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ELISABETH COIT:
PIONEER IN ARCHITECTURE

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# ELISABETH COIT:
# PIONEER IN ARCHITECTURE

By

Nancy Jane Olive

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## ABSTRACT

### ELISABETH COIT: PIONEER IN ARCHITECTURE

By

Nancy Jane Olive

Elisabeth Coit, an American twentieth-century architect and specialist in low-income housing, was born in Winchester, Massachusetts, in 1892, and died in 1987. She was educated at Radcliffe College and the Massachusetts Institute of Technology. Coit attained prominence in the early Forties with the publication of her study, "Notes on the Design and Construction of the Dwelling Unit for the Low-Income Family." The report was characteristic of her lifelong endeavor to lessen the gap between architect and client/tenant in an effort to make structures more user-oriented. As one of the few practicing women architects in her time, Elisabeth Coit was a pioneer in architecture. This thesis discusses the pragmatic approach with which she negotiated and refashioned her position as an architect, writer and planner over a period of sixty years in a male-dominated profession.

To Charlotte Millis

## ACKNOWLEDGMENTS

Special assistance from the staffs of the Michigan State University Library in East Lansing, Michigan, The American Institute of Architects Archive in Washington, D. C., and The Schlesinger Library at Radcliffe College in Cambridge, Massachusetts, is greatly appreciated.

I would also like to thank a number of individuals for their valuable assistance: Mr. Reginald Bender, Deputy Director of Design and Capital Improvement from the New York City Housing Authority, for providing me with a copy of "Memo to Architects;" Robert Coit Hawley, nephew of Elisabeth Coit, for his enthusiastic response to my inquiry about his aunt, and for his willingness to share her family history with me; Jacqueline Duby, a long-time friend of Elisabeth Coit, for her gracious hospitality and tour of houses designed by Coit in the 1930's in the Yorktown, New York, area; and Dr. Webster Smith and Mr. James Adley, professors in the Department of Art at Michigan State and members of my committee, for their thoughtful suggestions.

The encouragement, patience and support of two individuals must be singled out, for, without them, this thesis may not have made it to its completion. Dr. Linda Stanford, Associate Chairperson of the Department of Art and chairperson of my committee, whose course "Women in Art" served as the impetus for this thesis, gave me many hours of her time and guidance. And, William Kramer, my spouse, was there when I needed him.

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## INTRODUCTION

Elisabeth Coit, an American twentieth-century architect, (1892-1987), is not mentioned in any of the standard textbooks on the history of architecture such as Modern Architecture Since 1900 by William J. R. Curtis or A Concise History of American Architecture by Leland M. Roth. Presumably neither author would credit her with any ground-breaking or radically new design, nor would they determine her to be a genius. She was not instrumental in the conception of any architectural movement. In fact, a formal style in her work is not even an issue in this paper. Her major achievements were not about architectural style, making the likelihood of her being mentioned in a standard textbook even more remote. Furthermore, she was not prolific in her design of buildings, as famous architects such as Frank Lloyd Wright and Le Corbusier, and she could not be credited, like Julia Morgan, with a long list of commissions.

Elisabeth Coit's main contributions generally took a less tangible form than that of actually built structures. These contributions are to be found scattered among professional journals, popular magazines and government reports. The 1930's saw her in private practice with a number of commissions to her credit, the majority of them for houses whose clients were other women. Gradually, she became involved in public housing, and this involvement developed into a lengthy career as an expert in that field. Her lifetime efforts sought to lessen the gap between the architect and client, in an effort to make structure more usable, and form more subservient to function. She wanted the client to be a participant in the design and construction of any structure in which he/she would have to spend considerable time. This interest in the client

as well as her position as a woman architect in a male-dominated profession led her into a housing career, which eventually focused more specifically on public housing.

Within the past twenty years, Elisabeth Coit has been included more and more often in published work, most often written by other women, as a pioneer in her field. Unfortunately, no one has given her more coverage than a paragraph or two, with the exception of Women in American Architecture: A Historic and Contemporary Perspective, edited by Susana Torre and published in 1977. In it, an article written by Mary Otis Stevens pays tribute to Elisabeth Coit as one of the pioneering women in the field of architecture. It was this segment by Stevens that drew my attention to Elisabeth Coit. Her interest in low-income housing was unique in her time. Her philosophy that good design should be accessible to everyone, regardless of income level, was especially noteworthy. Finally, the pragmatic approach with which she negotiated and refashioned her position of some sixty years in a male-dominated profession could only give one cause for reflection.

The difficulties in researching this topic were many. Had Frank Lloyd Wright been the focus, a source such as the Art Index or a main card catalogue in a library would have revealed countless entries. Since Coit's building projects were few and her written work is scattered over a wide range of published and unpublished material, the above sources were virtually worthless. A more in-depth search into the life and work of Frank Lloyd Wright would probably reveal certain locations in the United States that would carry a vast array of organized material, thus saving a considerable amount of time for the researcher. No such situation is present in Coit's case.

One might think that books written about women in the arts would include Elisabeth Coit, yet those studies tend more often to cover visual artists, especially painters, than architects. Perhaps women architects are not mentioned because of the vast pool of women from which an author must choose, or, maybe, because an architect's work tends to be scattered across the countryside, rather than stored in a studio or on display in a warm, well-lighted museum. Moreover, the manner in which a professional works is a factor which affects his or her visibility to an author, scholar or the public. Individual artists tend to work alone, whereas women architects often function as members of a team. Coit was no exception. Whether employed by an architectural firm or within the government structure, her work was often anonymous because of her status as a team member. It is, then, only through other incidental sources that one discovers how involved in her profession she really was.

The search for material on Elisabeth Coit began in the usual manner: scanning the library's main card catalogue, paging through the volumes of the Art Index, the New York Times Index, and other standard architectural reference books, and finding those entries that were listed either in the stacks or through interlibrary loan services. Once found, some of the journal articles provided their own bibliographies, leading to other sources. Elisabeth Coit's own articles were especially helpful in that regard.

Next came a search through the Boston area telephone directory to find possible relatives, followed by letters to them. Other letters were written to various architectural organizations. One response led me to an Elisabeth Coit file at The American Institute of Architects Archive, in Washington, D. C. Further leads directed me to the New York City Public Library, in

search of a manual which represented much of the documented work Coit did at the New York City Housing Authority in the Fifties. The document was listed in the library's catalogue, but was missing in actuality. A telephone call and letter to the New York City Housing Authority's Design and Redevelopment Department followed. The letter eventually found its way into the hands of an official, who found an entire box of copies of the document by accident, in a storage room. He graciously mailed a copy to me.

The highlight of the search came with the discovery of a nephew and a long-time friend of Coit. The nephew, Robert Coit Hawley, gave me a family history by telephone, and then directed me to the Schlesinger Library at Radcliffe College, in Boston, where he had recently donated Coit's papers. The long-time friend, Jacqueline Duby, of Yorktown, New York, herself an architect, gave me a tour of existing houses Coit had designed back in the Thirties, and, like Robert Coit Hawley, she provided me with an idea of what Elisabeth Coit was like as a person.

It is my belief that the importance of this study lies in its ability to fill one of many gaps in the literature of women architects. It is hoped that the reader will gain some insights into the life of an American, twentieth-century architect, and into the reality of being in a minority position within a professional field.

## CHAPTER 1. Woman's Position as Architect in the Early Twentieth Century

Most architects would agree that creating a monument has more appeal than designing a common dwelling, that serving an upper-class clientele is more lucrative and therefore more desirable than providing for the needs of the lower class, and that being principal designer of a project is more advantageous than participating as a member of a team. To add to the incentives, architectural historians will most often document the monument before the common dwelling, because the former is more impressive and is likely to be more historically significant. From the researcher's point of view, the principal designer has a definite advantage over the team member in the documentation of any work. Besides, a team member is likely to play multiple roles, and thus defies categorization.

Historically, women architects have tended, more than their male counterparts, to take on the task of designing the common dwelling, of serving the needs of the lower-class, and of accepting roles as team members. In 1941, Henry Frost, then Director of the Cambridge School, which offered an architecture program for women, observed:

> . . .she (the woman architect) thinks clearly, reasons well, and is interested in housing rather than houses; in community centers for the masses rather than in neighborhood clubs for the elect; in regional planning more than in estate planning; in social aspects of her profession more than in private commissions.[1]

His statement is accurate, as far as it goes. What he fails to mention is that the woman architect's interests are often not freely chosen, but rather, are her only options.

An April 11, 1937, New York Times article again testifies to this interest in housing. Entitled "Women Architects Few But Versatile," it begins:

> For the last two decades the sight of a woman climbing the scaffolding of a half-completed house has been no novelty, yet a survey of New York's women architects discloses that small homes rather than skyscrapers are still their specialty. The number of women who have chosen this combination of art, science and business as their profession is limited, but their work has been profuse, and the suburban landscape is dotted with homes that first took form under their sketching pencils.[2]

The article then describes the work of four women architects, including Elisabeth Coit, who is introduced as, "Another woman engaged in the business of getting families into homes suitable to their kind of living. . ."[3]

Underlying reasons that place women in this stereotypical role as experts in the design of houses are many. Elisabeth Coit herself saw that it was very difficult for a woman to find her way even into this limited specialty, because there was a lack of trust. Thus, she is quoted in a 1935 New York Sun article:

> Woman's biggest hurdle in architecture. . .is getting people to trust her. Because she's a woman they have a feeling that she can't build a house that will stand up under a summer breeze. And the only way to get around that is to show them that you know your stuff.[4]

The author of this article also interjected his or her own comments. He, or she, apparently found the entire notion of women in the field of architecture quite amusing:

> "You can't really climb a ladder, can you?" people ask her when she tells them that she is an architect. "And heavens, what in the world do you do about the workmen? Surely, you don't try to boss the contractor."

> Of course Miss Coit has been climbing ladders, in her paint-smeared riding breeches with her T-square in her pocket, ever since she graduated from the Massachusetts Institute of Technology as a full-fledged architect. And before that she was pretty darned good at climbing trees. And as for bossing the contractor she just tells him what she wants and he does it.[5]

In the face of such a condescending attitude, it must indeed have been difficult for a woman to find any job as an architect. With "a woman's place is in the home" being the prevalent attitude, any woman wanting a professional career in architecture might find her way only into its domestic aspect, the only conceivably "natural" place for her within the profession. "A spattering of 'women's fields,' " Gwendolyn Wright has observed, "namely domestic architecture and especially interiors, evolved as areas of specialization where it was permissible for women to practice, since here they were dealing with other women's needs."[6]

In her essay entitled, "On the Fringe of the Profession: Women in American Architecture," Wright sees women architects as having positioned themselves into one of four categories in order to stay alive in their profession. The first required ". . .total dedication to become the 'exceptional woman'. . . more dedicated, more determined, more prolific, giving themselves over totally to their work and professional roles."[7] Most women, however, fell into the second category, which Wright calls anonymous designers. They fit into the conventional office set-up, tolerated discrimination and accepted less recognition in order to be able to do their work. The third, labelled by Wright as "adjuncts" to the profession, include those whose interests focused on social aspects of architecture. As planners, programmers, critics, writers,

and journalists, she identifies these women as those who have been best known and most accepted. The fourth category takes us altogether outside the profession to those who challenged the status quo and became "reformers," ". . .dedicated to creating alternatives, either by advocating legislation reform or by building new kinds of domestic institutions. . ." These women wanted to expand the available options for other women, and architectural innovation was one of their means for doing so.[8]

Elisabeth Coit, architect, planner, critic, writer, traveller, exemplifies all four categories. She was extremely dedicated to her work, especially that which pertained to low-income housing. Her professional life was long and productive. She tended to ignore discrimination and was given less recognition for her work than she was due, although she was often singled out because she was a woman. Her many roles were often those of an adjunct, and certainly, in her own manner, she acted as a reformer. For example, in the introduction to her Langley Scholarship report of 1937-1939, for The American Institute of Architects (AIA), Coit discusses low-income housing from the tenant's viewpoint, and criticizes the lower-income dwelling as one that does not meet the needs of the tenant, because it is too similar to an "abbreviated edition of the large scale home."[9]

> The "American" way tends, further, for all but the most careful observer, to be the standard of the more articulate part of yesterday's people: namely, the well-to-do and the upper part of the middle class, whose solutions to their shelter problem have long been recorded in books and journals--solutions already on their way to obsolescence as the record was being made; . whereas housing as it concerns us aims at building for today's workers and would-be workers and their families' homes serviceable today and half a century hence.[10]

At the time of Elisabeth Coit's birth in 1892, in Winchester, Massachusetts, architecture had been recognized in the United States as an important profession for only forty years, beginning with the establishment of The American Institute of Architects (AIA) in 1851. Professional standards were defined and the responsibilities of the architectural practice were differentiated from other professions related to building. Women in the architectural profession were few. Julia Morgan was then only two years away from becoming the first woman to complete an engineering degree at the University of California at Berkeley, the first step to a long and productive career as an architect.

Closer to home, Marion Mahoney was a student at the Massachusetts Institute of Technology, and Sophia Hayden, after having graduated as the first woman to complete the four-year course in architecture at the Massachusetts Institute of Technology in 1890, was close to completing her commission as architect for the Woman's Building at the World's Columbian Exposition, in Chicago. In fact, Hayden attended the informal dedication of the Woman's Building only one month after Coit was born.

By 1910 more than fifty women in the United States were trained architects, even though half the existing architecture departments in the United States still denied admittance to women. In contrast, by 1900, eighty percent of the colleges, universities and professional schools in the country admitted women. Most college-trained women became elementary school teachers, and most professional schools admitted only a small number of women.[11]

At the time of Coit's graduation from MIT in 1919 with a Bachelor of Science degree in architecture, Marion Mahoney had already completed

fifteen years in the office of Frank Lloyd Wright, had married Walter Burley Griffin, also an architect, and had faded out of the profession; Julia Morgan had established her own firm in California, and was designing the estate of San Simeon for Phoebe Hearst; and Sophia Hayden, suffering a nervous breakdown after the completion of the Woman's Building, had married an artist, William Bennett, and had long since stopped practicing.

