

- 1 As Gwendolyn Wright has observed, Americans have long used domestic architecture, and debates surrounding it, as a means of shaping social and political agendas. The single-family house has proved the most popular, and fertile, icon of family life and economic success across several centuries of American history. See G. Wright, *Building the Dream: A Social History of Housing in America*, MIT Press, Cambridge, Massachusetts, 1983. [First published Pantheon Books, New York, 1981.]
- 2 The Museum of Contemporary Art, Los Angeles's 1989 exhibition on the Case Study Houses featured full-scale reconstructions of some of them; see Elizabeth A. T. Smith (ed.), *Blueprints for Modern Living: History and Legacy of the Case Study Houses*, Exh. catalogue, Museum of Contemporary Art, Los Angeles and MIT Press, 1989. A full-scale reproduction of Le Corbusier's 1925 Pavillon de L'Esprit Nouveau was part of the same institution's 2001 exhibition, *L'Esprit Nouveau: Purism in Paris 1918–1925*; see Carol S. Eliel and Françoise Duclos, *L'Esprit Nouveau: Purism in Paris 1918–1925*, Exh. catalogue, Museum of Contemporary Art, Los Angeles and Harry N. Abrams, 2001.
- 3 B. Colomina, 'The Exhibitionist House', in R. Ferguson (ed.), *At the End of the Century: One Hundred Years of Architecture*, Harry N. Abrams, 1998, p. 151.
- 4 US Government Bureau of Labor Statistics Consumer Price Index, <http://www.bls.gov/cpi/data>
- 5 K. Hendrickson, 'The WPA Federal Art Project in Minnesota, 1935–1943', *Minnesota History*, vol. 53, no. 5, Spring 1993, p. 180.
- 6 As Nicolas Maffei has shown, Dana sought to reform the role of the museum through his exhibitions of industrial design, which, like Defenbacher, he felt were closer to the lives and interests of most people than painting or sculpture. See N. Maffei, 'John Cotton Dana and the politics of exhibiting industrial art in the US, 1909–1929', *Journal of Design History*, vol. 13, no. 4, p. 302–4; Defenbacher, Foreword to *Walker Art Center* (pamphlet), 1940, p. 4, in Holger Cahill Papers, roll 1107, frame 177, Archives of American Art, Smithsonian Institution, Washington, DC.
- 7 Defenbacher, Foreword to *Walker Art Center*, p. 10.
- 8 Daniel S. Defenbacher to Joseph Worschek, the Kohler Company, 3 October, 1940, in Director's Files/Daniel S. Defenbacher, box 3, folder 2, Walker Art Center Archives, Minneapolis, Minnesota.
- 9 *Ibid.*
- 10 See B. Kelly, 'The houses of Levittown in the context of postwar American culture', <http://www.cr.nps.gov/nr/publications/bulletins/suburbs/resources.htm>; originally published in D. Slaton and R. Schiffer, *Preserving the Recent Past*, Historic Preservation Foundation, Washington, DC, 1995.
- 11 R. Tobey, *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home*, University of California Press, Berkeley, 1996, p. 100; Wright, op. cit., p. 240.
- 12 D. Hayden, 'Model homes for the millions: Architects' dreams, builders' boasts, residents' dilemmas', in *Blueprints for Modern Living: History and Legacy of the Case Study Houses*, p. 198.
