# 4 MODERN HOUSING PROJECTED IN COLOR

Though keen on circulating exhibits and reports, the Housing Authority of the City of Los Angeles remained surprisingly silent regarding the promotional and educational possibilities of another contemporary photographic medium: Kodak's Kodachrome, a 35-millimeter color film for producing transparencies. Introduced to the market in 1936, 35-millimeter Kodachrome became an important technology in the United States' foreign cultural relations after the Second World War. Still, despite efforts on behalf of housers like Catherine Bauer to place public housing prominently within these postwar programs, the Housing Authority of the City of Los Angeles appears to have not publicized its housing work during this time—either at home or abroad—by projecting color photographic transparencies onto screens.

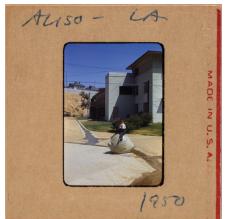
The collection of Catherine Bauer and her husband, the architect William Wurster, in the Environmental Design Archives at the University of California, Berkeley, contains a small number of Kodachrome slides of Los Angeles's public housing projects labelled in Bauer's handwriting with the years 1942 and 1950. While public housing residents likely made their own Kodachrome slides of life in their Los Angeles homes during these years, these slides in the Bauer and Wurster collection constitute the only known publicly accessible color photographs of Los Angeles's public housing from this early period. Almost certainly shot by Catherine Bauer, the slides offer intimate views of early public housing that were never published, but likely brought before the eyes of the public as projections on a screen in Bauer's classroom and public university lectures to provide images of techniques in modern housing design.

Bauer's Kodachrome slides take three completed projects and one potential site as their subjects. In one slide labelled "LA Hsg. Tour '42, Children playing in gutter. + H.M., A-75," a man in a tweed jacket stands amidst a group of children

occupied with a large puddle of water in the street outside Pueblo del Rio, the four-hundred-unit housing project designed by a group of architects under the leadership of Paul R. Williams and completed in May of 1942 (fig. 58). The lawns leading up to the cement stoops of the units glisten a bright green that contrasts with the pink of a young girl's dress. In another Kodachrome labelled "Aliso— LA, 1950," a small boy sits atop a giant gray sculpture of a fish, his white shirt shining brightly beneath a cloudless blue sky (fig. 59). Surrounding him, gray cement gutters direct brown rivulets of water between swaths of dry yellow ground. Behind him, a green lawn yellows in patches beneath the light bluegray of the Aliso Village housing project's buildings. Another Kodachrome of Aliso Village shows children in the shadows of one of the project's bridged walkways or "ramadas," a verdant lawn glaring in the sunlight of the interior courtyard (fig. 60).<sup>2</sup> Finally, two Kodachrome slides in a grouping of different views of Chávez Ravine reveal hillside houses as gray-blue and surrounded by green trees and stone walls (figs. 61, 62). Dated in Bauer's hand "1950"—the same year Catherine Bauer and William Wurster left their academic posts at Harvard and MIT, respectively, to return to the University of California, Berkeley—these slides depict a neighborhood slated for demolition to make way for Richard Neutra and Robert Alexander's never-realized Elysian Park Heights development for the Housing Authority of the City of Los Angeles.3

These color transparencies comprise only a tiny portion of the photographic activity surrounding the Housing Authority's projects, but one that raises several questions about the meaning of color in housing, the meaning of color in photographs of this housing, and specifically the function of these color transparencies during the Second World War and immediate postwar years. In pursuing these questions, this chapter takes as its point of departure Catherine Bauer's work as an advisor to the Museum of Modern Art on its wartime exhibitions, where she first suggested that the Museum show West Coast housing using color transparencies. By contextualizing Bauer's suggestion within writings about color in housing in the architectural press, it argues that color in photography for Bauer constituted a form of instructive technical data. Following this understanding of color's didactic function, the analysis then considers Kodachrome's projection technology by situating Bauer's slides within her work as an educator. Paying particular attention to similarities between Bauer's work in Kodachrome, the personal Kodachrome collection of the Farm Security Administration architect Vernon DeMars, as well as records of international initiatives such as the Office of Inter-American Affairs' building and circulation of a collection of Kodachrome slides, this chapter ultimately questions whether photographic presentations using color transparencies remained a unique



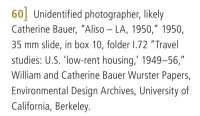


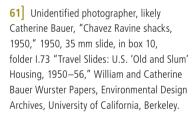






59] Unidentified photographer, likely Catherine Bauer, "Aliso – LA, 1950," 1950, 35 mm slide, in box 10, folder I.72 "Travel studies: U.S. 'low-rent housing,' 1949–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.







62] Unidentified photographer, likely Catherine Bauer, "Chavez Ravine shacks, 1950," 1950, 35 mm slide, in box 10, folder I.73 "Travel Slides: U.S. 'Old and Slum' Housing, 1950–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.

requirement of West Coast housing for Bauer, or whether she saw it as particularly suited to a comparative study and the furthering of an international modern housing movement.

In pursuing these questions, this chapter brings together and builds on research in the histories of photography, architecture, exhibition design, and pedagogy. It is especially indebted to historian of art and photography Kim Beil's study of the politics of color photography in print with a focus on the articulation of rival architectural modernisms in California magazines at the start of the Red Scare.4 Beil's investigation into the connections between color and a "regional" or "nativist" California residential architecture in the early postwar era serves as a springboard into this chapter's look at the political meaning of color transparencies of older, humbler West Coast housing for figures such as Catherine Bauer and Vernon DeMars.<sup>5</sup> With the further aid of primary texts from the garden city movement, architectural examples from interwar Germany, and photohistorian Sally Stein's research on the earlier Farm Security Administration's use of Kodachrome, a closer look at these slightly older housing initiatives aims to historicize color's midcentury connotation of Americanness.6

With this focus on the cultural meaning of color, the following investigation furthermore partakes in a recent surge in research on color photography. Kim Timby's review of two publications accompanying recent exhibitions of color photography and Sylvie Pénichon's guide to the conservation of color photography credit this increased research to a combination of "public enthusiasm" for color photographs, the possibilities of digital printing, as well as color photography's "firm establishment on the art market and in museum collections and activities." The outcome of these combined forces, in Timby's assessment, is a move of research "in the direction of a more critical history better synthesizing technical, aesthetic, and cultural issues."8 Photohistorian Sally Stein's essay complements Timby's study by placing this recent move in a long history of critical writings about color photography.9 Upholding the approach pioneered by Stein in a 1991 study that places the FSA's Kodachrome slides against a backdrop of the history of dyes, picture magazines, and consumerism in the United States in the 1920s and 1930s, both Timby and Stein celebrate a tendency toward more contextualized readings of color photography in print as opposed to histories focused solely on color photography's aspirations to placement on the gallery wall.10

The following reading of Bauer's Kodachrome slides thus aims to contextualize them with applications in advertising, but also art and science. As Sally Stein's history of color in the first half of the century in the United States illustrates, the advertising industry took great interest in color photography's

ability to render the colors of consumer goods that promised to fulfill a "desire for pleasure and change"—a desire which surely the Housing Authority architects catered to with the variations of color they introduced into West Coast housing projects.<sup>11</sup> For reasons related to this success in advertising, by the 1940s, color photography had not fully arrived in the museum as art.<sup>12</sup> But as historian of photography and science Kelley Wilder explains, starting in the 1930s both artists (she refers specifically to the color work of László Moholy-Nagy at the Bauhaus and the New Bauhaus) and scientists were using color photography in their work.<sup>13</sup> Aside from the application of photographic technologies as a research tool, photography and notably color photography allowed scientists and lay publics alike to "appreciate certain scientific subjects under study as being both appealing to the eye and elegant as illustrations of phenomena."14 Peter Geimer also explores historical shifts in the role of color as a determinant of photography's status as a documenting medium. 15 This history of color in photography, in short, is a history of business, the sciences, and art.

Although a broadening area of study, much work on the history of color photography remains to be done. Kim Timby specifically calls for research into both the historical "availability" and the actual practice of different color photographic processes so that scholars may better understand why, given the choice, photographers elected one technology or brand over another at a specific historical moment.16 As Sylvie Pénichon outlines, the German firm Agfa (a prewar competitor of Kodak) introduced Ansco Color Film in the United States in 1938. Depending on the needs of the photographer, Agfa's film possibly offered an advantage over Kodachrome in that photographers could develop Ansco Color Film themselves.<sup>17</sup> These choices available to photographers changed after the war when the United States government granted the US firm, Kodak, a monopoly on film production and sales in West Germany and Japan. 18 Further ground-laying research into these transnational histories of photographic technologies promises to place case studies such as the following of Bauer's work into a more meaningful context, in turn bringing about the better "synthesis" that Timby calls for and Stein's study of the color photographs of the Depression era exemplifies.

Looking beyond this growing area of photographic history, this chapter likewise contributes to recent scholarship in the history of the pedagogical use of photographic visual aids by showing the parallels between Bauer's work with Kodachrome and the advocacy of artist and Latin American studies scholar Florence Arquin, among others, for the building and circulation of Kodachrome collections in fostering the education of students as world citizens. 19 As photohistorian Olivier Lugon explains, the use of photographic slides and books in

the education of young children and adults alike garnered supporters in the 1920s, when the photography of the New Objectivity was negotiating a place between that of art and the "documentary mode" in Germany at the same time that the "New Pedagogy" was encouraging the study of photography by teachers and pupils as a way of bringing students into closer yet still mediated contact with "the world." Bauer's approach to university-level teaching in 1940s, which incorporated films and slides and introduced housing students to field research, illustrates the sustainability of these approaches. The observation of communication scholar Katie Day Good that actual practices among educators during these decades did not always deploy the newest media on the market, but rather reflected acts that might be compared to Michel de Certeau's notion of bricolage or "making do" further informs this chapter's closer look at Bauer's adaptive and pragmatic practice.<sup>21</sup> Adopting both these perspectives on the history of media in pedagogy, this chapter aims to go a step further by showing the practical and political dimensions of Kodachrome as a tool of public housing education. With respect to architecture and urban planning, Bauer's collecting and showing of color slides of modern housing demonstrates the instrumentality of color slides in a discipline built on finding ways to provide the best with minimal resources and the help of international networks.