When Coit entered the work force in 1919, women were on the verge of winning their right to vote. In 1920, women comprised twenty percent of the labor force, a number that had been rising steadily from sixteen percent since 1870 to over fifty percent by the 1980's. Needless to say, Coit shared company with very few of the twenty percent in occupational status. Based on a 1910 census, of those women who were working, eighteen percent were farmworkers, thirty-seven percent domestic servants, thirty percent were employed in manufacturing, five percent in clerical occupations, and four percent in trade, mostly as salespeople. A small number were employed as telephone and telegraph operators. The remaining eight percent worked mostly in professions, such as teaching and nursing.[12] Coit, however, did share one statistic with that original twenty percent: she never married. The number of single women in the United States dropped from 34.1 percent in 1890 to 24.2 percent by 1940.[13] A 1920 estimate would fall somewhere in the high twenties. Most of the female labor force in 1920 was comprised of single women. For a woman, marriage was considered a full-time career, with no time available for outside interests. Of those professional women who kept their careers throughout their lives, very few married. The architecture profession offered no exceptions to this rule.

> In the nineteenth century work outside the home was unthinkable for the married woman. . .The tendency (not to marry) was most pronounced, as was to be expected, among highly educated women.[14]

> Jane Addams' autobiography of 1920 noted that seventy-five percent of the women professionals in her day were unmarried; even today, only an estimated half of women architects are married.[15]

> . . .The question of marriage was still an issue in 1928, as it had been in the nineteenth century. With only forty percent of women graduates from six representative architectural schools married, the traditional constraints on women still applied.[16]

Elisabeth Coit was not unaware of women's history, nor of discrimination against women. In fact, she made some effort to identify the realities of the situation in a forthright and practical way, as a stratagem for finding potential employers.

> While working in Atterbury's office (1920's),[17] she met other women who were looking for employment. A networker before her time, Coit would keep two lists of architectural firms for these women. The first one consisted of firms known not to hire women, and the second of those who might take one on occasionally. In this way she helped to break down the system which excluded women and created an "old boy" system for women.[18]

On the other hand, her love of the profession could apparently also blind her to hard realities, as evidenced in her 1936 illustrated **(Figure 1)** article for the Radcliffe Quarterly, entitled "Architecture as a Profession for Women:"

> That architecture as a profession has not been eagerly adopted by women is rather a puzzle to me. For from Semiramis at whose word sprang into being Babylon's towers and terraces, to the domestic type, deemed good architect-material because of her mastery of esoteric closet-and-kitchen problems, we are touched by architecture in ways innumerable.[19]

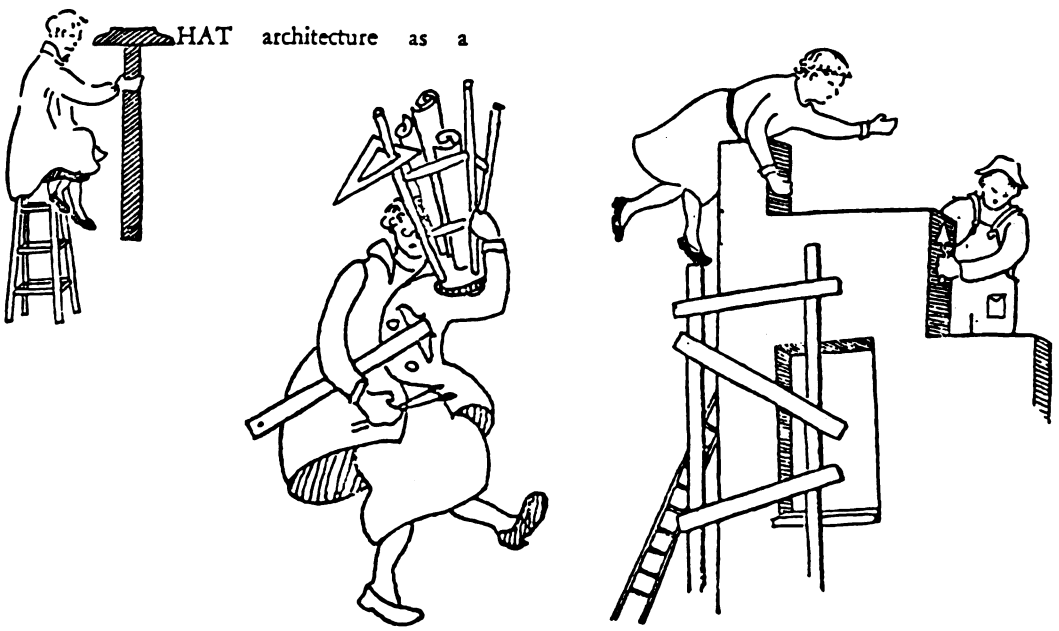



**Figure 1.** Elisabeth Coit, illustrations from "Architecture as a Profession for Women," 1936.

Perhaps her liberal upbringing had something to do with this comment. She continues by citing statistics, making it clear that she understood the minority position in which she worked: a dozen women architects are members of The American Institute of Architects, out of an approximate membership of three thousand; two members and an associate belong to the New York Chapter, out of approximately four hundred and fifty members; and but one woman is a member of the Architectural League. She casts some doubt on these statistics by suggesting that perhaps women are poor joiners, never considering whether women's chances of being accepted are as good as men's. She further discusses reports that indicate an average of one-half to one woman graduate in architecture per year, and that very few of these are actually

practicing. Again, she speculates as to the reason, offering the fact that architecture, even for men, is a fairly new profession, ". . .recognized as a good investment for great public, industrial and business buildings and also for larger homes," but used only fifteen percent of the time in smaller dwellings. Perhaps ". . .the unusual many-sidedness of the work inhibits some."[20]

> The profession demands a high degree of intelligence, wide knowledge, varied technical skills, great endurance, executive ability, a sense of humor, besides, of course, artistic sense: a versatility, in short, which few people think they can attain.[21]

An interesting side note comes to mind when considering another comment made in the article. The year after this article was published, Coit was awarded the AIA Langley Scholarship to pursue a study of low-income housing. Her keen awareness of the problems that existed within this sector of society's housing is already apparent:

> We still use Egyptian and Assyrian building units; we have discovered Roman concrete and can almost duplicate medieaval glassware. And these we put, along with the new glass and steel, and casein, and chromium, to the service of industry, business, luxury, ease, the modest home, and shelters for those for whom society has not yet quite solved the problem of "home."[22]

•

It was ". . .for those for whom society has not yet quite solved the problem of 'home'. . ." that Coit would devote much of her time and professional expertise in the following thirty years.

## Chapter 1. Endnotes

[1]Doris Cole, From Tipi to Skyscraper: A History of Women in Architecture (New York: G. Braziller, 1973), p. 97.

[2]Anne Peterson, "Women Architects Few But Versatile," New York Times, 11 April 1937, sec. 6, p. 6, col. 5.

[3]Ibid.

[4]Jean Lyon, "Women Architects Are Proving to Be Successful Home Builders," New York Sun, 19 November 1935, n. p.

[5]Ibid.

[6]Gwendolyn Wright, "On the Fringe of the Profession: Women in American Architecture," in The Architect: Chapters in the History of the Profession, ed. Spiro Kostof (New York: Oxford University Press, 1977), p. 280.

[7]Ibid., p. 284.

[8]Ibid.

[9]Elisabeth Coit, "Notes on Design and Construction of the Dwelling Unit for the Lower-Income Family - Part I," The Octagon (October 1941): 20.

[10]Ibid., p. 5.

[11]Lois W. Banner, Women in Modern America: A Brief History (New York: Harcourt, Brace, Jovanovich Publishing, 1984), p. 5.

[12]Ibid., p. 8.

[13]Jessie Bernard, The Female World (New York: The Free Press, a division of Macmillan Publishing Co., Inc., 1981), p. 154.

[14]Cole.

[15]Wright.

[16]Cole.

[17]For a background on Atterbury, see Chapter 3, pp. 41-42.

[18]Shirley Sherak to Jacqueline Duby, Yorktown Heights, New York, 10 April 1987, article on Elisabeth Coit by Shirley Sherak and Maxine Nachtigallia.

[19]Elisabeth Coit, "Architecture as a Profession for Women," Radcliffe Quarterly (May 1936): 17.

[20]Ibid.

[21]Ibid., p. 18.

[22]Ibid.

## Chapter 2. A Dichotomy in Setting: Architecture and Housing

Leland M. Roth, in his text, A Concise History of American Architecture, describes the period between 1915 and 1940 as one dominated by two divergent views of architecture: the traditional and the avant garde. In the realm of monumental architecture, the competition for the design of the Chicago Tribune Tower, in 1922, is a classic example of such divergence.

The two hundred and fifty-nine entries, coming from around the world, ranged from Medieval or Renaissance prototypes, as in the winning entry, a neo-Gothic design by Raymond Hood and John Mead Howells **(Figure 2)**, to an innovative entry by Walter Gropius **(Figure 3)**, described by William J. Curtis as incorporating ". . .devices which were just then emerging at the Bauhaus through the impact of van Doesburg, Moholy-Nagy, and Constructivism."[1] Other approaches that varied between the two included Raymond Hood's McGraw-Hill Building, New York, 1931; Howe and Lescaze's Philadelphia Savings Fund Society, 1929-32, which takes a more experimental International Style approach; the well-known Empire State Building by Shreve, Lamb and Harmon, 1929-31; and The Rockefeller Center by Reinhard and Hofmeister, in association with H. W. Corbett and R. Hood, 1927-34. The work of Albert Kahn is avant garde in his designs of modern factories and traditional in public housing; rarely did the two approaches intertwine **(Figures 4 and 5)**.

In the realm of non-monumental architecture, specifically that concerned with dwellings, efforts during World War I saw an unprecedented rise in housing constructions. By 1918, twenty percent of the number of houses in existence

**Figure 2.** Hood and Howells, Chicago Tribune Tower, 1922 (Arnason, History of Modern Art).

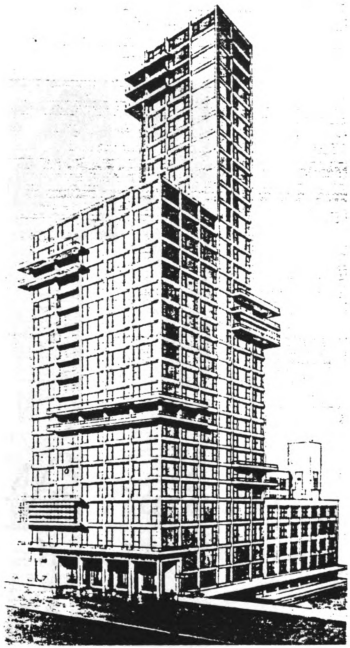


**Figure 3.** Walter Gropius, Design for the Chicago Tribune Tower, 1922 (Arnason, History of Modern Art).

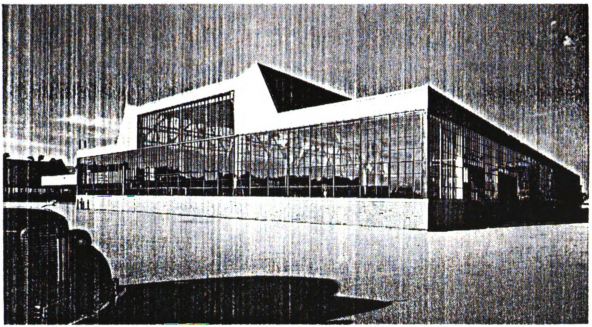


**Figure 4.** Albert Kahn, Half-Ton Truck Plant, Detroit, 1937 (Roth, A Concise History of Modern Architecture).

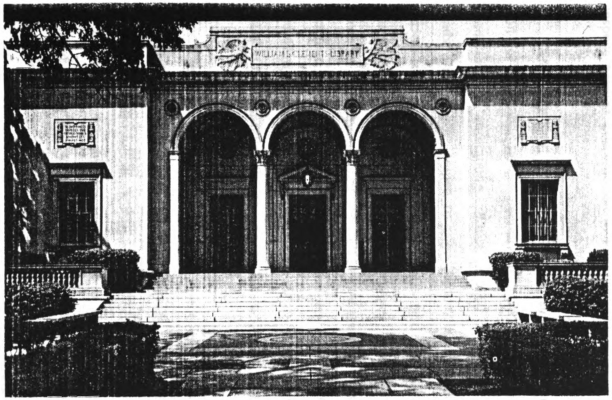


**Figure 5.** Albert Kahn, William L. Clements Library, University of Michigan, 1923 (Roth, A Concise History of Modern Architecture).

at that point were newly constructed, doubling the number of houses which had been built since 1800.[2] Much of this housing took the form of small towns and communities, based on the recommendations of Frederick L. Ackerman, who had been send by The American Institute of Architects to inspect housing construction in England.

After the war, in the 1920's, the suburb became the main focus of attention for home builders, especially because of the easy access to cities by railroads and the automobile. While in 1900 only 8,000 automobiles travelled the roads, the number jumped to over 20,000,000 by 1930, thanks to the mass marketing techniques and affordable prices made possible by Henry Ford. Architects involved in designing suburban houses varied in their styles as much as those in the Chicago Tribune Tower competition. Among their ranks can be included the firms of Goodwin, Bullard and Woolsey **(Figure 6)**, Mellor, Meigs and Howe **(Figure 7)**, and individuals as diverse as Albert Kahn **(Figure 8)**, Julia Morgan **(Figure 9)**, and Frank Lloyd Wright **(Figures 10** and **11)**.

The United States housing movement established its roots during the beginning decades of the twentieth century. The establishment of the Regional Planning Association of America (RPAA) in 1923 brought together a number of planners and architects interested in keeping alive the planning principles utilized during the war housing effort. Mary Susan Cole has described the intentions of the RPAA as:

> . . .an organization devoted to a new kind of human environment: the regional community, based on the interdependence of city and countryside and designed to achieve a just and harmonious balance between the two. The RPAA sought to restrict the free play of private enterprise in the interest of general welfare. It desired to replace speculative building and exploitation of resources with the planned growth of communities through government-sponsored programs.[4]

**Figure 6.** Goodwin, Bullard and Woolsey, Hallway of a House, Hartford, Connecticut, 1918-19 (Roth, A Concise History of Modern Architecture).

**Figure 7.** Mellor, Meigs and Howe, C. Heatley Dulles House, Villanova, Pennsylvania, 1916-17 (Roth, A Concise History of Modern Architecture).

**Figure 8.** Albert Kahn, Edsel Ford house, Grosse Pointe, Michigan, 1927 (Roth, A Concise History of Modern Architecture).