- 13 Despite its goal to stabilize American home life through improved living standards, the FHA did not view all families as equally deserving of its resources. It actively participated in discriminatory lending, encouraging neighbourhood racial and ethnic homogeneity by refusing to lend money in predominantly African-American or Jewish areas, claiming that the risk of bad loans was too high. These 'red lining' practices continued overtly until 1950, two years after a Supreme Court ruled that such lending practices were discriminatory and illegal, and covertly through the 1960s. For some Americans, the FHA enabled home ownership when it had been but a remote dream. For others it simply reinforced the notion that the American Dream itself could be a restrictive covenant, selectively accessible depending on race and religion. For example, in the post-war period the FHA refused to rescind or deny loans to James Levitt's Levittown development, even though he expressly forbade the sale of Levittown homes to anyone but 'members of the Caucasian race', although non-white domestic staff were permitted at Levittown. See *New York Times*, 19 March 1949, pp. 12, 19; Wright, op. cit., p. 248; Tobey, op. cit., p. 108; *Measuring America: The Decennial Censuses from 1790–2000*, US Census Bureau, US Department of Commerce, Economics and Statistics Administration, April 2002, pp. 124–8
- 14 Tobey, op. cit., pp. 98, 109.
- 15 These leaflets, published as *Technical Bulletins*, were published between 1936 and 1946. Several of them, notably *Modern Design* and *Principles of Planning Small Houses* were revised several times over these years. The new editions took into account changes in domestic housing design and construction.
- 16 'A modern house is defined as "modern" in the sense generally used. It will be likely to be found to be a house of unusual livability and convenience, but that it possesses any revolutionary qualities will rarely be surmised . . . Such houses are modern in the elemental sense.' Federal Housing Administration (FHA), *Technical Bulletin 2: Modern Design*, rev. edn, US Government Printing Office, 1940, p. 3; FHA, *Technical Bulletin 4: Principles of Planning Small Houses* rev. edn, US Government Printing Office, Washington, DC, 1940, pp. 14–15.
- 17 Wright, op. cit., pp. 241–2; Tobey, op. cit., 142.
- 18 H. Searing, 'Case Study Houses: In the grand modern tradition', in *Blueprints for Living*, p. 108; R. Plunz, *A History of Housing in New York City: Dwelling type and social change in the American Metropolis*. Columbia University Press, New York, 1990, p. 232.
- 19 Entrants received a list of specified General Electric products required in each design. The competition generated over 2040 entries, with 18 plans eventually produced for sale to the general public. R. G. Wilson, D. H. Pilgrim & D. Tashjian, *The Machine Age in America 1918–1941*, Exh. catalogue, Brooklyn Museum of Art and Abrams, 1986, p. 193.
- 20 See *The Official Pictures of A Century of Progress Exposition*, Reuben H. Donnelly, Corp., Chicago, 1933.
- 21 Plunz, op. cit., p. 233.
- 22 *Cultural and Social Aspects of the New York World's Fair, 1939, of Special Interest to Women*, Prepared for the National Advisory Committee on Women's Participation, New York World's Fair, Inc., New York, 1939, p. 49; italics added.
- 23 *Ibid.*
- 24 *Architectural Forum*, vol. 71, July 1939, p. 66.
- 25 'FHA says trend toward low-priced homes growing', *Minneapolis Sunday Tribune and Journal*, 1 June 1941, p. 12.

- 26 The Home Building Center also reinforced the importance of electricity as a key force in modernizing the American home with a large scale mural by Frances Scott Bradford with electricity as its theme. *New York World's Fair Information Manual*, New York World's Fair 1939, Inc., unpaginated manual (entries are alphabetical according to Fair departments).
- 27 *New York World's Fair Information Manual*; Whalen cited in J. Meikle, *Twentieth Century Limited: Industrial Design in America*, Temple University Press, Philadelphia, PA, 1979, p. 197; In this highly theatrical exhibition, visitors went on a bird's-eye view tour of a vision of America twenty years hence, escorted via a large conveyor belt. Bel Geddes' 'Futurama' was by far the most popular exhibition at the fair, drawing an estimated 27,500 visitors daily. It also exerted a profound influence on subsequent corporate exhibitions, redefining the way in which businesses courted consumers in fair environments. See Meikle, 'A microcosm of the machine-age world', *Twentieth Century Limited*, pp. 189–210. See also R. Marchand, 'The designers go to the fair: Norman Bel Geddes, The General Motors "Futurama", and the visit-to-the-factory transformed', *Design Issues*, vol. 8, no. 2, pp. 23–40.