# COLOR IN WESTERN WARTIME HOUSING

In 1942, while Director of the Department of Industrial Design Eliot Noves was planning the show Wartime Housing at the Museum of Modern Art in New York, Catherine Bauer wrote to him to ask whether he had "considered using color transparencies at all?" Her only explanation for her question was that "Much of the stuff out here—FSA, Bremerton Housing Authority, Bill's [William Wurster's, N.K.O.] Vallejo project, and above all [Ernest J., N.K.O.] Kump's school—really should be shown that way."22 Voiced in a private letter now long forgotten, Bauer's casual suggestion might seem a personal preference hardly indicative of a broader historical practice of viewing photographs of West Coast wartime housing in color. But Bauer had some expertise on housing in the region. She also had some more ideas for how the Museum of Modern Art could exhibit this housing as part of its wartime exhibition program.

Catherine Bauer saw the Museum in a favorable position for the promotion of local housing designs. As she congratulated Director Alfred Barr in the spring of 1941, the Museum was a national leader in encouraging "a healthy, indigenous development in the movement for modern architecture." Here, Bauer clarified

that she not only meant modern architecture in the sense of "facades and individual buildings," but also "large-scale housing and community planning," or modern housing for the masses.<sup>23</sup> For Bauer, this modern housing, with its promise of mass appeal, was an essential component of a modern museum program: in "presenting them [the arts, N.K.O.] as a vital concern to everyone instead of the plaything of a few aesthetes and collectors," she argued, the Museum of Modern Art was "a truly 'modern museum." 24

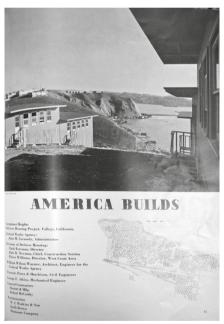
The urgency for the Museum of Modern Art in fulfilling its institutional "function," in Bauer's terms, heightened in less than a year with the bombing of Pearl Harbor.<sup>25</sup> With the United States' full entry into the war, the Museum embarked on a series of war-themed shows that would include the landmark Road to Victory (May-October 1942) and Power in the Pacific (January-March 1945) exhibitions presented by the Museum's Department of Photography as well as curator Eliot Noyes's Wartime Housing (April-June 1942) presented by the Department of Industrial Design. Bauer saw Noves's show first and foremost as a political opportunity for housing—as a chance to encourage popular support of local housing initiatives by positioning them as vital to the strengthening of a broader national defense program.<sup>26</sup> This aim likewise fit well within the modern Museum's program for attracting diverse audiences.<sup>27</sup> In a follow-up letter to Noyes, Bauer suggested that the Museum bring the exhibition to local agencies in the form of a travelling show.<sup>28</sup>

Part of the Museum's prescribed mission was to get the local vote on housing. However, as an art museum, Bauer also saw it in a position "to encourage better quality in defense housing production" (emphasis her own).<sup>29</sup> To achieve this goal, Bauer envisioned displays of "ABC-labeled examples of good architectural design and community planning, and worth-while technical experiment," as she explained to Noyes. She followed this description with several suggested sources for such "examples," including the Architects Advisory Committee of the United States Housing Authority and the editor of Architectural Forum, Howard Myers. 30 For examples of West Coast War housing, specifically, Bauer advised Noyes that he "may well find that the architectural magazines have better material in their files than Washington [...] Ernie Kump's school at Vallejo and Bill's experimental houses, just finished, have just been photographed."31

In her reference to recent photographs, Bauer was almost certainly referring to those by photographer Roger Sturtevant as published in John Entenza's magazine, California Arts and Architecture. In 1941, Entenza inaugurated a series of articles on California war housing, complete with extensive photographic coverage. Among the first articles was one by William Wurster on his latest project, Carquinez Heights—a demountable war housing project of 1,677 units



63 Pueblo del Rio: A Low Rental Housing Project," California Arts and Architecture, May 1942, 32-33, Berkeley Public Library.



64 "America Builds," California Arts and Architecture, November 1941, 35, Berkeley Public Library.

> constructed at break-neck speed between July and December 1941.32 Continuing with the focus on the projects near Vallejo, the following month Entenza published architect Vernon DeMars's article on demountable units not far from Carquinez Heights.<sup>33</sup> Finally, in February 1942, Entenza shifted the magazine's focus to the Southern California area with the presentation of a Federal Works Agency project at Long Beach, complete with photographs by the now utterly

forgotten photographer Margaret Lowe.<sup>34</sup> Additional photographs credited to Lowe showing construction at the Housing Authority of the City of Los Angeles's permanent development of Avalon Gardens appeared in the April issue, followed the next month by her shots of Pueblo del Rio (fig. 63).35

Taking these current projects as subject, the war housing articles published in California Arts and Architecture furthermore offered comprehensive technical data on modern housing construction with their profusion of illustrations and detailed explanations. Consider William Wurster's article on Carquinez. Carquinez Heights was one of the temporary Federal Works Agency housing developments built under the Lanham Act of 1940.36 It occupied a site near the Mare Island Naval Shipyard just north of Berkeley, California, where the Napa River meets the San Pablo Bay. As Wurster's article explains, this site and the view of the bay that it offered were two important factors in his development of an appealing design: "Don't ask that it be familiar or cozy," Wurster writes in the final paragraph of the article, acknowledging some of the public criticisms of recent government-sponsored housing projects, "But do ask if it fits the site uses the view—is gay—is economical—was done on schedule. And do this after it is complete...and I hope you can say, as I do, 'I'd like to live there.'"37

Roger Sturtevant's photograph of "there" on the page facing Wurster's article echoes the architect's invitation to readers to see the attractiveness of modern architecture's efficiency and correspondence with the surrounding nature (fig. 64).38 Taken from the top of the Carquinez hills facing south, the photograph shows the houses conforming to the natural terrain of the heights as the units descend step-like towards the water below.<sup>39</sup> If Sturtevant's photograph offers an excellent "ABC" illustration of the Carquinez Heights project, however, it is missing one important technical detail: the houses' "gaiety." <sup>40</sup> In his article on the facing page, Wurster describes the variety of colors of materials and paint characterizing the houses' exteriors. Of the 1,677 houses, "50 per cent of the houses are sand color or natural plywood, with colored doors; 25 per cent are barn red; 9 per cent are green; 8 per cent are blue; 8 per cent are yellow," he writes. 41 But in Sturtevant's photograph, all these buildings appear gray. If West Coast wartime housing should be shown in color, in Bauer's view, why would she direct Noyes to the black and white photographs in the architectural press? Was Bauer's suggestion to the Museum to show West Coast wartime housing in color indeed a new idea? What motivated it?

#### "DON'T BE AFRAID TO USE COLOR"

Historian of art and photography Kim Beil's research on the divergent photographic practices of two California magazines of the 1940s and early 1950s offers a helpful framework for approaching questions surrounding the motivations to show color photographs of wartime housing. As Beil observes, similar to contemporary art magazines, John Entenza's Arts and Architecture adhered to a practice of publishing photographs in black and white. 42 The magazine House Beautiful, on the other hand, published color photographs. Its most famous application of color photography was in "The Threat to the Next America," a divisive article written by the editor Elizabeth Gordon in 1953 in which she used color photographs to depict a "good" and "American" form of modernism and black and white photographs to depict a "foreign" modernism of the Bauhaus and the Congrès internationaux d'architecture moderne. 43 Beil does not mention Catherine Bauer's letter to the Museum of Modern Art regarding an "indigenous" modern architecture. Still, she nonetheless sets Gordon's famous editorial treatment of color photography against the backdrop of an effort to define and locate an "American" modernism in architecture starting as early as 1942 among a group of writers and theorists that included Bauer's former colleague, Lewis Mumford. For this group, the recent work of California-based architects Richard Neutra and Bauer's husband, William Wurster, epitomized this architecture's "good" and "human" qualities in their applications of design elements such as texture and color. 44 Color photography not only emphasized this color in architecture, but, as Beil argues, set the architecture in contrast to black and white photographs of European modernism as a way of underscoring the severity of the International Style.45

Although Catherine Bauer was a reader of Arts and Architecture, a closer look at the contemporary wartime issues of House Beautiful as modeled by Beil forms a more nuanced cultural backdrop for Bauer's 1942 suggestion to the Museum. Gordon became the editor of *House Beautiful* in the fall of 1941, just about a month before Entenza published Wurster's article on the war housing at Carquinez Heights. 46 As historian Monica Penick observes, in her first months as the magazine's editor, Gordon began to develop a concept of "better living" that encompassed everything from architecture and art to cooking and gardening.<sup>47</sup> House Beautiful aimed to educate its readers on these topics and encourage practices and the purchase of products that reflected "taste." Addressing homeowners and apartment renters alike, the wartime issues of House Beautiful contained articles on topics ranging from how to create rentable spaces in houses in defense areas to how one military family, despite the possibility of having to



**65**] "How to Live Well on What You Make," *House Beautiful*, February 1942, 38–39, Berkeley Public Library. Maynard L. Parker, photographer. The Huntington Library, San Marino, CA.

move away at a moment's notice, decorated their housing unit at Colonial Village in Arlington, Virginia.<sup>49</sup> Businesses marketed in the pages of *House Beautiful* to these new lifestyles created by the war: "The war is making nomads of many home-loving Americans," read a brief article highlighting rooms designed and furnished by Marshall Field's. The department store advised Americans to furnish their homes with such demountable items as sectional sofas and director chairs, but also to take risks with color: "Be sure to use color brightly and brashly. You'll be gone before you can tire of it."<sup>50</sup>

If readers could not visualize the color in the black and white photographs included with this small article, they needed only to turn to a feature article in the same issue. Titled "How to Live Well on What You Make," the article reproduced color photographs by Maynard L. Parker of rooms at the Marshall Field's store in Chicago (fig. 65). "When you haven't got riches, make up for it with gaiety," one of the captions to Parker's color photographs touted:

"This painted Welsh dresser is what we mean. So are the framed white glass plates. It takes courage to place white furniture against dark walls, but how nice! Gives that impression of chin up, eyes ahead that spells personality." <sup>51</sup>

Looking at the photograph of the white furniture painted with red flowers, green foliage, and figures in colorful clothing, one sees "personality" in the form of an interpretation of European folk culture set against a swath of dark green wall. A plush chair gives the room an air of comfort. The reflections in the polished wood floor lend an appearance of tidiness. Nothing in the photograph hints at the grit or sparseness of war. Only a month before, an article in House Beautiful advised that the war's demands for metals had contributed to a shortage of aluminum paint specifically in the colors yellow, red, and green.<sup>52</sup> Readers would hardly guess from this green wall in the room at the Marshall Field's store that the shortage was still in effect. Nor would subsequent advertising let on that tasteful living was on hold for the duration. Later that spring, an April 1942 layout advising "Don't Be Afraid to Use Color" reproduced thirteen Kodachrome images of multicolor home exteriors "courtesy Sherwin Williams," the paint manufacturer (fig. 66).53 The largest photograph shows a house painted barn red, while in the lower center portion of the layout a paintbrush with pink wings flies playfully across the gutter, a trail of green paint in its wake.