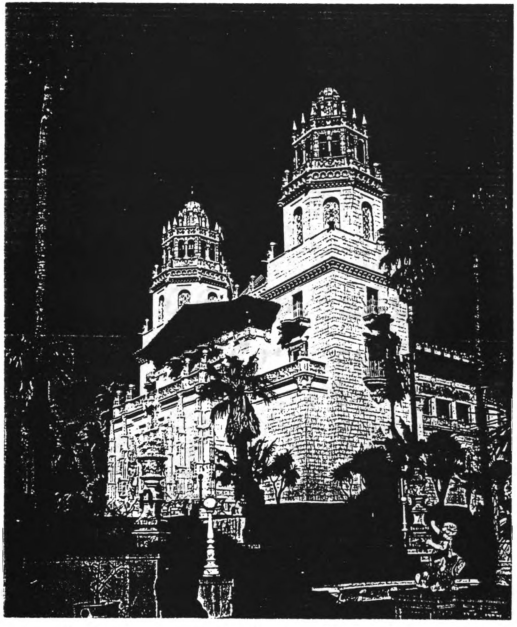


**Figure 9.** Julia Morgan, San Simeon, San Luis Obispo, California, 1920-37 (Women in American Architecture: A Historic and Contemporary Perspective).

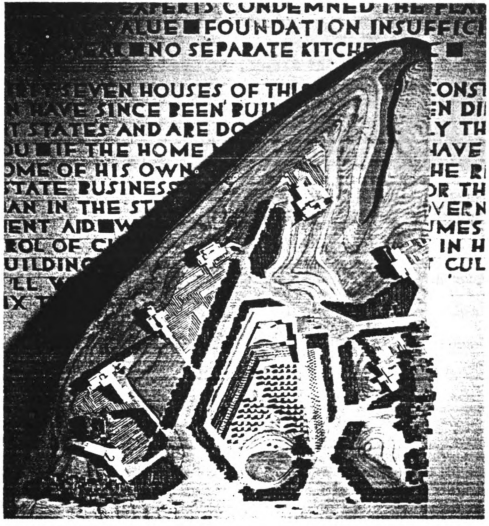



**Figure 10.** Frank Lloyd Wright, house group, model, Okemos, Michigan, 1939 (Roth, A Concise History of Modern Architecture).

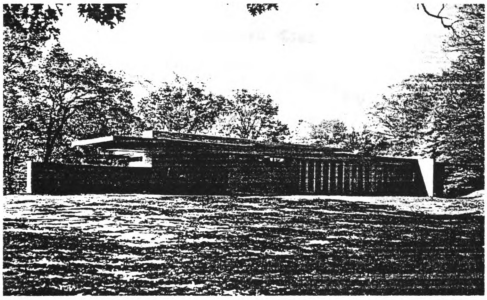


**Figure 11.** Frank Lloyd Wright, Goetsch-Winkler house, Okemos, Michigan, 1939 (Roth, A Concise History of Modern Architecture).

The English Garden City movement provided the RPAA with much of its philosophy and background. A leading British planner, Patrick Geddes, strongly influenced the English Garden City movement through his conviction that housing should be placed within the larger context of society's needs, which include not just shelter but also food, work, recreation and social life. Ebenezer Howard, in his Garden Cities of Tomorrow, wrote of ". . .a self-contained town protected by an agricultural belt that offered an alternative to congested areas and slums"[5] **(Figure 12).**

In 1928, Henry Wright and Clarence S. Stein, two RPAA members who were particularly active in promoting the Garden City concept in the United States, designed and built Radburn, New Jersey **(Figure 13),** a ". . .complete community planned from the beginning for the age of the automobile." Mary Susan Cole, drawing from Lewis Mumford, describes it as such:

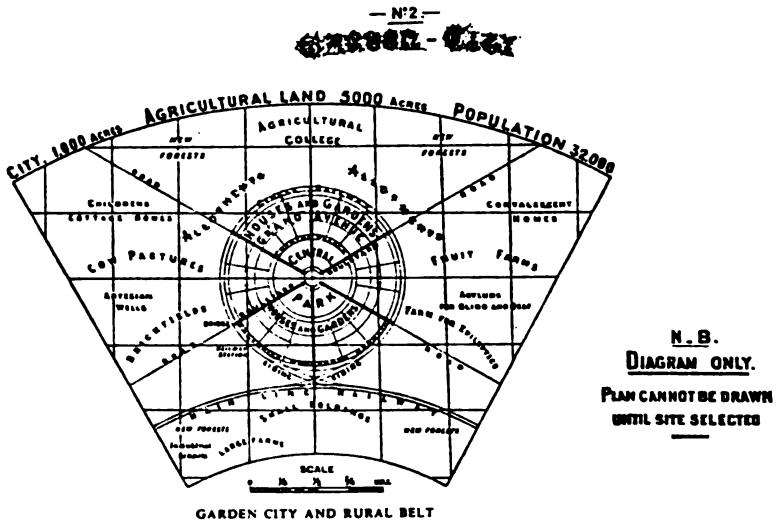



**Figure 12.** Ebenezer Howard, Diagram for a Garden City, 1898, (Scully, American Architecture and Urbanism).

> Stein and Wright wrought into their designs the qualities of comeliness and neighborliness. In a fashion up to that time unknown in New York since the middle of the nineteenth century, they insisted on providing generous open spaces, play areas and plantings as part of the essential first costs of housing, and demonstrated how open spaces could be preserved at no additional cost. This concern for the human environment added a pleasing aesthetic quality, in the beauty of "ordered buildings, measured to the human scale, with trees and flowering plants, and open greens surrounded by buildings of low density so that children could scamper over them.[7]

Economically, Radburn did not succeed because of the Great Depression, nor was it able to serve the needs of lower-income tenants. The creative innovations it promoted did, however, exert a profound influence on planning of the future. The RPAA itself was not to last, and yet it, too, strongly influenced public housing by exposing European models and adaptations of them to the American architectural community.

**Figure 13.** Clarence Stein and Henry Wright, Radburn, New Jersey, 1928 (Scully, American Architecture and Urbanism).

Germany became an important influence in the development of public housing through the leadership of Ernst May and Walter Gropius. While Clarence Stein and others continued to promote the English Garden City movement, Henry Wright, during a visit to Europe in 1932 and 1933, became enthralled with German architects' attempts to ". . .embody in new buildings and in a new community structure the actual daily needs of human beings."[8] German housing concepts favored a more flexible, open approach to the arrangement of interior space, as a response to the varying needs of the different types and classes of tenants who would occupy these dwellings. The standardization of parts through industrialization was also a focus of the German efforts, as was the development of housing on a large-scale that would include provisions for the low-income tenant.[9] This concept of including low-income tenants in the overall scheme of things became particularly significant once the United States had entered into the Great Depression and the severe housing shortage that was to last through the Thirties and World War II **(Figures 14, 15 and 16).**

Awareness of a growing problem in inadequate housing was gradual. By the Thirties, the movement toward government-sponsored housing programs was well under way. From mid-1933 until September of 1937, the temporary Public Works Administration (PWA) public-housing program laid the foundation for a permanent low-rent program by focusing attention on sub-standard housing problems and the use of federal funds to deal with them. This initiative by the Federal government eventually prompted local agencies to set up and finance their own programs.[10]

Robert Moore Fisher has identified the United States Housing Act of 1937 as the first permanent federal policy inaugurated to "promote the general welfare by using federal funds and credit," among other things, to help States and local governments "to remedy the unsafe and insanitary housing conditions. . . that are injurious to the health, safety and morals of the citizens of the Nation."[11]

**Figure 14.** Frankfort-Praunheim, Germany, from "An Analysis of Housing Practice," by Wells Bennett.

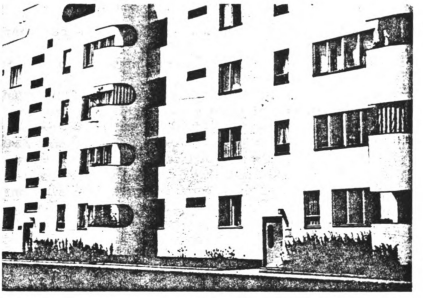


**Figure 15.** Berlin-Siemenstadt, Germany, from "An Analysis of Housing Practice," by Wells Bennett.

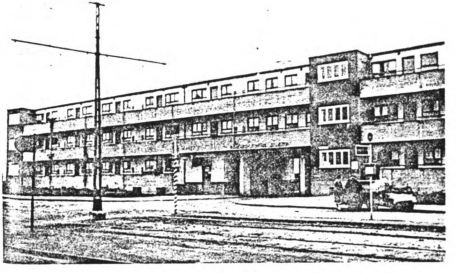


**Figure 16.** Frankfort-Platenstrasse, Germany, from "An Analysis of Housing Practice," by Wells Bennett.

On the other hand, the program set up to administer the provisions of this act, as Richard Pommer notes, ". . .carried housing further and further away from the art of modern architecture."

> Increasingly the younger defenders of modernism here turned inward to ever more formalistic and isolated objets d'art, of which Philip Johnson's own house (guest house, 1949), is perhaps the most precious. Compare that building with its sources in Mies van der Rohe's Tugendhat house (1930), and it is apparent that Mies' building could without a great stretch of the imagination be extended to a housing block, Johnson's never.[12] **(Figures 17 and 18)**

He describes the social consequences of this dichotomy between architecture and housing:

> The degradation of public housing in this country resulted as much from the contempt for it and its inhabitants expressed by these purely architectural values, as from the political and economic compromises necessary to sell it to the real estate owners, the rural politicians, and the bureaucrats. They did not understand, or rather understood too well that, as Stonorov clearly foresaw, "The very purpose of housing is at stake. . .a certain trivial standardization has taken hold of these interior arrangements and the exterior appearance which will definitely class these buildings once they are erected as those buildings which the government built to house poor people."[13]

It is under these conditions that Elisabeth Coit became a totally involved architect, planner and "houser."[14] Through her own creative, innovative efforts, she found flaws in the system that could realistically be refashioned. Her Langley study and her activities in the years that followed were to prove invaluable as examples and guidelines during a period in which action was paramount, but the expertise upon which to base it was limited.

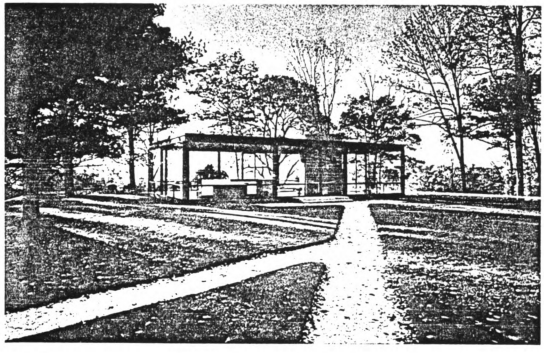


**Figure 17.** Philip Johnson, Glass House (guest house), New Canaan, Connecticut, 1949 (Arnason, History of Modern Art).

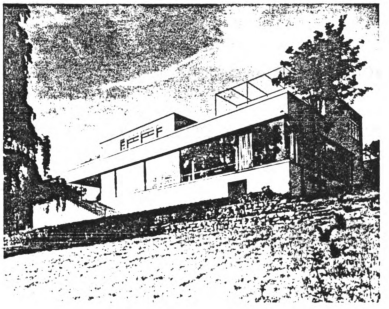


**Figure 18.** Mies van der Rohe, Tugendhat House, Brno, Czechoslovakia, 1930 (Arnason, History of Modern Art).

## Chapter 2. Endnotes

[1]William J. R. Curtis, Modern Architecture Since 1900 (Oxford: Phaidon Press Ltd., 1982), p. 148.

[2]Leland M. Roth, A Concise History of American Architecture (New York: Harper and Row, 1979), p. 230.

[3]Ibid., p. 232.

[4]Mary Susan Cole, "Catherine Bauer and the Public Housing Movement, 1926-1937," Ph. D. dissertation, George Washington University, 1975), p. 38.

[5]Ibid., pp. 44-45.

[6]Ibid., p. 60.

[7]Ibid., pp. 62-63.

[8]Cole, p. 77.

[9]Ibid., pp. 80-81.

[10]Robert Moore Fisher, Twenty Years of Public Housing (New York: Harper and Brothers, Pub., 1959), p. 89.

[11]Ibid., p. 27.

[12]Richard Pommer, "The Architecture of Urban Housing in the United States during the Early 1930's," Journal of the Society of Architectural Historians, 37 (December 1978): 264.

[13]Ibid.

[14]A "houser" refers to a professional who works specifically in the area of public housing.

## Chapter 3. The Pre-Langley Years (1892-1937)

The life of a woman artist is typically influenced by a strong male artist figure, most likely her father. Elisabeth Coit apparently fits into this pattern, for her father, Robert Coit, was himself a successful architect. By the time Elisabeth, or Betty, as she was called, was seven, Robert Coit had already seen his work published in The American Architect and Building News, in 1899. Other houses of his design appeared in the same journal no less than five more times over the next several years. Those houses are all of a fairly traditional, New England style, often Colonial in inspiration, to suit the upper-middle to upper classes in either Brookline or Winchester, both suburbs of Boston **(Figures 19, 20 and 21).** An article on women architects in the New York Times (April 11, 1937) duly notes Robert Coit's presence in his daughter's life. Elisabeth Coit is here described as the ". . .daughter of a Boston architect who designed homes for two Massachusetts governors."[1] The article goes on to say that "Miss Coit's first commission was the remodelling of a stable designed by her father years earlier in Rockport, Massachusetts, which she then transformed into a guest house."[2]

Robert Coit raised his family in an upper-middle class setting in Winchester, Massachusetts. He not only practiced architecture, but also wrote poetry and essays. Family members, especially Elisabeth's mother Eliza, were prominent contributors to various causes and did charitable work for the local hospital. Eliza Richmond Coit died when Elisabeth was ten or eleven. She left behind Elisabeth; an older daughter, Dorothy; a younger daughter, Mary, and a younger son, Robert. The four children were raised and educated at home ". . .in a liberal spirit"[3] by their father and grandparents. The three girls

**Figure 19.** Robert Coit, a house in Winchester, Massachusetts, 1914, from "Three Houses from Winchester, Massachusetts."

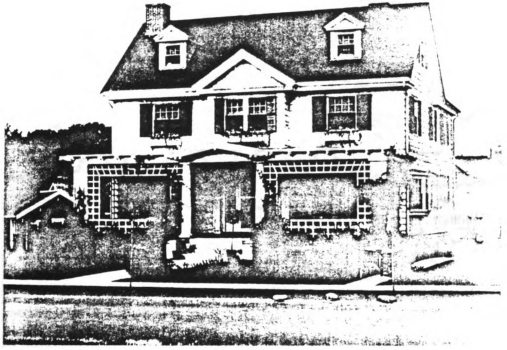


**Figure 20.** Robert Coit, Mr. E. A. Morris house, 1914, from "Three Houses from Winchester, Massachusetts."

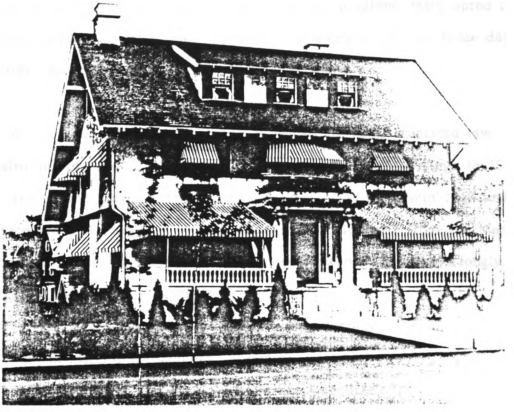


**Figure 21.** Robert Coit, a house in Winchester, Massachusetts, 1914, from "Three Houses from Winchester, Massachusetts."

later went to Radcliffe College. Dorothy Coit studied English and eventually published books of plays adapted for children. She and another woman opened the King-Coit Children's Theater, in Manhattan, and operated it for many years. Like Elisabeth, she never married.