- 28 T. Hamlin, 'California fair houses', *Pencil Points*, no. 20, 1939, p. 265, 293.
- 29 *Official Guidebook: Golden Gate International Exposition on San Francisco Bay*, The Crocker Company, San Francisco, 1939, p. 57.
- 30 Searing, op. cit., p. 109.
- 31 A. Blauvelt, *Ideas for Modern Living: The Idea House Project/Everyday Art Gallery* (brochure), Walker Art Center, 2000, p. 6.
- 32 *Minneapolis Tribune and Star Journal*, 1 June 1941, unpaginated insert.
- 33 Gwendolyn Wright notes that the utility room was a recently evolved room-type purposely created to house new appliances, yet by the mid-1940s it was commonly found in most new homes. See Wright, op. cit., p. 255.
- 34 FHA, *Technical Bulletin 2: Modern Design* (rev. edn), US Government Printing Office, Washington, DC, 1941, p. 2.
- 35 Lupton, E., *The Bathroom, The Kitchen, and the Aesthetics of Waste*, Princeton Architectural Press, New York, 1992, p. 60.
- 36 In *Technical Bulletin 2: Modern Design*, the FHA systems of property rating and 'adjustment for nonconformity' were laid out. This booklet made explicit the FHA position on homes of 'so-called modern design' that featured extraneous features that might be vulnerable to shifts in fashion. The bulletin is quite clear that these homes would receive low ratings for 'non-conformity' to FHA-approved definitions of good design.
- 37 Rolf Ueland of the Minnesota Arts Council, in a memo to its Board of Trustees, stated that the WPA was anxious about supporting the construction of an exhibition house when 'the real needs of food, clothing and shelter of so many people are still unsatisfied'. Ueland recommended that the house be funded separately from the Walker's WPA projects, and exhibition-related documents seem to bear this out, though there is no existing budget or other document to clarify the issue absolutely. Memo from Rolf Ueland to Board of Trustees, Minnesota Arts Council, 25 October 1940, in *Idea House I* Exhibition Files, box 1, folder 9, Walker Center Archives.
- 38 Funds were so limited and the project so experimental that Defenbacher appealed to a member of the Walker family for assistance. Archie D. Walker agreed personally to take out the mortgage on *Idea House I* when the Walker was unable to get bank funding for construction on its own. See *Idea House I* Exhibition Files, box 1, folder 9, Walker Art Center Archives.
- 39 Interview with Malcolm and Miriam Lein conducted by Martha Ruddy, 13 March 1999, Walker Art Center Archives, cited in Blauvelt, op. cit., p. 6.
- 40 Some businesses did reject the Walker's petition for goods for a variety of reasons. The largest local department store, Dayton's, refused to contribute in any way because the house would be open on Sunday, a conflict with their strict policy. Kohler simply refused to answer any of the Walker's requests. See *Idea House I* Exhibition Files, box 1, folder 9, Walker Center Archives.
- 41 *Minneapolis Tribune and Star Journal*, June 1, 1941, unpaginated insert.
- 42 *Idea House I* Exhibition Files, box 1, folder 9, Walker Art Center Archives.
- 43 K. Forde, 'Celluloid dreams: the marketing of Cutex in America, 1916–1935', *Journal of Design History*, vol. 15, no. 3, 2002, pp. 181–2.
- 44 *Minneapolis Tribune and Star Journal*, 1 June 1941, unpaginated insert.
- 45 While the FHA loan ceiling was \$20,000, the majority of loans were for between \$6,000 and \$8,000. See Wright, op. cit., p. 242.