Bauer understood the appeal to the consumer of color in housing design. In a 1940 letter to Jacob Crane at the United States Housing Authority, she expressed immense dissatisfaction with a recent choice of materials for the construction of a public housing project in Pittsburgh: "Of one thing I am convinced: for long straight rows with flat roofs, dark brick is visually the worst possible material," she wrote. A far better treatment, she posited, would be "concrete and stucco, or any flat, smooth material particularly if it has possibilities for variegated color [...]. They dramatize geometry somehow, and look lighter and gayer."54 To illustrate her point, Bauer described row housing in California recently constructed for migrant farm workers by the Farm Security Administration. Far more modest than the housing built by the younger United States Housing Authority, the Farm Security Administration's units nonetheless exhibited many formal qualities that Bauer championed in modern architecture. She described the exteriors of the FSA houses as "redwood horizontal boards on the first floor, with smooth doors and frames in flat, bright colors."55 "Rather a shock to the local peasantry, I imagine," she glossed, "but as gay and stimulating modern architecture as has been done in this country." Plus, the housing was "swell to look at."56

Catherine Bauer put her convictions to the test when she furnished one of the interiors of a "model" unit at Vallejo. "For all the basic stuff in the Vallejo House I used ordinary local unfinished pine items, with blonde varnish, dark green enamel, or gray-green stain to match the woodwork," she wrote in response to an inquiry into furniture design in wartime.<sup>57</sup> Like the photographs of the rooms in Gordon's magazine, Bauer's choice of furnishings for the model

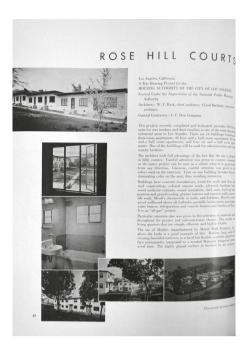


66] Author unknown, photographs supplied by Sherwin Williams, "Don't Be Afraid to Use Color: Make Your House Different and Charming with Lovely Paint Combinations," *House Beautiful*, April 1942, 40–41, Berkeley Public Library.

unit at Vallejo aimed to show visitors how they could make wartime housing colorful and livable. Bauer likewise saw these war worker households that Gordon targeted as hardly different from the middle class in their aspirations but perhaps more attuned to the "chin up, eyes ahead" attitude that the magazine celebrated. In reference to a recent issue of the magazine, *Retailing*, Bauer wrote to a colleague in confidence,

"I do agree with them that the genus 'war worker' is no different from anybody else and includes about the same range of taste and tastelessness as our own personal friends. They are more flexible and informal, though, than the average settled small-town-middle-class family: fewer of them would feel a religious compulsion to buy 'suites'... if the stores had anything else in stock."<sup>58</sup>

Despite her sensitivity to the demands of wartime living, *House Beautiful* editor Elizabeth Gordon did not publish articles specifically on wartime housing in Los Angeles. Rather, *California Arts and Architecture*, with its black and white photographs and appeal to a readership of architects, quickly became one of the more prominent publications for the circulation of the Housing Authority of the City of Los Angeles's and other West Coast housing authorities' project designs. <sup>59</sup> As in Bauer's furnishing of the Vallejo war housing unit, housing design for war



67 "Rose Hill Courts," California Arts and Architecture, August 1942, 32, Berkeley Public Library.

workers in Los Angeles showed a remarkable attention to color. Articles in California Arts and Architecture included tips on how to thriftily use color in housing while avoiding the faults Bauer saw in the Pittsburgh project. As one scholar notes, only half the units at Carquinez Heights were painted with the colorful facades Wurster describes in his article for California Arts and Architecture.60 Many were not painted at all, but instead sported colorful doors that required less paint yet still contributed to the overall colorfulness of the project. Indeed, this carefully planned variation also emerged as a cost-conscious practice in Los Angeles during this period. The designers of the Housing Authority's hundred units at Rose Hill Courts adopted a two-color scheme, according to another feature in California Arts and Architecture accompanied by black and white reproductions of photographs by Julius Shulman (fig. 67). At Rose Hill Courts, exterior wall color and trim color alternated from building to building, thereby requiring more paint per unit than at Carquinez Heights but requiring the purchase of fewer colors and still, according to California Arts and Architecture, "avoiding monotony." The Housing Authority's architects also chose color stucco for the 164 units at Avalon Gardens.<sup>62</sup> Manufactured by the Velvatone Stucco Products Company of Los Angeles, the cement-based "attractive pastel shades," as California Arts and Architecture reported, "solved the problem of providing a surfacing job encompassing not only beauty and permanence but economy as well" thanks to its fade-resistant mineral oxide colors. 63

The benefits of enduring beauty and economical color in housing were part of Catherine Bauer's case. As Bauer advised in a private letter to a fellow houser, housing's supporters had to keep in mind "the long-term housing needs" of the different defense centers, "since this is almost the only branch of emergency defense expenditure which can add to permanent civic wealth and welfare, emergency or not emergency."64 Public housing that made low-income families say, in architect William Wurster's words, "'I'd like to live there," indeed promised far-reaching benefits of civic wealth in the form of what Catherine Bauer casually referred to as "swell to look at" architecture. As the Housing Authority's efforts to rally community members to the public housing cause showed, presenting government-sponsored housing as a benefit to everyone was an argument to which the movement, especially at a local level, often turned. At a time when stylish home magazines posited painting interior and exterior walls as a low-cost way to exhibit one's "personality," housing in color fit this bill.

### CATHERINE BAUER'S KODACHROME SLIDES

If color was critical to making West Coast housing appeal to its inhabitants, the question remains whether color in the presentation of these designs was also critical for related reasons. Did Catherine Bauer suggest that the Museum of Modern Art display photographs of war housing in color so that the homes appeared happy as opposed to dull, interesting as opposed to monotonous, and livable as opposed to unwelcoming, just as the architects intended them to be seen when residents approached them from the street? The problem with this question is that it fails to also consider why Bauer saw color transparencies specifically as the best technology for exhibiting West Coast war housing work. Bauer's demand for color might indeed be better understood by situating it within the discourse on color in private correspondence and the appearance of colorful photographs of housing interiors in House Beautiful, but color slide technology, best suited for projection, not print, provided different experiences for practitioners and audiences, and had a following in the 1940s that was much its own.65

By the early 1940s, the technology of color transparencies was widely available in the form of Kodachrome. Designed by Kodak to be processed only in a lab, the film produced not negatives, but 35-millimeter color photographs on film that one could place in protective cardboard mounts and view over a light table, with the aid of a slide viewer, or projected onto a wall or screen. 66 This combination of color and projection technology formed two of Kodachrome's selling points, and nowhere did they receive a grander debut than at the 1939

New York World's Fair. While Bauer was organizing the housing exhibits for the same event, Eastman Kodak was building its now legendary Hall of Color (alternately called the "Great Hall of Color") as home to the company's Cavalcade of Color—a showcase of Kodachrome technology and a sales pitch to Kodak's audiences of amateurs, hobbyists, and enthusiasts who did not make photographs for money, but for fun.<sup>67</sup> In its report on the different exhibition designs at the fair, the New York Museum of Science and Industry described the projection of 17-by-22-foot images from tiny Kodachrome slides attached to ring gears that rotated them before the twin lenses of eleven custom-made projectors. The result was "a changing panorama of colored pictures" of subjects common in amateur photography—people, pets, flowers—projected on a 187-foot-long, semicircular screen. The exhibit "played to the emotions of the audiences," the New York Museum of Science and Industry reported of the rotating slideshows of images of everyday life, in color.68

The Second World War provided new opportunities for applications of Kodachrome. One photography manual issued by the United States Navy included chapters on Kodachrome as well as Kodacolor Aero Reversal Film—a Kodak film designed for taking color photographs from airplanes.<sup>69</sup> The Navy manual extolled these color photographic technologies as triumphs in the "successful reproduction of Nature's glow"—as "magic," and "ultra-modern" but above all suited to "practical use." The term "glow" may have alluded to Kodachrome's reliance on projection technology while "magic" may have invited a comparison of this technology to older forms of the popular magic lantern show. Still, the terms "ultra-modern" and "practical" quickly diffused any associations with the past, fantasy, and entertainment. Among the "practical" merits of color photography's realism was its applicability to the "study" of war's reality.<sup>71</sup> From discerning types of terrain in color aerial photographs to differentiating between this terrain and camouflage, the correct exposure and interpretation of color photography was a critical skill of modern warfare. 72 As the same manual also attested, color photography's war work further extended to matters of both education and promotion. "[C]olor enhances realism and attractiveness in training and publicity pictures," the manual explained, alluding to applications off the battlefield that were nonetheless pertinent to proper preparation for it.73 Kodachrome's reliance on a combination of color and projection technology, in other words, promised a modern, educational, and attractive form of display.

Although printed at the end of the war, these wartime claims reveal a breadth of Kodachrome's applications which fit well to the aspirations Bauer outlined for the Museum of Modern Art's Wartime Housing show. If the museum's role was to promote good war housing, in Bauer's view, then Kodachrome's



**68**] Arthur Rothstein, Row shelters, FSA ... labor camp, Robstown, Tex., January 1942, color slide, Farm Security Administration — Office of War Information color slides and transparencies collection, Prints & Photographs Division, Library of Congress, LC-DIG-fsac-1a34256.

realism and attractiveness could not only "sell" the colorful wartime housing to the Museum's visitors, but also allow for a technical study of the facades of colorful housing such as William Wurster's units at Carquinez Heights while providing the Museum of Modern Art with a visually pleasing, modern exhibit.