Mary Coit Hawley earned an economics degree and did graduate work at Iowa State University. Before completing her program, Mary opted to marry and have children at what was considered an advanced age for those days; she later taught high school for a number of years.

Robert Coit, Elisabeth's brother, attended Harvard, practiced law, married and also had children.[4] Elisabeth Coit attended Radcliffe College in 1910 and 1911, the Boston School of the Boston Museum of Fine Arts in 1912 and 1913, and received a Bachelor of Science degree in architecture from the Massachusetts Institute of Technology in 1919, at the age of twenty-six. She strongly endorsed the broad, liberal arts education she had received.

> A good general early education is important as a preparation for college and university work in history, archaeology, literature, painting, drawing, sculpture, music, mechanics and mathematics. In my own life stand out Radcliffe's cultural courses and other opportunities in preparing me for technical training, travel, work and play.[5]

Elisabeth Coit's nephew, Robert Coit Hawley, has rounded out her portrait with a number of personal reminiscences. She was, he recalls, a woman sturdy in stature, around five feet, five inches tall, jolly, forthright, articulate, intellectually active (especially in the arts, literature and current events), and a "dyed-in-the-wool" New Yorker (fell in love with New York early on), who led a quasi-Bohemian way of life, especially in the Thirties **(Figure 22).**

**Figure 22.** Portrait of Elisabeth Coit, from ". . .Inspired by Cows and Milk Bottles."

She enjoyed the company of her colleagues, who were almost always male, felt right at home in their presence, and enjoyed entertaining them in her apartment, which, according to her long-time friend, Jacqueline Duby, had a wonderful view of the Hudson, especially as the sun was setting. She held her own in the consumption of liquor, preferred being called "Miss" rather than "Ms." (although the common usage of "Ms." became popular only later in her life), and enjoyed notoriety as one of the few women in her field. She was a frugal, hardy soul who was never sick, but who always wore skirts and dresses, even in bitter cold weather. She relied on public transportation even when she presided as a member of the Landmarks Commission, while in her late seventies and early eighties, and insisted on visiting every site under consideration. She was always even-tempered and well-respected by her colleagues. She loved children, often treating her nieces, nephews and friends' children to outings in Manhattan and elsewhere.[7]

After her graduation in 1919, Coit worked for her father and for the firm of Grosvenor Atterbury, in New York City, for it was known that

Atterbury hired women. A Fellow in the AIA, a Yale graduate, and a former student of the Columbia School of Architecture and the Ecole des Beaux-Arts, Atterbury designed both large-scale residential architecture in period styles for the rich, and community housing for middle- and lower-income tenants. He is noted especially as the architect of Forest Hills Gardens (begun in 1909), in Queens, New York, which in its Tudor style, became the "archetypal American middle-class community of the early twentieth century."[8] He was also the designer of America's first practical prefabricated concrete houses.

Coit began as one of the draftspersons, but soon became assistant to the chief designer. Her employment with Atterbury continued through the mid-Twenties, until she finally opened an office of her own. During this time, Coit became registered as an architect in the State of New York (1926) and, like her father, was admitted as a member of The American Institute of Architects (1929). The Octagon, an AIA publication, noted her application for membership in its April 1929 issue.[9] Of approximately forty applicants, only two were women, Elisabeth Coit and Myrtle Parke, both of New York. When, in June of 1929, The Octagon published a list of members elected between March 8 and May 15, 1929, Elisabeth Coit was the only woman of seventy new members.[10]

Coit obtained a number of commissions independently in the Thirties out of her own office, which she maintained for about ten years. Some of these commissions came from neighbors who lived near her weekend cottage in Croton Heights, New York. Her design for the house of Anna Van Nort, in Croton Heights, won her an Honorable Mention--Two Story Class in the "1932 Better Homes in America" competition **(Figures 23** and **24).** Eight awards were given

**Figure 23.** Elisabeth Coit, Anna Van Nort house, Croton Heights, New York, 1931, from "1932 Better Homes in America Small House Architectural Competition," by James Ford.

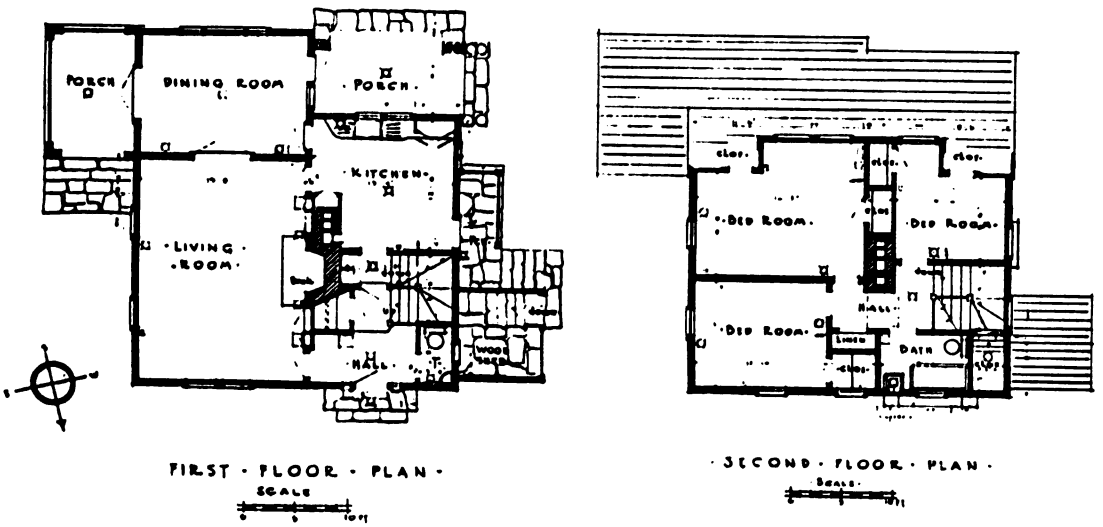



**Figure 24.** Elisabeth Coit, floor plans for Anna Van Nort house, from "1932 Better Homes in America Small House Competition," by James Ford.

in all; one gold medal and the others honorable mentions. Coit was the only woman recognized. This competition, organized in the early Twenties with the help of Herbert Hoover, who was then the Secretary of Commerce, ". . .sought to interest leading architects in the problems of designing and planning small residences and to create a "consumer demand" for homes of good design."[11]

The Van Nort residence is characterized by its careful attention to detail, from floor plans to built-in storage space, and a delightful squirrel motif stencilled and cut out of the shutters. The house has a satisfying sense of proportion, a layout that is handsome yet practical, and features that add to a very comfortable atmosphere, such as the hand-hewn beams in the living room ceiling and the wood paneling surrounding the fireplace. It is quite obvious that she placed the needs of her clients foremost.

In 1935, Coit remodelled the Philip Maguire house in Shrub Oaks, New York. It was included in a 1935 issue of The American Architect, which was devoted to the theme of modernization. Coit's renovation is quite remarkable. The house is literally transformed from an undistinguished box design into a Colonial-inspired, comfortable home, which suits the owner's needs and supplies him with all the modern conveniences[12] **(Figures 25** through **28).**

Another commission, the Burnham House, in Croton Heights, was designed specifically for a low budget **(Figures 29** and **30).** Coit did several such low budget designs. It was included in a series of thirty houses costing under $10,000, published in a 1940 issue of House and Garden.[13] As in the Van Nort house, this one was placed carefully in its setting, a hill, to take full advantage of a wide view of a distant range. At the time it was built, the owner planned to use it only during the summer and on weekends in the winter. Coit, however, allowed for the possibility of its being converted into a year-round home, while still paying close attention to the immediate needs of her client. She included a large closet in the attic, lined with galvanized iron, to be used for winter storage. Again, a cut-out stencil appears on each shutter, this time in a flower motif.[14]

Around the same time, Coit wrote an article for Woman's Day, a popular monthly magazine, in which she encouraged families of meager means to consider building houses of their own. She begins:

> You probably have dreamed for a number of years about owning a little house of your own but you have thought it impossible. Let me tell you that it is not impossible. . .today there are available for your selection practical, livable, representative homes. . .It is about these houses that I wish to give you some interesting detailed information.[15]

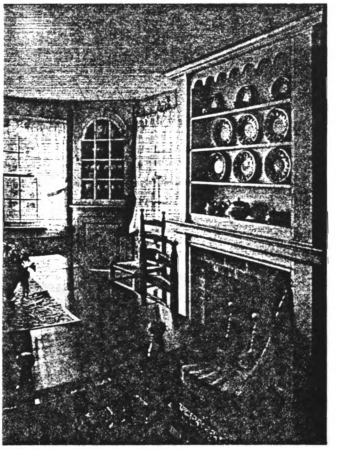


**Figure 25.** Elisabeth Coit, dining area of Philip Maguire house, Shrub Oaks, New York, 1935, from "Steps Toward Modernization."

**Figure 26.** Elisabeth Coit, Philip Maguire house, before renovations, from "Steps Toward Modernization."

**Figure 27.** Elisabeth Coit, Philip Maguire house after renovations, from "Steps Toward Modernization."

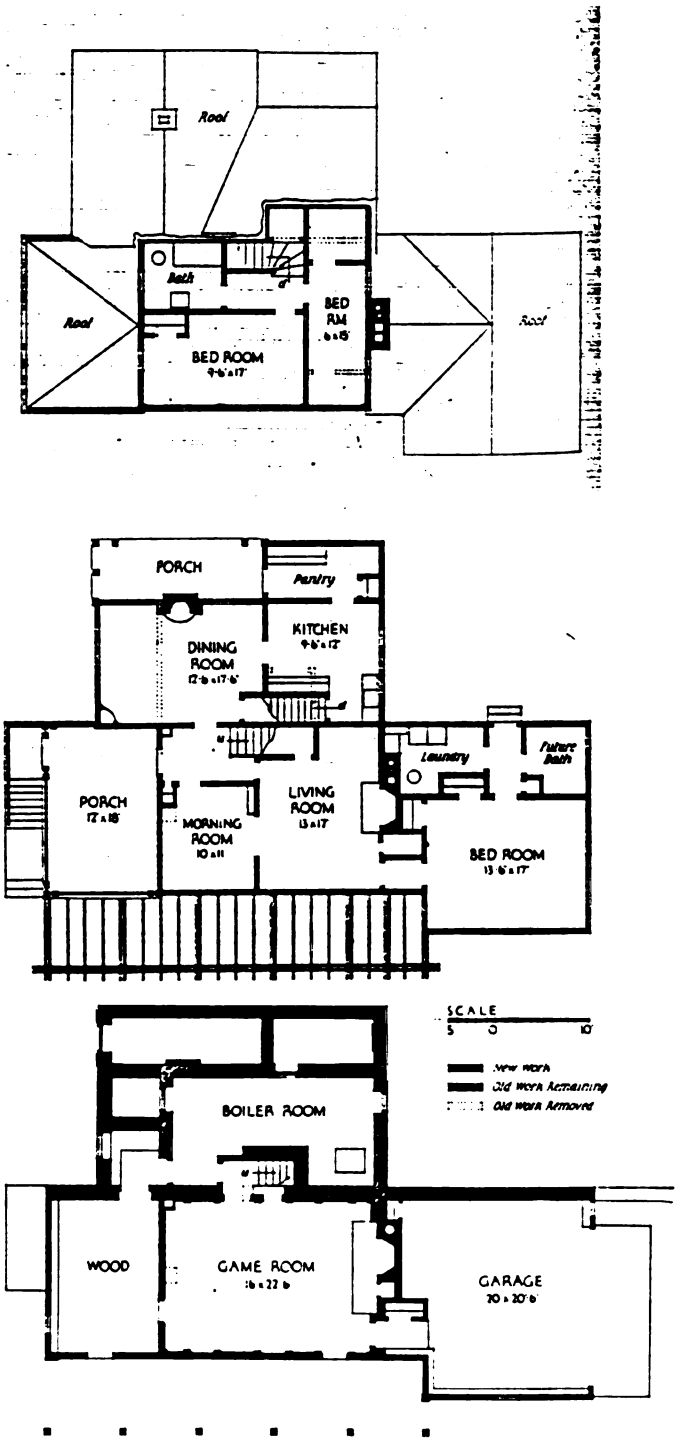



**Figure. 28.** Elisabeth Coit, floor plans for Philip Maguire house, from "Steps Toward Modernization."

Her sense of commitment and love of her profession, as well as her genuine interest in the lower- and middle-income segments of society, are expressed both above and in her concluding paragraph. Moreover, she seems to be directing her comments specifically toward women:

> Building your own home is a great adventure. As a practicing architect I find that people are rarely so happy as when they are making their own house. It develops all sorts of talents they did not know they owned; strengthens family solidarity; opens up many new avenues in their world; and gives them a sense of kinship with the homemakers of all times.[16]

Commissions in Coit's private practice were not limited to houses and country estates. She also designed a number of interiors, including several New York City restaurants.[17] The Art Deco renovation of the New York office of the Walker-Gordon Company was one of these (**Figures 31** and **32**).

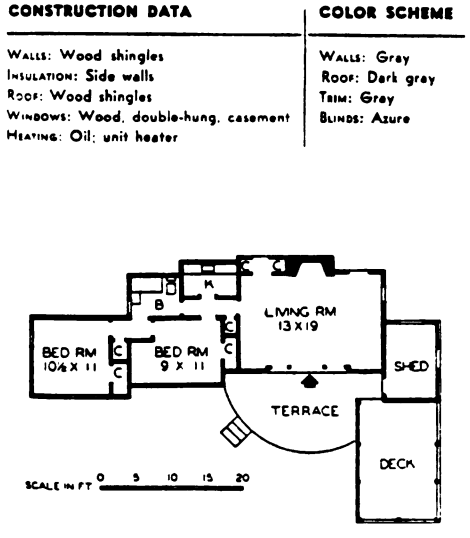



**Figure 29.** Elisabeth Coit, floor plans for Mary Burnham house, Yorktown, New York, 1936, from "30 Houses Costing Under $10,000."