- 46 'This house is *not* a model or ideal for any particular family group. It is a *House of Ideas* which may be applied to any home of any price. Actually the house adequately fits the needs of two people with or without one young child . . . The cost of the *Idea House* as it stands is excessive for the average builder because there are more refinements and more *ideas* in it than the average home owner would necessarily need . . . By the selection and elimination which would naturally be applied by the individual builder the basic *Idea House* could be built at reasonable cost. The most important *idea* of the House is *spaciousness*', *An Explanatory Guide to the Idea House*, p. 12.
- 47 *Idea House I* Exhibition Files, box 1, folder 9, Walker Art Center Archives.
- 48 In 1945, the Walker established the Everyday Art Gallery to display industrial design and objects of everyday household use. Hilde Reiss, a Bauhaus-educated architect and designer, curated the gallery. Reiss, who immigrated to America in 1933, came to the Walker by way of New York, where she worked in the offices of a number of prominent architects and designers, including Russel Wright, Gilbert Rohde and Norman Bel Geddes. She also taught under Rohde at the Design Laboratory, a WPA-sponsored school influenced by the Bauhaus. Rohde hoped the school would fill a need for an American design school that 'coordinates training in esthetics, products, machine fabrication, and merchandising'. For more on Reiss's career, see P. Weaver, 'Design for a modern career', *Mademoiselle*, February 1946, p. 310, and 'Idea House oral history project, 1999–2000', Walker Art Center Archives, pp. 22–33, 45–6. For the Design Laboratory, see 'WPA Established Design School', *New York Times*, 2 December 1935, p. 19; J. Keyes, 'WPA educators blazing trail with school in design industry', *New York Times*, 25 October 1936, p. N5. It was at the Design Laboratory that she met architect William Friedman, with whom she collaborated on a number of projects, including a house in northern New York State built in 1939 and subsequently featured in *Architectural Record* ('Plywood and fieldstone used in same house: William

- Friedman and Hilde Reiss', *Architectural Record*, vol. 85, March 1939, pp. 44–8). Friedman joined the Walker as Assistant Director of Exhibitions in 1944, and Reiss was appointed curator of *Everyday Art* in 1945.
- 49 Wright, op. cit., p. 242.
- 50 Ibid.
- 51 Plunz, op. cit., p. 145. Some blamed outdated building codes and regulations that failed to take account of new building materials and techniques developed during the war for sluggish construction rates. The Monsanto Corporation published Marcel Breuer's unrealized design addressing the anticipated housing crisis, the prefabricated Plas-2-Point house built of plywood coated with Monsanto plastic, in its eponymous magazine in 1943. By 1946, another *Monsanto* article titled, 'Can we build enough homes?' called for the reform of building standards to incorporate new materials such as plywood and plastics, products produced by the company. Despite Monsanto's financial stake in the widespread acceptance and use of these products, these articles illustrate some of the many complications inherent in housing construction immediately after the war. M. Breuer, 'Designing to live in the post war house', *Monsanto*, vol. 22, no. 5, October 1943, pp. 22–4; 'Can we build enough homes?', *Monsanto*, vol. 26, no. 3, July 1946, pp. 18–21.
- 52 As Ronald Tobey has shown, much commercial manufacturing was converted to defence production during the war, curtailing the purchase of expensive appliances. Workers instead saved their extra income. See Tobey, op. cit., p. 166.
- 53 See Wright, op. cit., pp. 251–3; see also M. Filler, 'Building organic form: Architecture, ceramics, glass and metal in the 1940s and 1950s', in *Vital Forms: American Art and Design in the Atomic Age, 1940–1960*, Harry N. Abrams, 2001, pp. 132–6.
- 54 K. T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States*, Oxford University Press, New York, 1985, p. 234; US Census Bureau, Historical Income Tables—Families—Table 1, //www.census.gov/income/ftp/histinc/CPI-U-RS/family/r01.lst
- 55 In 1949, the down payment on a Levittown home was \$90, with monthly payments of \$58. See *New York Times*, March 7, 1949, p. 21; B. Kelly, op. cit., p. 4. Many of the developments were also poorly built, eventually prompting a Senate investigation. See Hayden, op. cit., p. 199.