In March of 1942, Catherine Bauer may well have been the first person to suggest to the Museum that it display Kodachrome to promote public housing for workers in the United States' factories and shipyards. This support of showing public housing by using color slides followed closely on initial work in Kodachrome by the photographers of the Farm Security Administration's Historical Section under the leadership of Roy Stryker. As Sally Stein's archival research of the FSA's foray into Kodachrome shows, starting in the spring of 1941, Stryker's shooting scripts included requests from his photographers for shots of FSA housing for migrant workers on color transparencies.<sup>74</sup> Stein positions these color slides as a "compromise" between regional offices' demands for Kodak's popular 16-millimeter color motion film (introduced to the market in 1935) and the FSA's previous experience in black and white still photography, but also situates them within a rise in the popularity of color slides among clubs, businesses, schools, as well as such government agencies as the National Youth Administration.<sup>75</sup> As Stein further notes, many of the color film strips that the FSA produced are now lost.<sup>76</sup> Still, extant Kodachrome transparencies show that Stryker's call for color slides of FSA housing was in fact heeded.<sup>77</sup> In addition to Kodachrome views of Japanese internment buildings and housing projects in Puerto Rico, the digitized items in the FSA collection of the Library of Congress include a small group of Kodachrome slides shot by Arthur Rothstein in January 1942 of the migrant farm-worker housing units at Robstown, Texas (fig. 68).78 Western region FSA architect Vernon DeMars, moreover,



69 Unidentified photographer(s), "Yuba City," undated, 35 mm slides, in box 17, folder VI.18 "FSA (slides)," Vernon DeMars Collection (2005-13), Environmental Design Archives, University of California, Berkeley.

retained a collection of unattributed and undated Kodachrome slides showing FSA housing projects at Yuba City, California (fig. 69).<sup>79</sup> Housed in a plastic page together with a slide showing a black and white aerial view of the project, another 35-millimeter color slide on a blank mount, and a pair of slides that could be almost identical were it not for the different markings on the slide mounts and the fact that one shows slightly more contrast, DeMars's collection offers a comparison to Bauer's own in the variety of technologies and techniques it exhibits and in the subjects where the holdings overlap. Indeed, DeMars later recalled making a copy of one of Catherine Bauer's Kodachrome slides of a particularly poor example of a development in Texas that consisted of "3,000 units of public housing, brick, lined up like barracks." He had never seen the project with his own eyes, he recalled, but thanks to Bauer's Kodachrome he was able to assess the architect's error in the placement of the front doors.80

Hundreds of Kodachrome slides in Catherine Bauer's and William Wurster's files attest to an interest in this projectable color photographic technology that was intense and lasting. Slides of the Los Angeles public housing projects of Channel Heights and Rancho San Pedro were likely taken by Bauer on one of her visits to the projects operated by the Housing Authority (figs. 70, 71). As in the case of such slides as "FSA Ceres, Mills trip '42," or "Aliso-LA, 1950," dates inscribed in Bauer's handwriting on the slides' paper mounts indicate when the shots were taken, not when the depicted housing was built (figs. 72, 59, 60). Other slides indicate that Bauer's Kodachrome collecting extended beyond her housing work. She divided a slide index into a section for listing "Personal" Kodachrome slides and a section for listing slides that showed "Buildings, Country, etc."81 Some of the slides blur this divide: in addition to snapshots of the Wursters' friends in the fields of housing and architecture, one transparency labelled in Bauer's hand "FSA early years (+C.B.), V de M" shows Bauer with a camera hanging from a strap around her neck as she walks through the brush outside the trailers and tents of another Farm Security Administration project designed by Vernon DeMars (fig. 73). Filed on the same page of the shot of Bauer with her camera in the field are several other Kodachrome slides of FSA projects, including one labelled "FSA camp, Calif., Sun. A.M. Barber-Shop" and another, "FSA Camp, Calif. '40, Sun. A.M.—shooting crap" (figs. 74, 75).

Catherine Bauer understood from experience the advantages and disadvantages of different photographic technologies. On a 1939 research trip to the USSR, portability was of particular consequence. 82 Bauer wrote to an American colleague.

"I was consistently irritated by not being allowed to photograph anything. It really is a little disturbing to ask a milizi in sign language if it's okay to snap a perfectly harmless new apartment house, and have him scream hysterically and shoo you away, threatening to take your camera away. The net result was that I took a fiendish pleasure in standing on the roof of the Embassy, taking pictures of a Youth Day parade, the Kremlin, Red Square, and the Moscow Hotel (each individually forbidden) all at once, having Morrison develop them, and taking them out of the country around my waist."83

Her photographs of the parade and local landmarks, as she explained, were contraband. Only through their concealment was she able to bring them back to the United States.

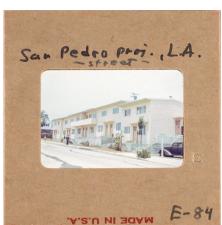
For a housing researcher who travelled and understood these challenges of field photography, Kodachrome offered several advantages. It required that the

photographer have at her disposal only a 35-millimeter roll film camera—one of the most affordable cameras in the United States in the 1940s.84 The film itself was smaller and easier to use than glass plate negatives, just as the processed transparencies were small and, unlike glass lantern slides, held up relatively well in transit. The drawbacks of Kodachrome for the field researcher came when it was time to produce the transparencies. In short, only Kodak could process Kodachrome by using a technology so complex that even the Navy's photography manual did not fully explain it.85 Clients brought their exposed film rolls to a Kodak processing station, Kodak processed the rolls, then clients received their color transparencies along with small cardboard mounts for preparing two-by-two-inch slides (a service processing stations sometimes performed for the client, as well). 86 For a field researcher like Bauer, this meant being at the mercy of Kodak's geographic reach, but also being freed from the drudgery of the darkroom. This freedom came with a price of about fifteen cents per transparency and sixty cents per print, according to one account from 1948, but it also saved busy professionals like Bauer valuable time.87 "[T]o make transparencies the amateur need to know only how to focus his camera and how to measure exposures," one manual advised, hinting at the ease with which Kodachrome offered a viewable product for practitioners uninitiated in the processes of developing and printing.88

After the war, Catherine Bauer wrote briefly about her preference for Kodachrome to the Danish architect Hans Erling Langkilde. She showed Kodachrome slides in her lectures, she explained, plus she personally found using Kodachrome film simpler and more befitting her housing work than making black and white photographs. 89 Bauer's attestation to the ease of Kodachrome aligned with Kodak's marketing message for their film. Kodak sold each roll of Kodachrome with a table of exposure data designed to help photographers judge which stop to set under different conditions. Manuals directed at amateurs warned of the shortcomings of these tables, as they neither took all combinations of conditions into account nor guaranteed that a photographer would get visually compelling results.90 Still, Bauer managed to avoid these hazards, as she later attested, with ease.

Bauer extended her application of Kodachrome to her work in the classroom when she returned from the USSR in the fall of 1939 to find an invitation to teach at the University of California, Berkeley. She looked upon this invitation as a chance to prepare a revised second edition of her book, Modern Housing, while also lecturing and taking students to perform "field-work" in the neighboring cities of Oakland and San Francisco.<sup>91</sup> Following her first semesters at Berkeley, an additional opportunity to lead students in field work opened up for

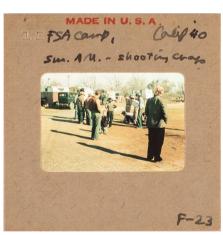












- 70] Unidentified photographer, likely Catherine Bauer, "Channel Hts. LA, entrances, 2-story unit, E-87," undated, 35 mm slide, in box 10, folder I.74 "Travel Slides: U.S. 'tract housing and sprawl,' 1946–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.
- 71] Unidentified photographer, likely Catherine Bauer, "San Pedro proj., L.A. street , E-84," undated, 35 mm slide, in box 10, folder I.74 "Travel Slides: U.S. 'tract housing and sprawl,' 1946–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.
- 72] Unidentified photographer, likely Catherine Bauer, "FSA –Ceres, Mills trip '42, A-60," 1942, 35 mm slide, in box 10, folder I.72 "Travel studies: U.S. 'low-rent housing,' 1949–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.
- 73] Unidentified photographer, "FSA early camp (+C.B.), V de M," undated, 35 mm slide, in box 10, folder I.72 "Travel studies: U.S. 'low-rent housing,' 1949–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.
- 74] Unidentified photographer, likely Catherine Bauer, "FSA camp, Calif., Sun. A.M. barber-shop, F-23," undated, 35 mm slide, in box 10, folder I.72 "Travel studies: U.S. 'low-rent housing,' 1949–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.
- 75] Unidentified photographer, likely Catherine Bauer, "FSA Camp, Calif. '40, Sun. A.M. shooting crap, F-23," 1940, 35 mm slide, in box 10, folder I.72 "Travel studies: U.S. 'low-rent housing,' 1949–56," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.

Bauer at Mills College, a women's school in Oakland. The "Mills Trip" Kodachrome in her slide collection shows housing at Ceres that Bauer visited with her summer session students at Mills in 1942 (fig. 72). 92 In a rigorous five weeks from the end of June to the beginning of August, Bauer taught a course on "Housing in War and Peace." An outline of the course in her files indicates that six of the course meetings on subjects ranging from "European housing between the wars" to "the local housing authority" to "wartime housing" were accompanied by slides.<sup>93</sup> Taken at the end of the course, Bauer quite possibly intended the Kodachrome slide of Ceres for future research and classroom use. 94 She certainly was encouraged. In a personal letter following the completion of the summer session, Alfred Neumeyer, the professor of art at Mills College who invited Bauer to teach there and visited her class meetings, himself, wrote approvingly, "There was variety and clarity in your presentation and a sound exchange of visual facts and of theoretical analysis."95

The ease with which these color slides could be created and shown formed part of Kodachrome's value proposition for educators. The viewing method most commonly used in the classroom or lecture hall involved the projection of the slide "on a screen, like a movie," wrote one contemporary color photography author, alluding to the technology's entertainment value. 96 With this scaling of the photograph, Olivier Lugon reminds us, more people could partake simultaneously and directly in the viewing experience.<sup>97</sup>