**Figure 30.** Elisabeth Coit, Mary Burnham house, from "30 Houses Costing Under $10,000."

The project also prompted her to write an article documenting it. ". . .Inspired by Cows and Milk Bottles" illustrates her approach to architectural projects, to her problem-solving techniques. When asked by the company to create an interior for their office that would "express the spirit and purpose of their organization," Coit responded, "Tell me in what way your organization is unique, startling, world-beating or what have you?"[18]

The company replied by giving her a tour of one of its farms, complete with daily procedures, physical layout, history, goals and objectives of the company. This opportunity also gave Coit a chance to gather source material, anything from organic, living motifs to managerial philosophy. After studying the office space, its unique problems and the roles of the city office, she saw as her objectives:

> . . .first, to modify the feeling of narrowness at the entrance; second, to give pleasant and easy access to the mezzanine, avoiding difficulties raised by structural columns; and third, to provide comfortable and strategic quarters for the office force. Psychologically, the aim was to create an atmosphere expressive of the highly specialized service offered by the company.[19]

With these objectives in mind and her source material, she deemed the best solution to be a "logical layout" accented with forms abstracted from those found on the farm, from "bacillus acidophilus flasks and a suggestion of white milk bottles. . .for the main lighting fixtures" to "metal railings. . . fashioned from cow stanchions glorified with floral forms" to a linoleum floor, ". . .tan in color. . .with dark streaks suggesting shadows" to "walls painted with a graded wash from pale corn color at the ceiling to terra cotta at the base" to stair treads ". . .derived from the huge concrete silos which seem to guard the farm buildings."[20] The finished product, which

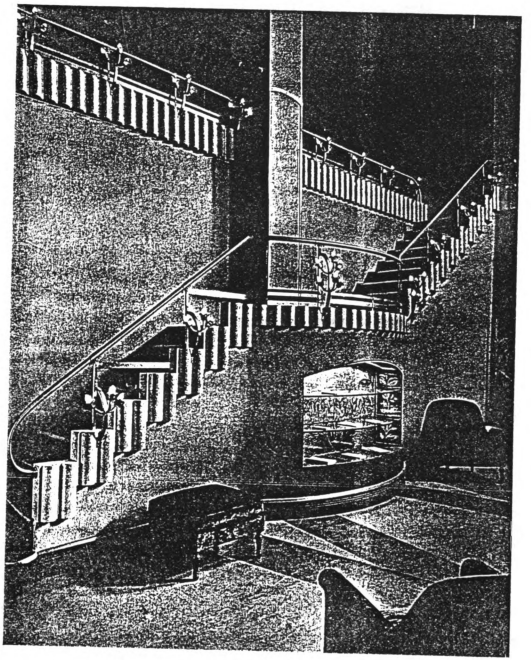


**Figure 31.** Elisabeth Coit, interior view of Walker-Gordon Office, New York City, New York, 1931, from ". . .Inspired by Cows and Milk Bottles."

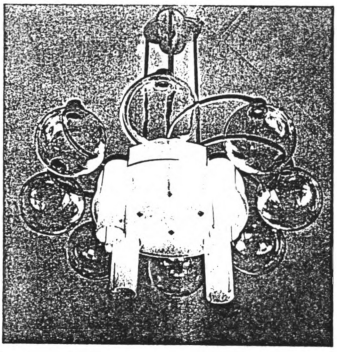


**Figure 32.** Elisabeth Coit, close-up of main lighting fixtures, from ". . .Inspired by Cows and Milk Bottles."

featured a modern and sleek Art Deco style, clearly and imaginatively reflected the uniqueness of Walker-Gordon's enterprise.

Elisabeth Coit emerged in these pre-Langley years as an adventurous individual. During the latter half of the Thirties, she flew many hours with a pilot, Wolfgang Langewiesche, in a small, two-seater plane along the East coast. She often acted as navigator, and used her opportunities in the air to paint watercolor landscapes from her bird's eye view. Over the years, she exhibited those watercolors and others many times.

Her experience in the air led her once again to write an article, this one published in the November 1937 issue of Pencil Points, called "The

Smaller Airport." Her thorough understanding of essentials lacking in smaller airports, her natural ability as an educator, and her concern for the well-being of the lesser-known, in this case, pilots and passengers of small planes, are clearly apparent. Her research informs us that 1937 statistics estimated over 14,000 air pilots and numerous landing fields in the United States, with New York State alone having over eighty. Most of the data she collected, however, came from firsthand experience. After having travelled three thousand miles in the Taylor Cub, Coit had much to say about the state of the smaller airport:

> Ports range in serviceableness and beauty from excellent to deplorable. . .a great number of existing fields have been designed without benefit of architect and without regard to good city planning. To secure for the medium and the smaller field those essentials lacking today in many of the airports officially listed would bring to the architect professional satisfaction, and to him and his community material gain.[21]

Those "essentials lacking today" included directions and markers to guide the pilot to the airstrip and hanger. She suggests painting arrows on convenient roof tops to direct the pilot, installing vertical pylons or painting a nearby chimney in an appropriately bright color (one that would also contrast with the surrounding environment) instead, and marking out a white circle on the field, which ". . .should be at least 100 feet in diameter and freshly painted."[22] She strongly endorses surfaced runways edged with white and hanger roofs painted in large black and yellow checks. Furthermore, she advocates the standardization of these features as well as of the size, color and position of the windsock--of course, to favor the most highly visible airstrip possible. Permanent hazard markers, a well-drained level site, adequate housing facilities both for visiting planes and visiting people follow on the list. All should be placed in an appropriate setting visually distinct from the surroundings **(Figure 33).**

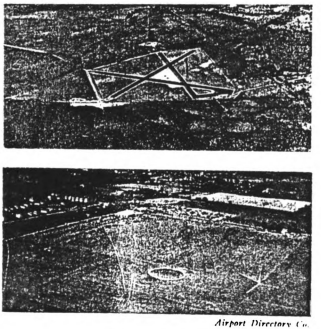



**Figure 33.** "Easy to see, well-marked landing fields," illustrations from "The Smaller Airport," by Elisabeth Coit.

Her summary paragraph is practical and convincing:

> Naturally the well-equipped field will attract more airmen: but the flier is grateful for the mere essentials: an accessible field adequately marked and so designed that it can be properly maintained and not open to visitors whether loafers, or those taking short cuts, and shelter and fuel for man and ship. With the attention to these simple requirements the dangers and discouragements of cross country flying would be greatly reduced, and also local airport, local community, and local architect would gain kudos and income.[23]

1937 was also the year Coit won a Langley Scholarship from The American Institute of Architects (AIA). The scholarship was established "to promote higher education in architecture" in accordance with a bequest by Edward Langley, an architect.[24] A journalist who reported her winning also knew of her flying experiences and of the insights she gained while observing the earth's landscape from the air:

> Miss Coit used to have an idea about building a skyscraper. She won't admit that she's forgotten it, or that she still wouldn't build one if she were asked. But she thinks low-cost housing is going to be more valuable than skyscrapers for a while. Anyhow, once you start flying (and she's gotten so that she can fly the plane herself after she is in the air), a skyscraper doesn't seem quite too tremendous as it did before.[25]

Housing, specifically low-income housing, was indeed far more important to Elisabeth Coit than the monument or skyscraper. Even her visits to Europe focused on housing rather than historic monuments, and gave her further insight into the problems and possibilities in this realm of architecture. She wrote, in "Notes on European Low Cost Housing, 1935" **(Figures 34** and **35):**

> But the mass of actual low cost decent building which has been accomplished on the continent since the war, and which at this moment is steadily being added to, rouses in the American observer emotions of jealousy, awe and shame. . . .To European cities the obligation of decent housing is almost as pressing as the obligation of properly maintained streets, unpolluted water supplies or fire protection. For this reason the American student finds quantities of important material, sermons in brick and concrete, all over Europe.[26]

When, in September of 1937, the results of the Edward Langley Scholarship awards were announced in The Octagon, eight of the seventy-one applicants (fifty architectural draftsmen and architects, twenty-one graduate students and teachers of architecture) had been selected, most to travel in Europe, all were men, with the exception of Coit. She received her scholarship for ". . .research in economical design and construction of single family dwellings and apartment houses."[27]

Later that year, already well into her study, Coit realized that she could not do justice to the vast material available and applied for a renewal, which she received for 1938-39.

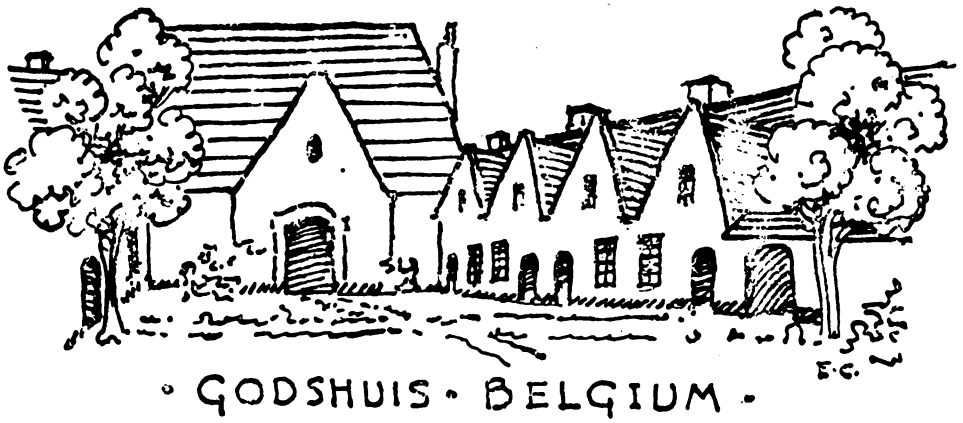



**Figure 34.** Elisabeth Coit, illustration from "Notes on European Low Cost Housing, 1935."

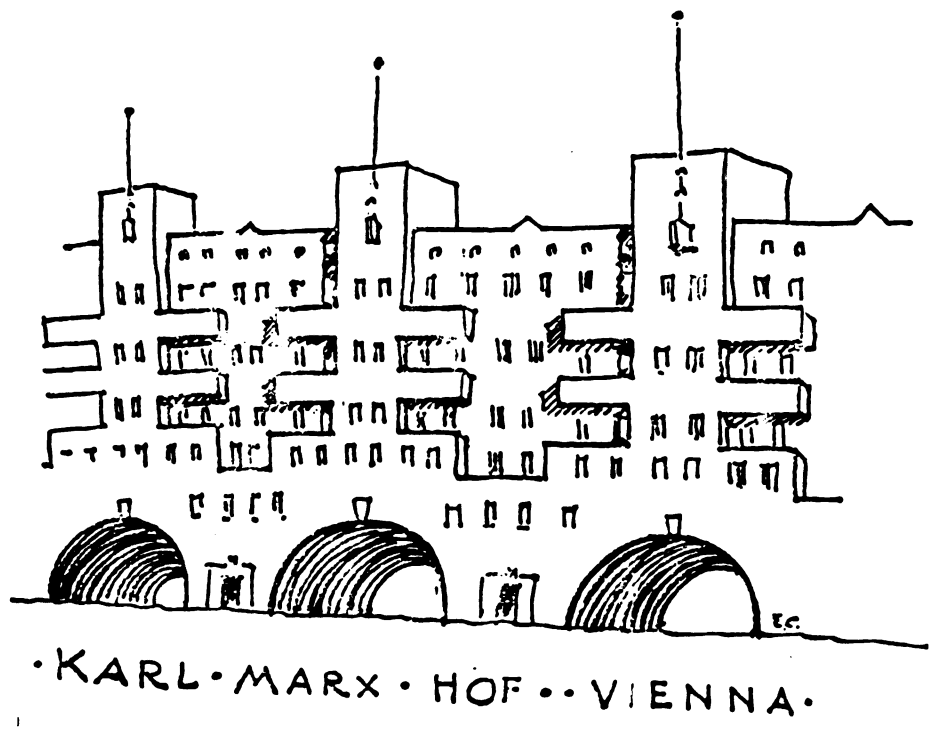



**Figure 35.** Elisabeth Coit, illustration from "Notes on European Low Cost Housing, 1935."

**Chapter 3. Endnotes**

[1]Anne Peterson, "Women Architects Few But Versatile," New York Times, 11 April 1937, sec. 6, p. 6, col. 5.

[2]Ibid.

[3]Robert Coit Hawley, telephone interview, 12 September 1988.

[4]Ibid.

[5]Elisabeth Coit, "Architecture as a Profession for Women," Radcliffe Quarterly (May 1936): 17.

[6]Jacqueline Duby, interview in Yorktown Heights, New York, 8 October 1988.

[7]Hawley.

[8]Donald Harris Dwyer, "Atterbury, Grosvenor," Macmillan Encyclopedia of Architects, p. 436.

[9]Elisabeth Coit Papers, Schlesinger Library, Radcliffe College, Cambridge, Massachusetts.

[10]"Applicants for Membership," The Octagon (April 1929): n. p.

[11]"Members Elected from March 8 to May 15, 1929," The Octagon (June 1929): n. p.

[12]James Ford, "1932 Better Homes in America Small House Architectural Competition," Architectural Record 73 (March 1933): 196.

[13]Elisabeth Coit, "Steps Toward Modernization," American Architect 147 (September 1935): 15-20.

[14]"30 Houses Costing Under $10,000," House and Garden (1940): 29.

[15]Ibid.

[16]Elisabeth Coit, "$25 Dollars a Month for Your Own Home," Woman's Day (February 1939): 9.

[17]Ibid., p. 11.

[18]Shirley Sherak to Jacqueline Duby, Yorktown Heights, New York, 10 April 1987, article on Elisabeth Coit by Shirley Sherak and Maxine Nachtigallia, p. 2.

[19]Elisabeth Coit, ". . .Inspired by Cows and Milk Bottles," American Architect 139 (April 1931): 56.

[20]Ibid.

[21]Ibid., pp. 56, 57, 86, 88.

[22]_____, "The Smaller Airport," Pencil Points (18 November 1937): 739.

[23]Ibid., p. 740.

[24]Ibid., p. 741.

[25]"Architecture Prizes Won by Woman, 7 Men," New York Times, 30 September 1937, p. 25, sec. 7.

[26]Jean Lyon, "Her Favorite Perfumes Are Cellars, Paint and Wood," New York Sun (September 1937): n. p.

[27]Elisabeth Coit, "Notes on European Low Cost Housing, 1935," Radcliffe Quarterly (October 1935): 247.