- 56 See for example 'House 24C—a small house planned for efficiency, privacy and graceful living', *Minneapolis Tribune*, 28 September 1947, p. 12.
- 57 Ibid.
- 58 Undated press release, *Idea House II* Exhibition Files, box 15, folder 11, Walker Art Center Archives.
- 59 For more on the Home Institute, see 'Bank program for home planners', *Banking*, vol. 15, no. 3, September 1947, pp. 58, 60.
- 60 For a complete description of *Idea House II*, its construction materials, techniques, furnishings and appliances, see *Everyday Art Quarterly*, no. 5, 1947.
- 61 B. Colomina, 'Reflections on the Eames House', *The Work of Charles and Ray Eames: A Legacy of Invention*, Exh. catalogue, The Vitra Design Museum and Harry N. Abrams, Inc., New York, 1997, pp. 137–8; 'Furnishing a post-war house', *Monsanto*, vol. 22, no. 5, October 1943, pp. 25–6.
- 62 'So you are learning to cope with your range and refrigerator', *McCall's Homemaking*, September 1947, pp. 48–50. This is the same technique used to reinforce reader loyalty earlier in the twentieth century in women's magazines such as the *Ladies Home Journal*, as demonstrated in Jennifer Scanlon's study, *Inarticulate Longings: The Ladies Home Journal, Gender and the Promises of Consumer Culture*, Routledge, London, 1995, p. 5.
- 63 Blauvelt, op. cit., p. 12.
- 64 R. Buckminster Fuller developed a unit in conjunction with his Dymaxion house project, stamped from one piece of metal, in 1937–8. The Integrated Bathroom (alternatively known as the Dymaxion Bathroom) was produced briefly and in small numbers by the Phelps Dodge Corporation. See Ward, J. (ed.), *The Artifacts of R. Buckminster Fuller: A Comprehensive Collection of His Designs and Drawings in Four Volumes*, Garland Press, New York, vol. 2, pp. 3–51
- 65 E. McCoy, 'Case Study House 8', in Smith, op. cit., pp. 51–3.
- 66 '\$15,000 home to be given away in jingle contest, part of St. Paul Home Show', *Minneapolis Tribune*, 28 September 1947, p. 12.
- 67 Blauvelt, op. cit., p. 14; *Minneapolis Sunday Tribune*, 2 November 1947, p. 12.
- 68 Daniel S. Defenbacher to Henry McKnight, Editor of *Look*, 12 November 1947, in *Idea House II* Exhibition Files, box 15, folder 11, Walker Art Center Archives.
- 69 According to the 1950 census, no less than 99 per cent of the state's almost three million residents were white. F. Hobbs and N. Stoops, Census Bureau, Census 2000 Special Reports, Series CENSR-4, *Demographic Trends in the 20th Century*, US Government Printing Office, Washington, DC, 2002, pp. A-25, A-5, 128.
- 70 Lois Miller, Helen Tully and Dorothy Vine to D. S. Defenbacher, 24 September 1947, in *Idea House II* Exhibition Files, box 16, folder 5, Walker Art Center Archives.
- 71 'I believe that, without exception, every manufacturer of equipment and furnishings for the *Idea House* would be interested in having pictures or some sort of comment on how their product found favor in Walker Art Center's *Idea House II*, where only the "newest and finest" of everything was used . . . [T]his is the sort of thing that house organ editors are delighted to get and use . . . it's excellent material for circulars and mail stuffers . . . and I've a notion that you might even get one or more of the large manufacturers to tie in their national advertising with *Idea House II* and the fact that their product was chosen over all others. From my experience with Continental Airlines I know that advertisers are always interested in getting an original slant on their product—and it's an ideal way to get the *Idea House* across . . . Have you thought about making a movie short? This might be a little more complicated, but it could be done.' Undated letter from Helen Tully to Daniel Defenbacher in *Idea House II* Exhibition Files, box 16, folder 4. Defenbacher replied 7 December 1947. See *Idea House II* Exhibition Files, box 16, folder 4, Walker Center Archives
- 72 Blauvelt, op. cit., p. 13.