The second selling point for Kodachrome was nearly always that "color has been shown to have greater effectiveness in teaching than black-and-white pictures," according to another contemporary author on audio-visual education. 98 However, not all educators shared this experience. In a 1943 issue of its magazine, the College Art Association published a pair of articles debating the pros and cons of color slides in teaching art history. In his argument in favor of color slides, an art historian from Bowdoin College in Maine pointed to the importance that students not only hear lecturers describe the colors of paintings, but also have the opportunity to see them as they hear this description in order for the "lecture system" to work at all. 99 Acknowledging that "[t]here is [...] no such thing as a truthful lantern slide," he added that "the decision should favor the slide which distorts the least." In teaching the history of painting, color slides, and especially well-made slides such as those available through the Carnegie Corporation's Color Slides Company, surpassed black and white slides, the professor argued.<sup>100</sup> In short, the reasons to adopt color slides outweighed the reasons to continue to show art in black and white. Presenting the rebuttal was an art historian from Harvard University. If all slides presented "abstractions" of paintings, he surmised, then it would be best to pick the obvious abstraction of a black and white slide rather than confuse students, or worse, offer empty entertainment. "Such slides," he wrote of color transparencies, "might help to keep a class awake but would not be of help in giving any idea about color in paint."101

This concern with the deceptiveness of color transparencies extended beyond the field of art history to general discussions of visual education, as well. For many lecturers outside of art history, however, Kodachrome technology presented far too many positive attributes to continue lecturing with slides in only black and white. 102 An example from the natural sciences illustrated the possibilities that Kodachrome presented in all aspects of lecturing, from preparation to the facilitation of the lesson in the classroom. In a 1946 article, one college instructor described his preference for Kodachrome in teaching the identification of local plants. Color transparencies are more "lifelike," the biology teacher explained. He could make the slides himself with Kodachrome film bought at the local biology supply and take photographs in a way that gave him control over the content and emphasis of his own visual teaching aids: "Before I take a picture I decide exactly what I want to show—details of flowers or fruits, floral or leaf arrangement, the plant as a whole, or the relation of the plant to its surroundings—and then compose the picture to bring out my idea adequately," he wrote.<sup>103</sup> In composing his Kodachrome slide to highlight these different visual characteristics of plants, he could in turn focus classroom activities on a memorization of these identifying traits. "My procedure in teaching spring flora," he explained,

"is to flash a picture of a plant on the screen and ask for its identification. If the student is able to give the common name, I verify it and ask the students to write the name in their notebooks. Then I point out one or more of its characteristics. These are written in the notebooks also. The teacher should point out the characteristics rather than elicit them from the students. Students frequently give characteristics which are really not diagnostic and tend to confuse the whole group. Mentioning characteristics tends to bring about closer observation and writing them down fixes them in the minds of the students. After all the pictures have been shown I change the order of the pictures and show them again."104

The biology lecturer's method was much akin to paper flashcards. Talk through a deck of slides. Pause. Take notes. Shuffle. Then repeat.

Research on the history of audio-visual education corroborates these claims to the freedoms of the slide lecture, especially in contrast to motion pictures.

As Olivier Lugon writes, the "stillness, reflexive pauses, and concentration" afforded by slideshows gave them pedagogical value that was more difficult to emulate in film.<sup>105</sup> And as Christel Taillibert observes in her study of the use of still and moving images in American, French, and Italian education in the 1930s, not only "habit," but the prices of motion picture film kept many earlier classrooms focused on slides. 106 Even as motion picture technologies became more widely available, the slideshow maintained a strong presence in the classroom well through the 1960s—a testament to its conduciveness to lesson formats, cost-effectiveness, and deep-seated integration into personal teaching practices. 107

Although directed primarily at developing a rote knowledge, the botany instructor's procedures for preparing and conducting Kodachrome-centered lessons reveal how Catherine Bauer might have applied the color transparency technology in her own lectures for college students and for the many audiences of housing professionals and civic groups she spoke to during the war and immediate postwar years. By using Kodachrome, Bauer quickly had at hand transparencies that focused on the details that made housing architecture exemplary and illustrative of the quality she advised the Museum of Modern Art to promote. These specifics of subject matter and composition as well as photographic images in general mattered to Bauer on a political level. As historians Daniel T. Rodgers and Gail Radford each note, it was Bauer's political acumen that set her work apart from that of her fellow regional planners in the 1930s. 108 Bauer brought this political perspective on housing into the classroom in courses with such titles as "The Housing Movement" and "Problems of Housing Policy."109 But in order to maintain the voter demand that started the housing movement, Bauer knew, like Wurster, that housing also had to look like a place people would want to live. In 1942, Bauer asked at one gathering of housers in San Francisco whether the latest housing was too "dull" in appearance to make the movement truly popular. 110 The hypothesis inherent in her question suggested that appealing designs factored into winning popular support for housing policy. No lecture or classroom instruction on housing, then, was complete without slides that visually underscored good housing's exemplary attributes.

One of the Kodachrome slides that Bauer made on the Mills trip to the Farm Security Administration's housing projects at Ceres during the summer after the Museum of Modern Art's show reveals modern housing's small but significant formal details. Bauer, or perhaps even a student, composed the shot to capture the Mills students in summer garb in an array of light colors as they walk up a driveway to one of Ceres's rowhouses in the distance (fig. 72). Clearly visible, the windows in the shadows of the building's second floor are propped open—not on hinges swinging to the side, but upward to let air into the upper story from below. This visibility defied the common criticism that Kodachrome did not show "details in the shadows."111 Closer on the right, another building casts a long shadow across a bright green lawn to counterbalance the bright group of students on the left. Finally, in the foreground a row of low shrubs borders the green lawn with small red and white flowers, likewise providing a framing edge for the composition.

To viewers seeking to learn the ABCs of FSA architecture, such images of the housing set in its landscape were important to understanding what made this FSA project exemplary. At Ceres, the FSA architects adopted a window design similar to that developed for the housing in Yuba City, a California town north of Ceres in Sutter County. Bauer had visited the Yuba City project two years earlier and remarked on the practicality of the houses' "high windows with a panel below which can be pushed out on hinges for easy ventilation."112 Comprised of only a few parts and easy to operate, the Yuba City windows were a simple solution to regulating the temperature inside the house. In looking back on his FSA work, this was exactly how the Yuba City architect Vernon DeMars defined his job: "Just solving this most basic, immediate problem." 113 DeMars commented specifically on the struggle among the FSA architects to develop inexpensive architectural features that kept housing ventilated and cool. This was especially challenging in Arizona and New Mexico, according to his account, but also arguably in California. In another FSA housing project designed by DeMars together with Burton Cairns in Chandler, Arizona, the architects oriented the building so that the windowed facade faced away from the northwest sun in the late afternoon.114 Plywood and celloglass "flaps," as DeMars termed them, allowed occupants to regulate airflow to upper stories by propping open sections of these lightweight exterior "windows" and "walls."115 Bauer's Kodachrome of Ceres, with the sun hitting the building's "blank" wall and the window "flaps" propped open in the shade, illustrated this FSA concept developed in the earlier project at Chandler for the audiences of her subsequent lectures.116

While Bauer's Kodachrome masterfully captures this detail despite the challenge, its technology is truly harnessed in its rendering of the modest but colorful garden in the foreground. Landscaping, as the FSA architects later attested, was crucial to fulfilling the functions of housing for migrant farm workers. Although the trees shown planted in the lawn in Bauer's Kodachrome of Ceres were still saplings, the architects intended this landscaping to (eventually) provide necessary shade from the heat of California's agricultural regions,

as FSA landscape architect Garrett Eckbo later explained to historian Greg Hise. 117 For DeMars, trees were a simple gesture towards people who had until then been treated as "peons." Recalling a visit to a rural housing community built by California's Associated Farmers, DeMars remarked that although the Associated Farmers could afford proper planting, "[...] there was not one tree, blade of grass, or anything. It was absolutely barren. It depressed anyone who came in who had to stay there."118 Trees, like the decent housing they cooled, were as assertion of the humanity of the migrant farm workers for whom they were planted, making these trees in turn a crucial technical aspect of modern housing as a product of the New Deal and the progressivism that shaped it.<sup>119</sup>

Returning to the example of William Wurster's colorful war worker housing at Carquinez Heights, one sees that Kodachrome brought more than color to a historical visual understanding of the architect's design. The Kodachrome slides of Wurster's housing at Carquinez, labelled in Bauer's handwriting and most likely made by her as part of her involvement in the project, draw attention to the structures in the foreground in ways that the black and white photograph by Roger Sturtevant published with Wurster's article in California Arts and Architecture does not. Quickly apparent from one Kodachrome in the Bauer and Wurster collection is that it was taken when construction on this section of units was still underway (fig. 76). The unit in the foreground appears finished, but a pile of timber in the dirt as well as two foundations behind the foremost unit hint that more building remains to be done. Close cropping in the Kodachrome cuts out part of the steps leading up to the entirely cropped-out door of the nearest unit, whereas Sturtevant's black and white photograph captures two sets of steps and doors in the row of housing facing the camera in addition to those of a row receding more directly down the hill on the right (fig. 64). Taken closer to morning, the Kodachrome renders the facade of the unit in shadow, whereas Sturtevant's photograph, composed closer to sunset, captures the facades in full light that also rakes across the uneven texture of the cliffs across the bay. Still, other details appear in the Kodachrome that Sturtevant's photograph does not fully capture. The hills in the background appear covered in a mix of grayblue rock, brown grass, and dark green shrubs. The different angle exposes the buildings and docks along the shoreline below. The fresh construction in the foreground boasts unfinished wood panels in yellows, browns, and reds. In another Kodachrome of the Carquinez housing, this bare wood harmonizes with the blues and browns of painted doors standing closed in the partial shade provided by the units' flat roofs (fig. 77).

As these examples of photographs and comments surrounding early 1940s housing show, color was an essential element in the design of an attractive and





76] Unidentified photographer, likely Catherine Bauer, "So. Vallejo — Carquinez, '41, Wurster. View to Bay, A-1," 1941, 35 mm slide, in box 10, folder I.75 "Travel Slides: U.S. 'war housing,' 1942—55," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.

77] Unidentified photographer, likely Catherine Bauer, "Vallejo, Carquinez Hts. — Vallejo, F.L., E-8," undated, 35 mm slide, in box 10, folder I.75 "Travel Slides: U.S. 'war housing,' 1942—55," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.

modern regional housing development. While it would be erroneous to conclude that West Coast housing was exceptionally colorful and therefore should be shown in color, as will be made clear in the section below, it is worth considering how Kodachrome captured chromatic information with a technology that allowed scientists, researchers, and educators to create these slides themselves in a practical and controlled way conducive to the didactic functions of college housing courses and, quite possibly, those of the Museum of Modern Art. What one encounters with Bauer's Kodachrome slides therefore is not necessarily a practice that privileged Kodachrome's color-rendering capabilities, but one which begs an understanding of these capabilities as part of a broader, political effort to teach and learn modern housing design.