[28]"Edward Langley Scholarship Awards for 1937," The Octagon (September 1937): 4.

## Chapter 4. The Langley Report

"Notes on Design and Construction of the Dwelling Unit for the Lower-Income Family," the major publication resulting from Coit's Edward Langley Scholarship studies from 1937-39, made possible by the American Institute of Architects, was a timely report. Robert Moore Fisher, in his book, Twenty Years of Public Housing, discusses the conditions up to the mid-Thirties as a time in which ". . .relatively little information existed about the residential inventory."[1] He further cites the United States Census Bureau in its report, Intercensal [sic] Housing Surveys to support his position:

> . . .that during the period when. . .nearly all the present Federal agencies (including the USHA) concerned with housing programs were established, no overall measures of the housing inventory were available upon which to base a firm housing policy. Decisions were made on piecemeal evidence from Federal legislation and administrative studies and surveys or on local surveys made by individual communities with or without the aid of Federal agencies.[2]

Coit's study, while not pretending to address the overall housing situation across the country, did attempt to present the situation from the viewpoint of those who were most affected by it, namely the tenants who lived in the housing about which architects and other such experts were talking.

> I have tried to learn what the low-income client thinks he needs or would like to have, and what architects and other experts in the more architectural aspects of homemaking think he ought to have or can have, and how this or that solution works out in practice: collating and comparing, rather than criticizing, the opinions expressed, but keeping in mind always the necessity of reconciling as far as possible expressed desires with the present-day procedures as to cost, design, construction.[3]

She concentrated her time and efforts in the eastern part of the United States, but found this restricted field still too much to cover in a year--thus the extension to two years (**Figures 36** and **37**). "Notes on Design and Construction of the Dwelling Units for the Lower-Income Family," which appeared in the October and November 1941 issues of The Octagon, an AIA journal, forms part of a larger unpublished report which shows the tenants' viewpoint toward his or her housing. Coit defines the "tenant" as the owner of a small living unit or the renter of a low cost unit. A "unit" includes ". . .limited-dividend cooperative, philanthropic, or outstanding rehabilitation projects,"[4] United States Housing Authority lowest-rental and defense developments, and other government-subsidized developments. She visited over eighty such developments in the initial phase of her study and then another forty or so later (chiefly the USHA developments).

The Octagon articles do not include any of the almost sixty illustrations present in the larger, unpublished report. Many of those illustrations, specifically floor plans, elevations, drawings, and photographs are included in "Housing from the Tenant's Viewpoint," a summary printed in the April 1942 issue of the Architectural Record. That summary, together with "Notes on Design and Construction of the Dwelling Unit for the Lower-Income Family" will be given scrutiny in the following pages.

In the first section, entitled "What People Want in Housing," Coit defines housing as that which provides ". . .shelter from excess heat, cold, and noise, so combined with adequate provision of light, air space, privacy and convenience as to be acceptable, and consequently useful, to those for whose service it is intended."[5] Furthermore, she finds it most important for housing to be

**Figure 36.** Westfield Acres, Camden, New Jersey, a government-subsidized housing development Coit is likely to have visited, from "Architectural Opportunities in Public Housing," by Catherine Bauer.

well enough designed and constructed so that either public or private sponsors consider it a good investment.

The key to identifying ". . .those to whose service it is intended" is gaining a knowledge of the community and the individuals who make up the community. Coit argues that the "American home," as she calls it, is thought of erroneously in two senses. First, it is thought of as a prototype that will fit any climate, geographic region, nationality, and occupation. On the other hand, this same "American home" assumes that the occupants are either wealthy or at least upper-middle class. It is this commodious kind of dwelling that is so well-documented in books and journals, which Coit believes to be on its way to obsolescence. To her, the "American home" of the present and the

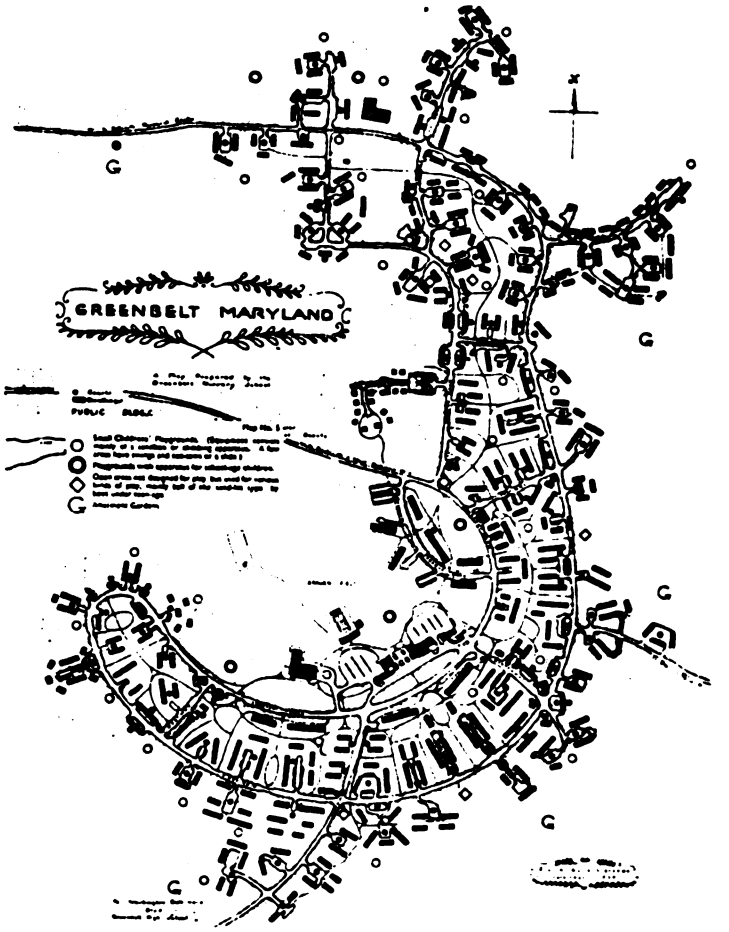



**Figure 37.** Greenbelt, Maryland, another housing development Coit probably visited (Roth, A Concise History of Modern Architecture).

future is that of the worker.[6] Coit's research leads one to conclude, nevertheless, that lower-income families are themselves not primarily concerned over housing per se. "Especially striking," she says, "is the record of how little apparently some of the not so very poorly housed, as well as the slum dweller, care about modern housing and about the major comforts, conveniences, and safeguards considered their right by safety, hygiene, and other welfare organizations, while valuing highly a feeling of freedom, of independence, and

of opportunity for self-expression."[7] Other attributes valued by the tenant and listed in order are "physical health," ample room which promotes feelings of freedom, privacy, the opportunity for self-expression and economic security.

Other values rank much lower, although still in the top twenty: comfort, decency, convenience, safety, opportunity for recreation and aesthetic satisfaction. Coit believes that the above statistics, gathered by social experts, legitimize some of those she calls "housing's heretics:" shanty-town families, those who live in trailers, the conventional family who is only marginally interested in owning a home (thirtieth on a list of desirables), and those for whom subsidized housing costs just slightly more than they can afford without providing enough living space. These families, she found, spend as much as thirty percent of their income on rent. Toward the end of the article Coit establishes a norm of income expenditure for rent and utilities at one-fifth or twenty percent of a family income.

The desire for convenience and order seems to boil down to one word: closets **(Figures 38** and **39).** Coit found that tenants need more closets for the sake of order, convenience and safety. Studies cited in her report show that the storing of household equipment on basement steps, because of the lack of any other space, caused many accidents. Convenience in the eyes of the tenant meant adequate work space as well, ". . .for opportunity to dry, if not wash, clothes where they will not irk the family at meals, at homework, and at rest"[8] **(Figure 40).**

Beyond the universally expressed desire for order, Coit expressed her astonishment at the widespread lack of interest in beauty and amenity (as

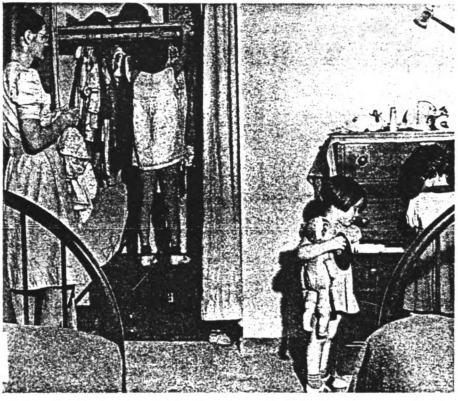


**Figure 38.** Closet space (Public Housing Design).

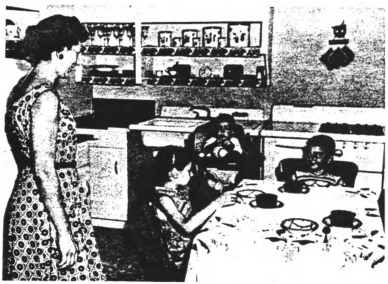


**Figure 39.** Adequate work space in the kitchen, illustration in "Report on Family Living in High Apartment Buildings," by Elisabeth Coit.

she calls it), indicated in some places she visited by a frequent abuse of the lawns. On the other hand, the tenants do take an interest in those amenities over which they have some control: clothing, especially for their children; cosmetics; interiors with dainty curtains, kitchen utensils, tableware and small gardens are all colorful, pleasant and well-kept.

She finds notable that in some low-rent projects, the managers have been successful ". . .in establishing and maintaining those pleasant relations which enable the tenant to get the maximum use and enjoyment from his new housing."[9] She records her astonishment that good management can minimize weak points and maximize the strengths of design, citing a couple of specific locations as examples.

She suggests that architects might better understand the many ". . .economic-national-racial complications of general human needs"[10] by reading the "Diary of a Housing Manager," by Dr. Goldfeld, and by taking the suggestion of another source, who suggests ". . .that the architect and his family should live in the project he has designed (preferably in the least desirable unit) as a source of information on what the "housing consumer of the lower-income strata" needs in housing."[11] Finally, tenant complaints seem to suggest the experts themselves leave much room for improvement. "Discontents registered seemed to concern mainly not a shortage of luxuries or novelties, but rather errors in planning or equipment, most of which could have been avoided with little or no extra expense."[12]

Examples of poor design and planning are seen, for instance, in the front porch oriented toward the bitter winter winds yet away from the prevailing summer breezes, or the children's backyard playground with the high walls that feel like a jail, so that the children prefer playing on a nearby dump. Other complaints may have originated in banks, organized labor, and the Federal bureaucracy, whose rigid rules and regulations might, for example, prevent a house from being built unusually close to a quiet street to allow for a larger garden in the backyard. She does qualify her criticism, though, by stating that these bureaucracies are changing for the better and are becoming more and more flexible.

Coit concludes this section by citing "Tower and Homes" **(Figure 40)**, 1877-1878, and "Riverside," 1890, both in Brooklyn, New York, as examples of well-designed and solidly constructed housing developments:

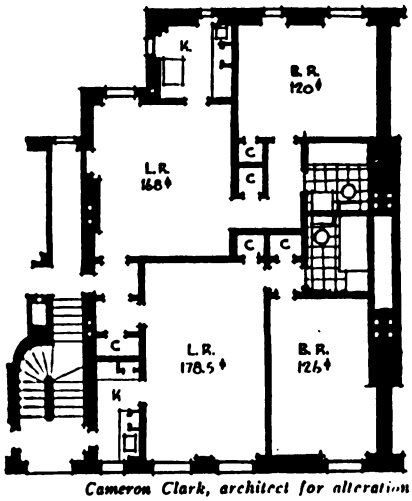



**Figure 40.** "Tower and Homes," illustration from "Housing from the Tenant's Viewpoint."

> Exteriors in brick, handsome in the style of the period but not florid, coverage fifty-two and forty-nine percent respectively, courts grassed to avoid noise and to delight the eye, provided with walks, a fountain, a music pavilion, a children's playground with sand piles, house walls surrounding the court are covered with ampelopsis, most living rooms face on the tree-planted quiet court, 'with a few exceptions every room receiving direct sunlight for many hours of every day in the year.'[13]

"Who Are the People Who Want Housing? - Unit Sizes Needed," is the title and focus of the second section of Coit's study. Earlier, an identification of the tenant was made by experts in the field. Coit also turns to statistics to gain more knowledge. The question she wishes to answer is: Who actually makes up the American family of the 1930's and 1940's?

Coit finds that at the time she wrote this study, half of the population of the United States was over thirty years old. She speculates that by the

1980's, sixty percent of the population will be over thirty. People sixty-five and over form six to seven percent of the population and are expected to double by 1970. Children under nineteen, on the other hand, who are now a little over thirty-five percent of the population, will be thirty-one percent by 1950 and twenty-seven percent by 1970. The average number of occupants per household in 1935 ranges from 3.51 in California to 4.99 in North Carolina. The Negro population (her terminology), however, is different. Very few have high or even moderately high incomes, and most statistically have smaller families. The family of one person forms 16 percent of the whole; the family of two, 31.9 percent; the family of three, 20 percent; and four, 13.2 percent of the entire black population. A very small percentage, 5.5, contains seven or more members. Thus, Coit concluded that nearly half of the housing for this segment of the population should be geared toward the family of one or two.

The figures above, while interesting, may be deceptive if one assumes a family of two to mean husband and wife or mother and child, or a family of three or four to mean mother, father and child or children. In a section devoted to the "unattached" and the "non-typical family," Coit emphasizes the need for planners to consider them as well. More specifically, she refers to unrelated adults living together who would, of course, need more private space; or of a family whose additional member is an aunt, uncle, cousin or grandparent, any one of whom could be an invalid. She stresses that these "non-typical family" units have been too much ignored in public housing and should certainly be more seriously considered. She points to National Association of Housing Officials (NAHO) objectives to support her concern:

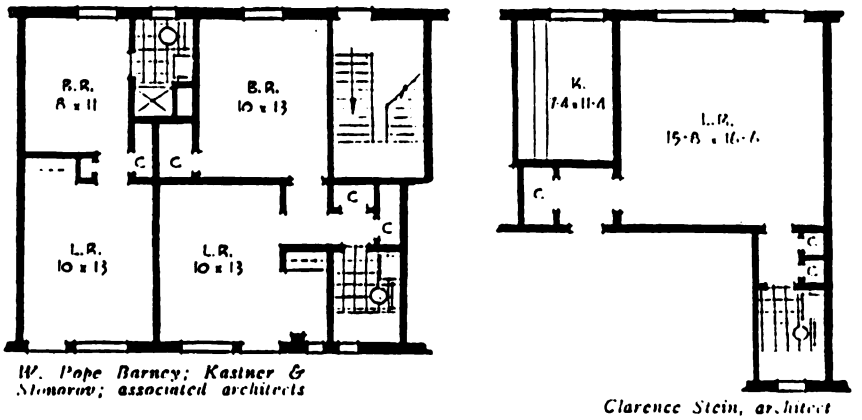
> Objectives of modern housing, according to the NAHO include provisions of 'a range in sizes of dwellings that will accommodate a normal cross section of the families in the group to be housed, and that will

> accommodate individuals as well as provide for the normal development of families from the newly married couple through the phases of child rearing and on to childless old age. . .'[14]

The boarding house or "club" is mentioned as an unfortunately passing phenomenon but one that certainly fills a real need for those who are unattached or at the very start of a career. Groups of three or four young men or women more and more often are sharing housing. Coit also notes the growing number of elderly people in need of public housing who ". . .live less pleasurably and profitably together."[15] She makes it clear that the inclusion of these people into the planning of public housing would not increase expenses but would certainly better fulfill the needs of the low-income tenant.