- 73 M.D. Gillies, 'This house will help you plan your own', *McCall's Homemaking*, vol. 75, January 1948, pp. 44–53; '*Idea House II* for the Walker Art Center', *Progressive Architecture*, February 1948, pp. 39–47.
- 74 'How livable is a modern house?', *Life*, vol. 25, no. 16, 18 October 1948, p. 105–8.

- 75 *Minneapolis Morning Tribune*, 16 October 1947. From the *Idea House II* scrapbook, Walker Art Center Archives.
- 76 William Friedman to Maurice Adelsheim Jr, Jacobs & Co., 20 October 1947, in *Idea House II* Exhibition Files, Walker Art Center Archives.
- 77 A. D. Thomas for *Fortune* to D. S. Defenbacher, 11 March 1948, in *Idea House II* Exhibition Files, box 15, folder 11, Walker Art Center Archives.
- 78 Defenbacher was distraught that *Idea House II* was not drawing as many visitors as he had hoped, writing to Henry McKnight of *Look* magazine on 12 November 1947, 'We are getting about one third of the expected attendance to *Idea House II*. Believe me, we are painfully surprised. There is nothing wrong with the house. It is a good show and excellent architecture in any league.' *Idea House II* Exhibition Files, box 15, folder 11, Walker Art Center Archives.
- 79 Philip L. Goodwin to Walker Art Center, 3 November 1947, in *Idea House II* Exhibition Files, box 15, folder 6, Walker Art Center Archives.
- 80 *Museum of Modern Art Bulletin*, vol. 16, no. 1, 1949.
- 81 See *Science Illustrated*, vol. 4, July 1949, pp. 65–9.
- 82 While the Walker and MoMA were the only two American museums to exhibit full-scale, furnished and functional houses, many museums held innovative exhibitions of modern home furnishings and interior designs in the late 1940s. Some, like Alexander Girard's 'For Modern Living' exhibition at the Detroit Institute of Arts in 1949, featured completely decorated room environments from modern designers such as George Nelson, the Eameses and Florence Knoll. Still others pursued commercial partnerships to promote their projects, such as MoMA's 'Good Design' exhibitions, subtitled 'A joint program to stimulate the best modern designs of home furnishing', which featured goods available from the Merchandise Mart in Chicago. See M. Friedman, 'From *Futurama* to *Motorama*', in *Vital Forms*, op. cit., pp. 175–7.
- 83 In general, scholars writing about dwelling design during mid-twentieth century appear unaware of *Idea House*. In her essay 'Case Study Houses: in the grand modern tradition', Helen Searing lays out the rich and complex history of the antecedents of the Case Study project, both in America and Europe, and identifies Breuer's 'House in the Museum Garden' as a 'museological and temporary version of the Case Study Houses,' making no mention of the earlier *Idea House* project; see Searing, op. cit., p. 117; Beatriz Colomina, in her essay 'The Exhibitionist House', cites the issue of *Everyday Art Quarterly* devoted to *Idea House II* as an example of the popular appeal of the exhibited interior in the middle of the twentieth century, but makes no mention of the exhibition itself. See B. Colomina, 'The Exhibitionist House', op. cit., p. 141.
- 84 L. Hyman, *Marcel Breuer, Architect: The Career and the Buildings*, Harry N. Abrams, Inc., New York, 2001, p. 296; J. Driller, *Breuer Houses*, M. Cole and J. Verrinde, trans., Phaidon Press, London, 2000, pp. 180–9, 263.
- 85 D. Defenbacher, 'A man's house is his art', *Everyday Art Quarterly*, no. 5, Fall 1947, p. 1.