# KODACHROME MAKES GOOD NEIGHBORS

Taking a longer view of West Coast housing's history, it is difficult to argue that Catherine Bauer recognized Kodachrome's ability to render color in architecture as an opportunity to underscore an ideological or formal distinction of West Coast projects. Still surrounded by California's agricultural land, but with a landscaped "community recreation space" for fifty-one families, homes in the FSA settlements like Ceres, as historian Greg Hise indicates, were at their roots garden homes akin to (and in the case of DeMars's designs directly based on) the housing and planning projects of East Coast-based garden city proponents Clarence Stein and Henry Wright. Bauer's Kodachrome of Ceres, with its row of flowers framing the lawn, likewise bears formal echoes of the German garden city ideas that she sought to describe for the readers of *Modern Housing* in 1934.

Looking beyond the similarities in settlement layouts and landscaping, Bauer's work with Kodachrome helped make a transnational tradition of specifically color in housing design available for viewing and study by new audiences. By 1942, Bauer was aware of the meaning of color in modern housing overseas. In the prize-winning essay for Fortune magazine that kick-started her career in 1931, Bauer was sure to mention color in her argument for the "art in industry" as she saw it in the economic designs for housing and municipal buildings in the new neighborhoods around Frankfurt, Germany. She described Praunheim:

"From Frankfort proper, a view of dazzling whiteness and the satisfactory geometry of clean lines, well-defined, largely conceived forms, and simple surfaces occasionally curved to conform to the topography. The Praunheim streets, well-balanced harmony of red and blue concrete planes, broken only by windows and doors and occasional mass variations to meet different plan requirements. No monotony of standardization here. Far from it."121

Elsewhere in the article, Bauer described a method of making color stucco for the houses' exteriors similar to that later adopted in the construction of public housing in Los Angeles. Regarding interior color, Bauer singled-out Mart Stam's designs for a home for the elderly as an excellent example with its color linoleum floors, plaster, and doors. 122 All these applications of color, Bauer implied, were economical, structurally functional, aesthetically pleasing, and evidence of the "Americanization" she argued was inherent in recent German city planning.123

Bauer attested in her 1931 article that she did not aim for "bodily acceptance of the current German idiom in modern architecture" by her American readers.<sup>124</sup> But in showing how color might fit into this idiom and arguing for the Americanness of this idiom's efficiency and economy, she posed color as also cultural and political. Bauer was doubtlessly aware of one of the most famous examples of the political ramifications of color in modern housing: the color facades of housing units in German architect Bruno Taut's garden cities first at Falkenberg (1913-1914) and Reform (1912-1915), then in Zehlendorf (1926-1932). 125 Taut's use of color was at first derided by general audiences, then singled-out as an object of the Nazi-era criticism that eventually caused the architect to flee to Turkey.<sup>126</sup> Against this political backdrop, color in the modern housing movement took on new and complex connotations. Nowhere were these more manifest than in Catherine Bauer's work with Kodachrome following the Second World War.

#### KODACHROME IN POSTWAR HOUSING RESEARCH

Bauer's interest in Kodachrome as a means of collecting and researching modern housing increased after the war. She brought Kodachrome with her on her trip to the International Federation for Housing and Town Planning congress in Hastings in the fall of 1946 so that she could make slides to use in her lectures. 127 On this trip, Bauer took photographs with Kodak's Kodachrome film in Paris, London, Copenhagen, and Amsterdam. She continued to add to her color slide file of modern European housing after she returned to the United States. As Bauer explained in a subsequent letter to the architect Hans Erling Langkilde, bad weather and a faulty camera on her trip to Copenhagen resulted in Kodachrome slides that "were not good enough" for her lectures. 128 She sent his office a list of ten requested shots along with some Kodachrome film and the promise of payment. Her only justification for her preference for Kodachrome was that she showed Kodachrome slides in her lectures and, as mentioned, that she personally found using Kodachrome easier than making photographs in black and white (despite the evidence that bad luck could befall her, after all). 129 When Langkilde's office sent Bauer her requested shots a few months later, she wrote a letter thanking them for filling the hole in her slide collection to the benefit of audiences in the United States: "All I can say is that this work, which is almost unknown in the USA, is I think the most fresh and interesting housing design done recently anywhere, and I shall do my best to show it to people."130

Bauer's letter to Langkilde was one among several she sent in the spring and summer of 1947 to solicit photographs for use in her housing work in the United States. The reason for this copious correspondence was that the Kodachrome film that Bauer found easy to use in some areas of her work posed challenges in others. She wrote to Arthur King, planner for the London County Council, to say that she was writing an article for the magazine Survey Graphic and faced a small technical problem: "I have some good Kodachromes of new construction in London but alas, they are not transformable into equally good black and white photos for reproduction."131 Bauer specifically asked King for "an overall view of an area under reconstruction; (preferably the Poplar area...of which I have excellent Kodachromes...of which I'd be delighted to send you copies or color prints in exchange if you'd like them)."132 She explained a similar problem in a letter sent that same day to the architect Kay Fisker in Copenhagen. Bauer needed a photograph of a certain set of row houses, "including if possible a view inside the little 'patio'? It just happens to illustrate perfectly a point I must make in an article I'm just starting on," she wrote. 133

For helping her obtain photographs to replace her Kodachrome slides, Bauer sent her correspondents packets of printed pamphlets and books on housing in the United States. She offered to send such a packet to Fisker's office.<sup>134</sup> Quite probably as an attempt to counteract the "inadequate presentation" of the United States' housing at the 1946 International Federation for Housing and Town Planning congress in Hastings, Bauer furthermore offered to send US materials to anyone at the London County Council who might be interested in them. 135 She forwarded "a miscellaneous assortment of American material on housing and town planning" to Dr. Langkilde. 136 She also sent the Danish architect a copy of her sister Elizabeth Mock's book, If You Want to Build a House. 137 Forming the foundation of the Museum of Modern Art's circulating shows of the past year, the book "includes pictures of many recent modern homes in America," Bauer wrote.138

With her long lists of contacts in both Europe and the United States, Catherine Bauer's orchestration of a postwar transatlantic exchange of Kodachrome, black and white prints, and housing publications positioned her to promote a picture of US housing work abroad that was defined by select publications and institutions. By sending Mock's If You Want to Build a House together with copies of Mock's Built in USA to her contacts, Bauer doubtlessly raised interest in the Museum of Modern Art's wartime and postwar exhibitions in the Department of Architecture. 139 Yet, despite her praise for many of these publications sent in exchange for shots on Kodachrome film or replacement black and white prints, Bauer sent many of these materials along with her criticism of recent housing work in the United States. She wrote to the Dutch architect Cornelis van Eesteren to say that she sent US materials to the City Planning Office in Amsterdam, "so you will be seeing it, for whatever it may be worth. Very little of it is really distinguished, as we are in a bad period politically as you in Europe know all too well."<sup>140</sup> Just a few days earlier, Bauer had written to the Dutch politician Jan Bommer in Amsterdam to send him a Kodachrome print, but also to briefly share her concern regarding the "political crises on housing in Washington" and a recent "reactionary wave." 141

Spirited and hopeful as Bauer's postwar exchange of photographs sounded, her practices responded to the same pressures faced by the National Association of Housing Officials in their production of annual reports and exhibitions. On a local level, housing authorities such as the Housing Authority of the City of Los Angeles and others greatly impacted by the war struggled with creating a peacetime housing program amidst a persistent housing shortage and an environment of rampant racism and red-baiting. 142 In Washington, housers and legislators were caught in what would be a four year struggle to turn the Taft-Ellender-

Wagner Bill into the Housing Act of 1949—a "logiam" that "would finally break with Harry Truman's successful 1948 presidential campaign," according to historian Don Parson.<sup>143</sup> The logjam was symptomatic of a larger "reactionary wave." As Parson points out, none other than the Republican Senator from Wisconsin, Joseph McCarthy, introduced a "parallel housing bill" that omitted public housing completely.144

As historian Daniel T. Rodgers's research further illustrates, Bauer's continued positive regard for European housing programs went against a changing tide of US progressives' attitude toward their European counterparts. Starting in 1942 with reactions to Britain's first postwar plan for a welfare state, progressives writing in US journals began adopting "a new tone of critical superiority" toward progressive policy across the Atlantic. 145 The war left the United States with the strongest economy in the world, as Rodgers writes, and Britain's postwar plan for a welfare state "smelled too much of limits and poverty" for adaptation and adoption in a country aiming above all for economic growth. 146 The United States' schemes to "Americanize" Europe through the Marshall Plan's sale of manufactured goods reflected these attitudes and economic aspirations.<sup>147</sup> Despite persistent international exchange among experts, Rodgers observes, European examples did not figure prominently in the footnotes of lasting postwar policies in the United States. 148

Although Bauer's comparative, critical methods for the study and promotion of modern housing in the United States were ultimately overwhelmed by US attitudes of exceptionalism following the war, it is worth investigating how she hoped for color slides to help make them work. In the summer of 1947, Bauer began planning "a little book on some of the issues which are more and more universally recognized, whether in Warsaw or Chicago," as she wrote to Cornelis van Eesteren. 149 She likewise told John Entenza about a book she was writing "on some of the issues that seem to be increasingly recognized all over the world" and noted that she might send Arts and Architecture a related article. 150

Bauer never wrote the book she planned, but still gave numerous lectures on housing issues at home and abroad in the spring of 1948, complete with color slides. The first was a guest presentation at the New School in New York for Charles Abrams's class on "Housing and Planning Abroad," where Bauer accidentally left "a color slide of a sketch for a town center for 'Ongar,' a hypothetical New Town suggested in the Greater London Plan," in the classroom's projector (fig. 78).<sup>151</sup> Bauer wrote to the New School to say that she needed the slide returned so that she could show it in her upcoming lectures at Cornell University.<sup>152</sup> These presentations at Cornell were a milestone in Bauer's postwar career. Part of the Messenger lecture series, they formed a chapter in an over twenty-year history of intellectual exchange between the university and a host of historians, humanists, philosophers, and scientists. 153 In a first draft, Bauer gave her series of three lectures the title "Housing Progress and Democracy." 154 She later revised this title to "Key Issues in Housing and Community Planning," but the manuscripts in her files show that this question of modern housing's function for all modern democracies, not just the United States, indeed remained key.155