Coit suggests a higher percentage of two-room suites and of one-room suites on the ground floor in order to give easy access to the outside for the elderly and disabled **(Figure 41).** In this way, stair climbing could be avoided and a window to the outside world would be open for those who want to see and hear what's going on around them. Furthermore, she sees a fourth floor (which is above the advisable level for mothers with children) for those younger workers who would rarely climb the steps more than twice a day anyway. She also suggests for the unattached worker a small suite without "preferred exposure" (to the sun) because he/she is gone before eight each morning, not home until after dark and often gone on weekends. She further defends the value of these unattached individuals:

> Even if they prove merely decent neighbors, these adults are valuable to dilute an otherwise too purely parent-and-child community, which keeps child and adolescent perpetually in an atmosphere of authority between parent, teacher, recreation director, housing manager, guardian of the public lawn, and the rest,




For the very small family or for individuals the Hillside project (New York City) offers tiny ground-floor units (right) and the Carl Mackley development (Philadelphia) provides ground-floor two-room units. With entrances from outdoors, not from the hall, these units give privacy for old people or others who need quiet

**Figure 41.** Hillside project and Carl Mackley development, illustrations from "Housing from the Tenant's Viewpoint."

> whereas it is their right to mix unofficially with their fellowmen of all ages as a preparation for adult life and work.[16]

And again, approaching the argument from a different angle:

> But housing must avoid establishing a new type of unnecessary segregation in addition to those already effected [sic] by school, by religious and political affiliations, by age, by sex, and by national backgrounds, even if the new segregation wear the badge of the disappearing so-called 'normal' family.[17]

She notes that some housing authorities are ready to receive the elderly or other childless people in small suites and proposes that rent be based on the amount of plumbing and other cost consuming equipment, rather than space, so that the smaller units would have to pay proportionately more than the larger family with several dependents.

She concludes this section by advocating, as other authorities have, the practice of designing some suites in each development with movable partitions or sound-proof doors to facilitate the redivision of units into appropriate sizes and numbers, depending on this or that situation.

The rest of this report, divided into several sections, focuses on housing requirements themselves. Coit first discusses room uses, then size requirements, and then finally turns to each individual room, with its problems and potential. She gives some attention to other details, such as windows, surface finishes, and outdoor living spaces. The report ends with a final word on the cost of housing.

Coit makes it clear in her introduction that the design concept for low-income housing is that of a somewhat abbreviated edition of a large-scale, middle-class house. For the family who can afford an extra living room, this concept becomes a practical one for work, play and games. But, at the same time, she is aware of the economic reality. "Few families in the lower-income half of the nation can afford one extra room. Few can even take the trouble to live in their living room."[18]

Her comments about the use of kitchen space are again realistic:

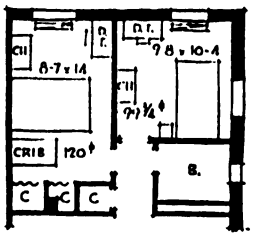
> The congestion then occurs in the kitchen, where there is even greater discomfort (than in the living room), as well as a certain stigma attached to having only one room for washing, cooking, eating, dishwashing, drying, steaming linen, ironing, bathing the baby, changing him, handling his daily quota of diapers, homework, recreation, and the informal entertaining which is all the lower-income family can ordinarily manage.[19]

Just as overuse of space can be a problem, underuse is equally inefficient. Here, the living room becomes a prime suspect because, as Coit has discovered, many tenants want this one room in the house to be kept clean. The bathroom, too, sits idle most of the day, and the bedrooms are used only one-third to one-half of a twenty-four hour period. And, in the meantime, each family member (Coit does not specifically mention the mother/wife/homemaker, however) longs for some private space in which to do homework, talk to friends, or carry out a hobby.

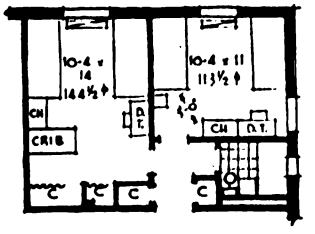
Coit suggests that architects and planners look at the use of space in lower-income housing in a slightly different way. "A new nomenclature, combined with changes in plan and detail, neither radical nor costly, would restore to use these areas, increasing the efficiency of the shelter, and at the same time embellishing the small-scale family scene."[20]

She first refers to the bedrooms, which could be called the children's room and parent's room. Each could be slightly larger to allow for a couple of pieces of additional furniture **(Figure 42).** The children's room or rooms could have a low table and chairs or stools and a toy chest or box with shelving in the closets to supply storage space for clothing **(Figure 43).** Thus, children would have quiet space for doing homework and a place to play and talk with friends. The parent's room could be similarly equipped to meet their needs. She mentions the assumption on the part of many experts and tenants alike, that the living room may double as a bedroom.

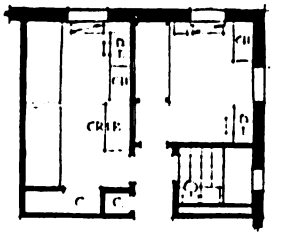
The bedroom might thus be somewhat enlarged. The living room could, in turn, become smaller, as the reasons for spending time in the living room




An actual and fairly representative plan of two bedrooms, with the furniture arrangement suggested by the architect. Note 1 ft. 9 in. between bed and wall in the larger room. In neither room would there be space or equipment for any daytime activity, or for homework



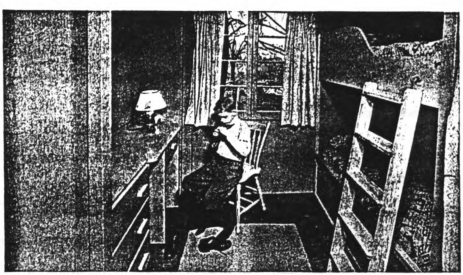

The plan at the left is here redrawn to show how much areas would need to be increased for reasonable passage between furniture and to allow 3 ft. at least between beds and crib. (Assuming twin beds 3 ft. by 6 ft. 10 in., and junior beds 2 ft. 9 in. by 6 ft.)




Here the same plan (far left) is again redrawn, this time to same size but with different furniture arrangement. There are built-in beds in principal bedroom, built-in bunks in the other. Linen is stored in drawers under beds and under lower bunk. Usable space is increased

**Figure 42.** Elisabeth Coit, children's room floor plans from "Housing from the Tenant's Viewpoint."

*Photos by Eric J. Baker*



Built-in furniture has greatly improved the usefulness of both of these bedrooms, in a house planned by the John B. Pierce Foundation and Skidmore, Owings & Merrill, architects. The boy's room is really a small bedroom, but the built-in bunks and shelf spaces leave good room for study or hobbies or just conversation

**Figure 43.** Elisabeth Coit, children's room furniture arrangements, from "Housing from the Tenant's Viewpoint."

would be fewer. And so, the complaints of "Too close companionship when we are in one room." or that "Homework suffers." or that there is "No place for children to play without bothering their father who wants to rest." would be alleviated.[21] The living room would then be used ordinarily just as a reception room, or even as yet another bedroom.

The conflict in the kitchen lies between laundering and food preparation. For most, they just don't mix. Coit suggests a bathroom-laundry room that would alleviate the congested space in the kitchen, and make better use of the bathroom space **(Figure 44).**

The utility room, depending upon the housing unit, can range anywhere from storage area to small laundry to a vestibule to a pantry. In rural housing, the basement sometimes serves as a "glorified utility room, accommodating curing, canning, washing in winter, cold weather workshop operations, and many other activities often taken care of in summer on the back porch."[22]

Coit concludes this section on room uses in a negative manner. What of the "new difficulty," as she calls it: the dining-alcove or dining-foyer, a room that seemed to be gaining popularity while Coit was doing her research:

> A dining-alcove or dining-foyer looks well in the plan and in the publicity text of a medium-rent development, rates as half a room in statistics and rent; and weary househunters may sign an agreement before realizing that there is no natural light, that bathroom, bedrooms, kitchen and living room are all entered via that 'foyer,' and than when the table is in position with its complement of surrounding chairs little passage is possible in any direction. . .[23] **(Figure 45).**

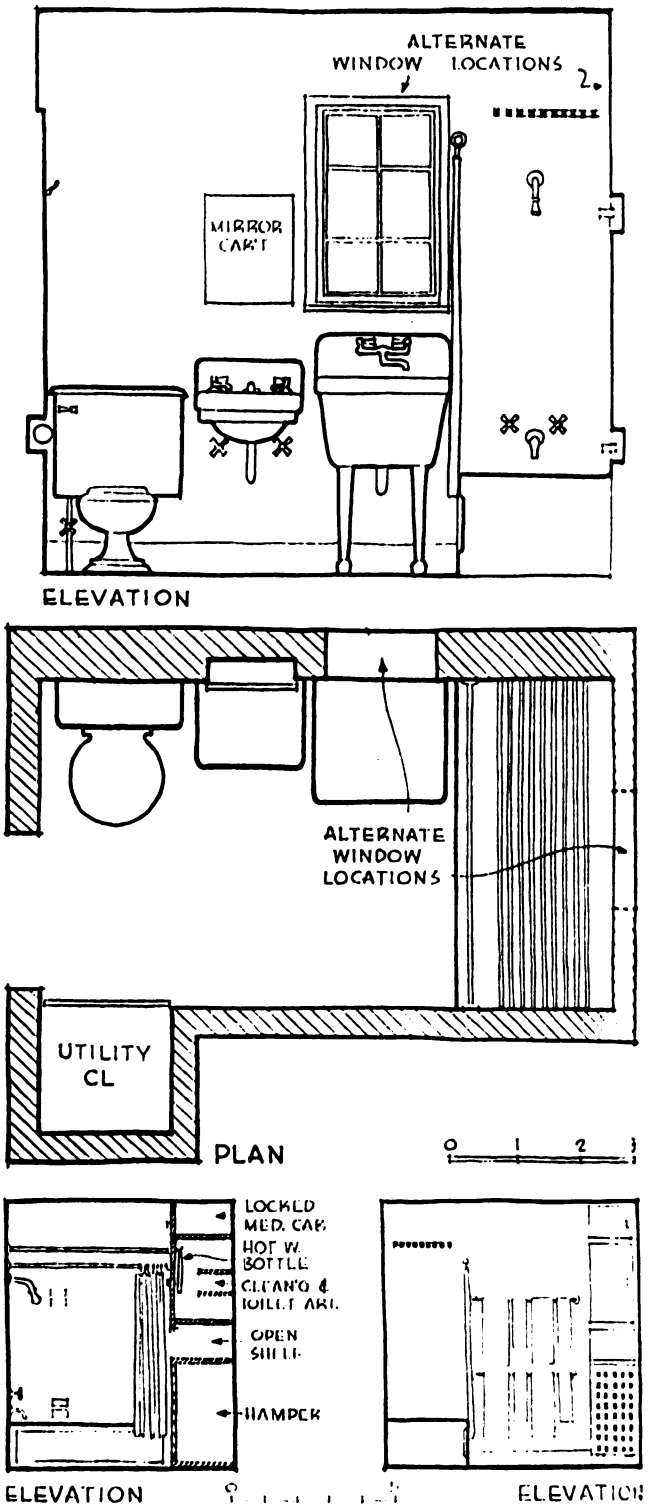



**Figure 44.** Elisabeth Coit, 'bath-utility' room elevations and floor plan, from "Housing from the Tenant's Viewpoint."

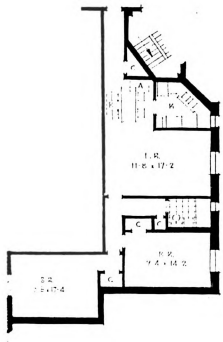


**Figure 45.** Elisabeth Coit, dining-foyer combination, from "Housing from the Tenant's Viewpoint."

Regarding room sizes in low-income housing, Coit finds that much variation in size and shape exists. Not only do housing surveys bear this out, but also the recommendations of government authorities and other experts.[24] She mentions one study made by the Housing Study Guide, which shows how adequate size affects rentability. Apartments with an average net room area of 168 square feet rented without problem, while those with an average of 113 square feet were very difficult to rent. A look at some floor plans with indications of furniture will make the desirability or undesirability of a set number of square feet in a particular room more understandable **(Figures 46** and **47).**

> In view of the great variety of opinion on space needs, and especially in view of the fact that USHA and NAHO minima (which however carefully offered must tend toward setting standards) approach the tenement standard of room sizes of thirty to forty years

> ago, it is worthwhile to examine some typical dimensions in housing erected under different auspices over a long period.[25]

After a recent remodelling, Chicopee Falls Village, a Massachusetts milling town built in the 1830's, averages 188 square feet for the living rooms, 146 square feet for the bedrooms, and 103 square feet for the kitchens. In addition, 'Tower and Homes' housing project, built in downtown Brooklyn, already mentioned as being successful in many ways, has an average net room area of 148 square feet for the living room-kitchen, living room with adjoining kitchen at 129 square feet, and 108 square feet for the bedroom, all after some replanning with some additions. Coit does make the point that the situations in which these pre-twentieth century housing units were built does not totally justify a comparison with current (1930's) standards, because families were larger when Chicopee Falls Village and 'Tower and Homes' were built, and home industry necessitated more space. Therefore, she makes a more useful comparison with twenty-three housing units New York workers and small "white-collar" projects built from 1904 to 1933. According to an unpublished survey, the average gross apartment area for the twenty-three is 176 square feet, and the average net room area is 133.7 square feet. However, if six of the most atypical of the twenty-three are eliminated, the average gross apartment room area then becomes 190 square feet, while the average net room area is 142.9 square feet.[26]

We now come to the section of this study which treats individual areas within a unit, i.e., kitchen, bathroom, basement, etc. In "Housing from the Tenant's Viewpoint," Coit's "One-Wall Apartment Kitchen" scheme **(Figure 48)** and her "Ideal Meal Center for a One-Family House" **(Figure 49)** are illustrated in elevation, sections and floor plans.