Bauer opened the first of the lectures on May 17, 1948, with the thesis that the housing crisis in the United States was "actually part of [a, N.K.O.] worldwide situation"—a situation which many democratic nations in Western Europe were facing with methods developed out of a "valuable history" of housing policy based in the Enlightenment idea of housing as a basic human right. 156 Bauer did not mention color in housing in her script, although she mentioned the dangers of "dull and unlovely" houses and the need in the United States for "some quality of the creative imagination" similar to that of the post–Second World War "Garden City movement" in England. 157 She followed twenty-seven typed pages in this first lecture with nearly four pages of notes for slides. Bauer wrote to Cornell several times in advance of the talks, asking "to make sure that the slide projector has a 750-watt bulb in it," for anything less powerful would not be enough for showing slides in color. 158 The slides she listed in her notes correspond not to Kodachrome slides, but glass slides, several of which are still extant in her collection at the University of California, Berkeley. Among these glass slides were ones showing the council housing of Becontree in England, Kay Fisker's row-houses in Denmark, and Farm Security Administration housing in California. Bauer's notes regarded the FSA housing as an "effort to set modern standards for farm labor homes" and one that was "still pretty lonely." 159 Finally, towards the end of this list of slides Bauer included the war housing at Vallejo. A cross archival reading of this list with Bauer's glass slide collection suggests that of all these slides noted, at least the Becontree slide was possibly one from her collection that showed the development in color (fig. 79).

Why did Bauer request photographs made using Kodachrome from her European colleagues for exhibiting in the Messenger lectures, only in the end to show glass lantern slides? Her collections show that she made both slide formats work for her, again, with the relative ease she required of her professional photographic practice. Although Bauer's writings and the current state of her Kodachrome collection suggest that she began using Kodachrome as part of her housing work in the early 1940s, she had been collecting photographs since she wrote Modern Housing in the early 1930s. Many of these photographs by 1940 offered historical examples of the housing movement's most celebrated achieve-

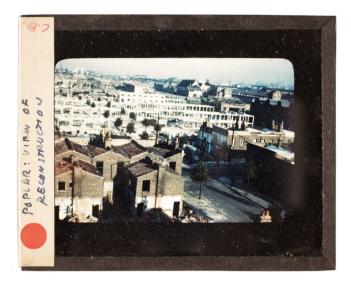


**78**] Unidentified photographer, "Ongar: Sat[ellite]. Town-view," undated lantern slide, 3.25 in. × 4 in. (8.26 cm × 10.16 cm), in box 13, William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley. The name of the architect Peter Shepheard appears in the photographed illustration.



79] Unidentified photographer, "Becontree: Cul-de-sac," undated, lantern slide, 3.25 in. × 4 in. (8.26 cm × 10.16 cm), in box "9 of 21," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.

ments in building. As Bauer's outlines for her courses and the typescript for the first of her lectures for the Messenger series at Cornell show, Bauer regularly spoke about housing as both a current concern and a historical problem. In maintaining a personal file consisting of both Kodachrome transparencies and standard 3 ¼ × 4-inch glass slides, Bauer did not see any obstacles or contradictions. The example of one standard-sized glass lantern slide showing the Poplar area of East London—the same area that Bauer wrote to Arthur King about, extending an offer to send him her "excellent kodachromes"—hints that she likely used one technique for reconciling the two technologies. Not a 35-millimeter Kodachrome, but a glass slide in color, the transparency shows the white frames of the new development rising up as a promising outline of better homes amidst the brown-gray brick of the surrounding buildings that survived



**80** Catherine Bauer, "Poplar: View of Reconstruction," undated, lantern slide, 3.25 in. × 4 in. (8.26 cm × 10.16 cm), in box 12, William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.



**81]** Unidentified photographer, "New Haven Housing Authority pre-war," undated, lantern slide, 3.25 in. × 4 in. (8.26 cm × 10.16 cm), in box "9 of 21," William and Catherine Bauer Wurster Papers, Environmental Design Archives, University of California, Berkeley.

the war (fig. 80). Clues such as the image's rounded corners and dimensions suggest that the maker of the lantern slide possibly created it by enlarging a Kodachrome. Such an enlargement, although not as quick as placing a Kodachrome in a larger slide mount, would not have resulted in any loss of resolution in the projected image and would have allowed Bauer to project her Kodachrome slides in the same machine as her glass slides. 161

As the correspondence on these postwar lectures further suggests, color slides in general stood at the center of Bauer's transnational approach to housing reform. Far from promoting a colorful picture of West Coast war housing, slides such as those of Ongar, Becontree, and a prewar project built by the Housing Authority of New Haven, Connecticut (fig. 81), reveal that color mattered to Bauer in presenting housing examples that were both real and hypothetical,

from abroad and from across the United States. Not all of these housing examples were tried and true, nor were they all examples to which US plans should aspire: Becontree upon its completion in 1934 was the largest of Britain's council housing projects, but by 1947 also the subject of criticism for its failure to solve the problems of the slums. 162 Still, Bauer gave a place to these slides in her collection from which she composed visual accompaniment to the lectures which, against the postwar tide, brought housing ideas from abroad into critical dialogue with the United States' postwar housing problems.

## KODACHROME IN INTERNATIONAL CULTURAL RELATIONS

In choosing to use color slides, Catherine Bauer elected to use a popular medium. After the war, educators in the United States increasingly championed the use of audio-visual teaching materials and Kodachrome, in particular, as especially egalitarian. For educators inexperienced with audio-visual media, handbooks explained their proper handling, projection, and storage. 163 Kodachrome required little technological transition for teachers already using glass lantern slides, for they could use adapters to show Kodachrome in the same projectors. 164 For educators looking to build slide libraries, opportunities abounded. If schools did not make their own slides, companies such as the Society for Visual Education in Chicago sold Kodachrome slides "covering many courses, ranging from social studies and national parks to sciences such as entomology, zoology, embryology, botany, and geology."165 Educators looking for enrichment of their curriculum or guidance could also turn to established institutions participating in audio-visual education, including the Los Angeles County Museum of History, Science and Art in Exposition Park and the Museum of Modern Art in New York. 166 Finally, slideshow making allowed students to take the lesson, so to speak, into their own hands. Although various agencies continued to advertise pre-made slides for classroom use, proponents of visual education upheld teaching students how to research images, outline a presentation, and prepare their own slides.<sup>167</sup> In allowing students to take command of lessons, Kodachrome doubtlessly appealed to postwar US educators looking to distance their classrooms from older models involving authoritarian teachers and limited opportunities for student leadership.

Like the advocates for the New Pedagogy in Germany in the 1920s, educators in the United States saw in slides and other audio-visual classroom technologies a means of making students more connected citizens of the world. In his introduction to Anna Curtis Chandler and Irene F. Cypher's 1948 publication, Audio-Visual Techniques for Enrichment of the Curriculum, member of the American

Psychological Association Paul R. Radosavljevich claimed that the methods presented in the book "point the way to the best possible means of education for World Citizenship."168 For Radosavljevich and his like-minded contemporaries, achieving world citizenship required educating students on topics that were foreign to them. Businesses that sold slides were quick to cater to this demand with claims to "the wide variety of material from all over the world that they [the slides, N.K.O.] bring to the classroom."169 On another level, however, creating world citizens also fulfilled a national postwar aspiration: "This book should be in the hands not only of good teachers in all grades from kindergarten to university," Radosavljevich wrote, "but also should be consulted by all others who are interested in helping to develop a modern, ideal and useful American culture and civilization."170

The notion of a "modern, ideal and useful American culture and civilization" smacked of Marshall Plan politics and postwar paternalism. But the authors of Audio-Visual Techniques for Enrichment of the Curriculum appeared to have had another program in mind. In a section of the book titled "Aids in War and Peace," Chandler and Cypher discussed the recent development in audio-visual techniques in the wartime training of the United States' armed forces.<sup>171</sup> These techniques, they argued, could be carried over into the peacetime classroom, replacing the ubiquitous "'Americana Series,' fostering Americanism alone" with "'The World of Today Series,' furthering world unity."172 "Like a magic carpet," the authors explained,

"audio-visual aids can take our boys and girls to remote corners of the earth—or bring the world to the classroom. They can make possible a visit to the very homes of our near and far neighbors, and cover more ground in a shorter period of time than can be traversed by any other kind of transportation, even our swiftest airplanes. The better our boys and girls, for whose happiness in the world of tomorrow hosts of soldiers have fought and died, understand the people of other countries, their culture and ideals, the more likely it is that they will be able to live together in peace."173

The education of future citizens was not only crucial to creating Radosavljevich's "modern, ideal and useful American culture," but a promising step towards the prevention of additional wars.

The conviction that audio-visual learning fostered world citizenship found its most elaborate articulation in the Office of Inter-American Affairs' support for Kodak's color transparencies. Established in August 1940, the Office of Inter-American Affairs (called the Office of the Coordinator of Inter-American Affairs

from 1941 to 1945) operated only until May of 1946, but still long enough, as several scholars show, to have brought new attention to fostering inter-American air travel, radio communication, and exchange in the arts. 174 These efforts were all part of the United States' "Good Neighbor Policy" with the nations of the Western Hemisphere—a policy that ostensibly strove to maintain peaceful relations among these nations (especially during the Second World War) while serving the United States' interests in economic and cultural trade. 175 Among the Office's arts initiatives was the Inter-American Office at the National Gallery of Art that it set up with a Department of State grant in 1944 to continue the Office of the Coordinator of Inter-American Affairs' "art exchange program." Kodachrome slides formed the foundation of this program as well as the Inter-American Office's efforts to promote general education on Latin American cultures. Following a 1944 "survey of the existing sources in Latin America of color reproductions, slides, and books pertaining to art in the United States," the Inter-American Office identified institutions to which it could send boxes of labelled Kodachrome slides showing both American paintings and European paintings in US museums "[a]s indication of our cultural appreciation and the tradition from which our contemporary art has developed," the Office declared. 176 Kodachrome at the Inter-American Office thus acted largely as a US export and as a symbol of the United States' cosmopolitanism that highlighted the nation's ties to Europe by providing institutions abroad with a glimpse into the United States' collections of international art.

In confining this collection to slides of paintings in US museums, the Inter-American Office overlooked some of the most important and more recent projects in the arts in the United States such as the murals of the 1930s or the journal Camera Work, which served as a truly international (and not simply transatlantic) hub for creative photography.<sup>177</sup> Yet, the presence in the United States of the arts of the countries that the Office grouped under the term "Latin America" nonetheless formed the foundation of a second part of this initiative, this time for the benefit of US viewers. Together with the American Council on Education, the Office of Inter-American Affairs made available a selection of "Kodachrome Slides of Latin America" as copies or for loan from such distributors as the Pan American Union, the Philadelphia Museum of Art, and regional Councils on Inter-American Affairs in Denver and Los Angeles. 178 Not collected directly from foreign cultural institutions, the file instead contained a number of Kodachrome slides supplied by Pan American World Airways, TACA Airways, the Chicago Museum of Natural History, and the Museum of Modern Art. 179 With such thematic sequences as "Popular Arts in Mexico," "Bolivian Highland Costumes," and a set of forty-four slides called "Brazil Builds," the collection

promised to bring the arts and design of these countries into the classrooms of the United States in color.180

The titles of some of these slide sequences would have sounded familiar to visitors to the Museum of Modern Art. Brazil Builds was also the title of an exhibition that opened at the Museum in January 1943 to showcase the research that trustee Philip Goodwin and photographer G.E. Kidder Smith conducted on their trip to Brazil the previous summer. As the press release for the show attested, "The Office of the Coordinator of Inter-American Affairs assisted the project in every way possible."181 The forty-four slides available through the Office, thus, were probably contributed by the Museum from the forty-eight color slides presented at the entrance to the exhibition in New York as a "continuous screen projection."182 The Museum worked closely with the Inter-American Office during the war period, especially in the circulation of the Museum's multiple exhibits abroad. In one of its first major collaborative efforts with the Museum, the Office translated Look at Your Neighborhood (1944) into Spanish and Portuguese. The Office furthermore sent copies to contact institutions in Lima and São Paulo "to answer their respective demands for practical information on large and small-scale community planning."183

In his study of the history of the Museum of Modern Art's travelling exhibitions, Olivier Lugon notes how Look at Your Neighborhood was one of the first "multiple exhibitions" developed by the head of the Department of Circulating Exhibitions, Elodie Courter. 184 Like the other multiple exhibitions from the years 1943 to 1945, Look at Your Neighborhood was printed in photogravure on panels (figs. 31, 32). 185 Subsequent exhibits, however, indicate that the department's multiple exhibitions became increasingly technically involved. The circulating exhibit designed for Elizabeth Mock's If You Want to Build a House (1946) came with "nineteen colored panels" as well as "thirty-two kodachrome slides ( $2 \times 2$  inches), showing various houses illustrated in the exhibition." <sup>186</sup> Certainly a reference to the photogravure prints on the panels, but quite possibly a reference to the Kodachrome slides, as well, the Museum promoted the exhibit in words that reverberated with the vocabulary of the garden city movement and Catherine Bauer: "The photographs which make up the exhibition were chosen to indicate the endless variety of form possible in modern architecture," the Museum's description of the exhibit read, "as well as to illustrate the particular points under discussion."187

## COSMOPOLITAN ASPIRATIONS IN COLOR

Research on the Museum of Modern Art's 1942 Wartime Housing exhibition leaves open the question of whether Noyes took Bauer's advice and showed West Coast housing in color. 188 The press release for the exhibition promised "movie shorts, blown up photographs and architectural models," but did not mention specifically color photographs or slideshows.<sup>189</sup> Among the projects featured in these media, the Museum included William Wurster's housing units for war workers at Carquinez Heights, but none of the multi-color stucco projects operated by the Housing Authority of the City of Los Angeles appear to have made the cut.190

Looking beyond the Wartime Housing exhibition uncovers a complex history of color in housing and photographic slides. Color in modern housing long formed one of the ideals that sprang from the transatlantic garden city movement, but a new reason to show this housing in color, and specifically Kodachrome, emerged in this postwar environment that promoted international understanding through visual education. By 1947, when the Museum of Modern Art published the description of Elizabeth Mock's multiple exhibition, If You Want to Build a House, Kodachrome was established as a didactic tool wrapped in the cosmopolitan aspirations of postwar educators and government employees. Bauer's transatlantic trade in Kodachrome and preference for lecturing with color slides aligned with these broader pedagogical practices that aspired "to a better intercultural understanding." 191 As historian Daniel T. Rodgers argues, Bauer still wanted to learn something from Europe's progressive policies—to hold them in critical comparison with the United States' own so that US policy could be improved. 192 As part of this endeavor, Bauer made her own slides in color—a choice she saw as appropriate for representing West Coast architecture, but also for representing housing in London and Copenhagen in 1946. She traded these slides with her colleagues across the Atlantic for black and white photographs for print publication. According to her lecture notes, she showed examples of modern housing projects near and far, in color, to crowds of students, municipal officials, and members of the community. What began as a suggestion to the Museum to show West Coast housing in color, then, became a personal Kodachrome collection of the latest European and US housing in shots snapped by housers and architects as technical illustrations for a project which, especially following the war, needed to appear as American and democratic as possible in order to win popular support.<sup>193</sup> At a time when modern housing in the United States already seemed to Bauer to be mired in old ways, color in Bauer's slides not only distinguished these homes from historical

European precedents as "American" and current (in a case study further supporting Kim Beil's argument), but also as teachable models for a better future for public housing design.

Catherine Bauer's writings and slides along with architect Vernon DeMars's oral history help situate color slides in relation to a housing effort that was at once educational and commercial, technically informative and emotionally appealing, local and transnational. Bauer's color slides were both small portable objects of personal study and objects that with a projector could be scaled for public display to quickly and easily convert her research into an educational exhibition for her audiences at Mills College and Cornell University. The display of Bauer's Kodachrome slides and color glass slides, in short, functioned to bring private research before an educated public in a visual language that was commercially popular and evocative of Good Neighbor rhetoric.

In its pursuit of this close reading of Bauer's work, this chapter leaves open the question of why the photographers directly employed by the Housing Authority of the City of Los Angeles did not leave similar Kodachrome collections to posterity. Aside from a few undated color slides of the "Temple area" in Leonard Nadel's collection of photographs for the later Community Redevelopment Agency projects, little in the scattered collection of the Housing Authority of the City of Los Angeles suggests that its photographers worked in Kodachrome to complete assignments.<sup>194</sup> Was Kodachrome simply too expensive to print?<sup>195</sup> Or might the Housing Authority's photographers have viewed Kodachrome's commercialism and amateurism as an inappropriate fit in their respective approaches to photographing low-income neighborhoods and modern public housing? Indeed, might such photographers as Lou Stoumen, who applied to receive the Guggenheim Foundation's prestigious fellowship in 1948, have avoided Kodachrome because it was not yet elevated to the status of art?<sup>196</sup> Not just the presence of Bauer's Kodachrome slides, but the almost complete absence of color slides from the remainder of the Housing Authority's scattered collection frames the Authority's photographic work in a broad set of questions. As future scholarship looks closer at photography's technical, aesthetic, and cultural histories, further investigation into public housing in color prior to the digital turn promises a better understanding of an effort that was at once research-based and creative, a public good but also one that needed to advertise and "sell" itself in images directed at potential consumers.

Finally, further investigation into Kodachrome in housing history promises to provide a much-needed background for later showings of Kodachrome slides not of architecture or art, but as art. As historian of color photography Nathalie Boulouch observes, many commercial photographers looking to break into the

museum and art market shied away from Kodachrome's small format and relinquishment of darkroom processes until the 1960s, when artists such as Robert Smithson and Dan Graham began viewing Kodachrome's accessibility with interest and introduced slideshows into their exhibitions. Audiences first saw the photographs of New Jersey suburbs from Dan Graham's now famous Homes for America conceptual art piece (published in the December 1966–January 1967 issue of Arts Magazine) as projected color slides at the Finch College Museum of Art in New York in 1966, Boulouch notes. "Using slides as a simple and economical technology," she weighs,

"Graham was trying to make art with minimal means. The modular coloured forms of tract housing were reinforced by the saturation of Kodachrome slide film. By using projected transparencies, he explained, he was trying to get close to the luminescence of the neon of Dan Flavin and the minimal colored forms produced by Donald Judd [...]. The sequential display of the slideshow was the best way to emphasize the serial logic in the organization of the suburban houses he registered in his snapshots."197

Here, Boulouch's analysis of Graham's use of the readily available and popular medium of the color slide poses it as fit for depicting the minimalism of not necessarily public housing, but the 1960s suburban landscape. As Boulouch, citing Graham, also observes, Kodachrome in both its color and seriality further spoke the language of contemporary minimal and conceptual art made with electric lights. In other words, Kodachrome in Homes for America became art's metaphorical low-income housing unit—its "minimal house," to quote the architect of the Farm Security Administration's migrant farmworker housing in California and Arizona, Vernon DeMars. 198

But Dan Graham's "minimal house" of Kodachrome was not home to the picture of modern housing that Catherine Bauer envisioned. As Graham's work published in Arts Magazine in its December 1966-January 1967 issue made clear, the ubiquitous monotony of America's postwar suburbs was owed to the profit-grabbing building practices that first manifested themselves in the construction of housing for World War II defense workers in Los Angeles. 199 This was bad housing twenty years later—housing which Graham, as art historian Gwen Allen explains, presented with a "deadpan" appropriate to these homes with their dearth of emotional appeal.<sup>200</sup> Whereas Kodachrome practices like Bauer's promised to easily capture and display the colorful variety of public wartime housing to further the housing movement at a critical moment in the immediate postwar years, in the mid-1960s, Graham's showing of Kodachrome

slides in an art museum turned a critical eye on the postwar era's private developments and made them the stuff of a new conceptual art.<sup>201</sup>

Many changes in housing policy, the arts, and creative approaches to photography happened in between these two moments that helped photographs of housing into the museum as art. The next chapter turns now to the work of two Los Angeles-based photographers to explain how photographing for the housing movement in the immediate postwar years fit broader notions about photography as art and the role it played in a divided world.