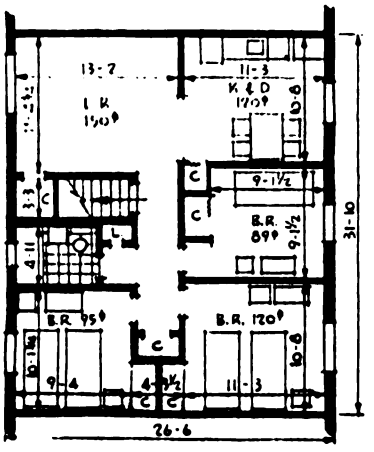


Figure 1. A graphic presentation of room size standards given by USHA in 1938. They call for: Living room 150 sq. ft.; kitchen 60; dining alcove 60; or an aggregate net of not less than 260 for those three; first bedroom 120; secondary bedrooms 90 for two persons, 80 for one

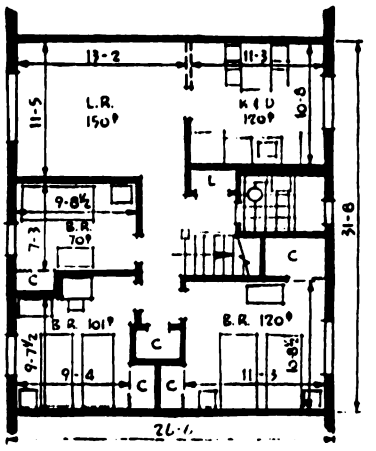


Figure 2. Minimum recommendations of USHA check list of 1939: Living room 150 sq. ft.; kitchen 70, with aggregate of these and dining space of not less than 260; first bedroom 120; secondary bedrooms 100 for two persons, 65 for one. And 20 sq. ft. of storage space

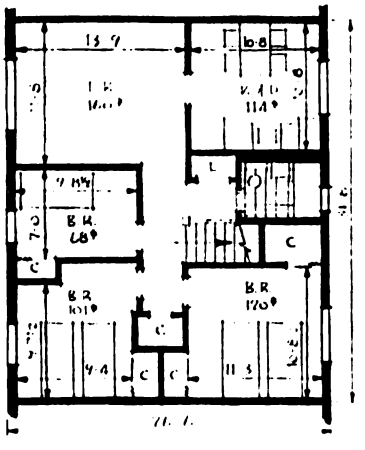


Figure 3. Minimums by USHA for Lanham Act projects (1941): Living room 160 sq. ft.; kitchen 70, with 270 for living-dining-kitchen area; first bedroom 120; secondary bedroom 100 for two people, 65 for one. And they ask 30 sq. ft. of general storage space

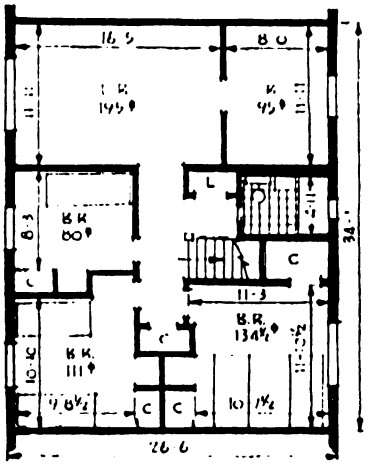


Figure 4. Maximums by USHA for Lanham Act projects: Living room 210 sq. ft.; kitchens 120, with aggregate of 290 for the two areas. First bedroom 130; 110 for two-person secondary bedroom, for one person 80

**Figure 46.** Elisabeth Coit, "Standards for Room Sizes," from "Housing from the Tenant's Viewpoint."

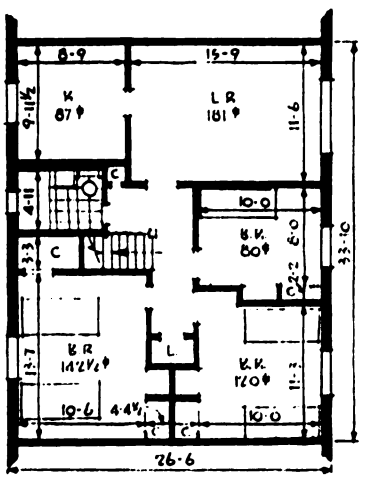



Figure 5. The New York State Board of Housing recommended (1938) simply 180 sq. ft. for living rooms, bedrooms 140, kitchens 70, using "reasonable flexibility" in application. The present regime recommends bedrooms of 120 sq. ft. for two persons, 80 for one

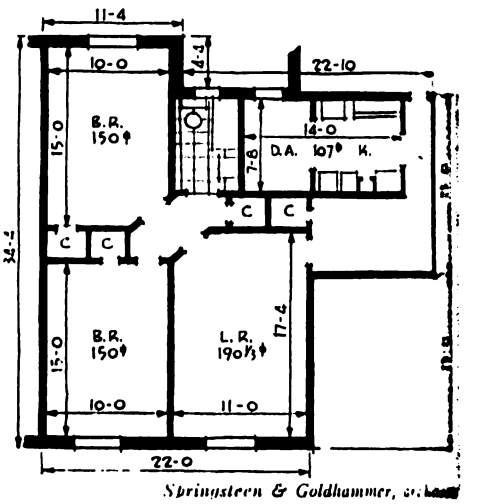



Figure 6. From the tenant's standpoint this plan of Academy Housing Corporation shows very desirable areas. It happens to check quite closely the averages of 14 projects in New York City built "for workers by workers," and is more generous than any "standards"

**Figure 47.** Elisabeth Coit, "Standards for Room Sizes," from "Housing from the Tenant's Viewpoint."

> Of many hundreds of homemakers whose opinions and wishes have been collected by recent investigators, relatively few express any considerable dissatisfaction with the house as a whole in comparison with those discontented with the kitchen and related spaces. Changes desired relate chiefly to inadequate size, poor finish, and unsuitable heights of work surfaces, and to poor planning with regard to other work spaces, rather than to lack of more and better equipment.[27]

Coit found in her research that the preparation of meals and completion of other chores were only part of the kitchen's function. Equally important was its function as a family center. She points out that, in low-income situations, families cannot always afford to properly heat and light the entire unit, and that the kitchen then becomes the most comfortable area in the house. Furthermore, the common practice of doing laundry in the kitchen is over

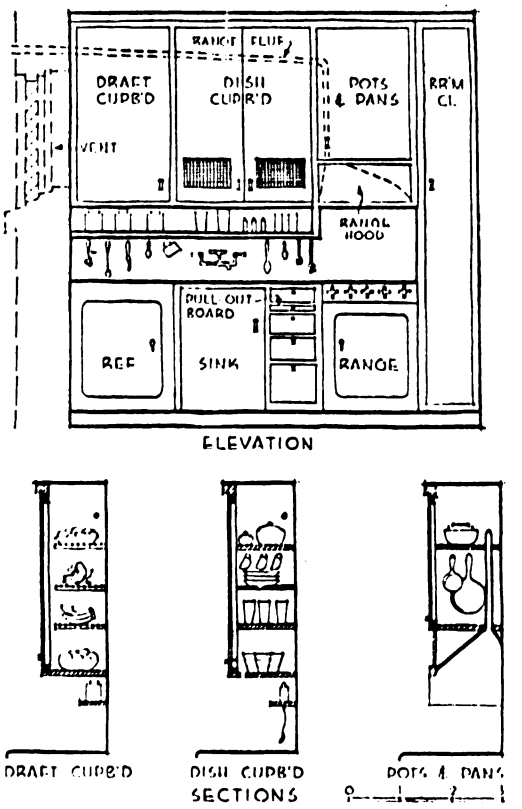
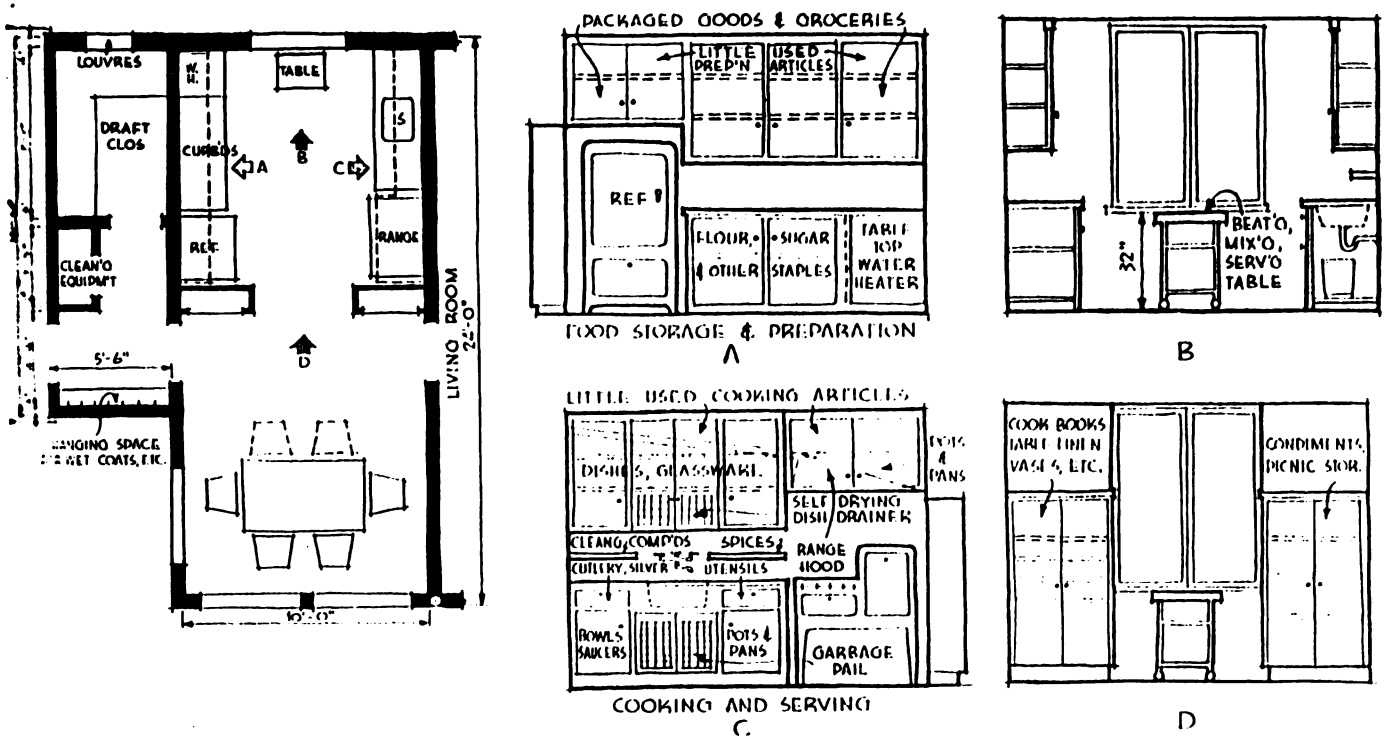



**Figure 48.** Elisabeth Coit, "A One-Wall Apartment Kitchen," from "Housing from the Tenant's Viewpoint."




**IDEAL "MEAL CENTER" FOR A ONE-FAMILY HOUSE**

**Figure 49.** Elisabeth Coit, "Ideal 'Meal Center" for a One-Family House," from "Housing from the Tenant's Viewpoint."

and over reported as being undesirable to most homemakers. Coit has already suggested a bathroom-laundry combination.

In researching dimensions and arrangement of space in the kitchen, Coit found that in theory, most authorities agree. This includes the amount of space needed in front of equipment, the space doors need to swing, the logical arrangement of equipment and the placement of windows and doors in relation to them. Unfortunately, Coit found that, in practice, many buildings' architects and/or planners were not aware of the studies or chose to ignore them, and therefore subjected tenants to poorly designed kitchens. Examples include lack of cupboard space near the sink and placement of a stove/oven too close to a refrigerator, causing it to blister. Her study of the kitchen continues with a thorough discussion of work surfaces (the main difficulty in the unsatisfactory kitchen), the stove, and storage space. She advocates draft or cold cupboard storage (open to outside air) in climates where the temperature from November to May averages in the thirties. She concludes: "Much ado about little, one is inclined to think; yet this space is often at once workshop, factory, laboratory, nursery and family center, operated over a term of years by one individual on whose health and efficiency depends largely the effectiveness of the rest of the family arrangements."[28]

In conclusion, Coit provided architects, planners, and others who had access to her study, ample material to consider when designing and building housing for the middle and low income client. It was, in fact, "much ado about little" that could make all the difference between poorly designed and therefore uncomfortable structures and those designed to meet the user's needs.

## Chapter 4. Endnotes

[1]Robert Moore Fisher, Twenty Years of Public Housing (New York: Harper and Brothers, Publishers, 1959), p. 31.

[2]Ibid., p. 32.

[3]Elisabeth Coit, "Notes on Design and Construction of the Dwelling Unit for the Lower-Income Family - Part I," The Octagon (October 1941): 10.

[4]Ibid.

[5]Ibid.

[6]Ibid., p. 11.

[7]Ibid.

[8]Ibid., p. 13.

[9]Ibid., p. 14.

[10]Ibid.

[11]Ibid., p. 15.

[12]Ibid.

[13]Ibid., p. 16.

[14]Ibid., p. 18.

[15]Ibid.

[16]Ibid., p. 19.

[17]Ibid.

[18]Ibid., p. 20.

[19]Ibid.

[20]Ibid., p. 21.

[21]Ibid., p. 20.

[22]Ibid., p. 23.

[23]Ibid.

[24]"Housing from the Tenant's Viewpoint," Architectural Record (April 1942): 84.

[25]Coit, p. 25.

[26]Ibid.

[27]Ibid.

[28]Ibid., p. 28.

[29]Gwendolyn Wright, "The Model Domestic Environment: Icon or Option?," in Women in American Architecture: A Historic and Contemporary Perspective, ed. by Susana Torre (New York: Watson-Guptill Publications, 1977), p. 18.

## Chapter 5. Elisabeth Coit: Expert on Housing

The publication of "Notes on Design and Construction of the Dwelling Unit for the Lower-Income Family" made Elisabeth Coit suddenly prominent as an expert on housing. The study was published in two parts in The Octagon in October and November of 1941, without illustrations, and again in an abbreviated version with illustrations in the April edition of the Architectural Record. In 1942, it was summarized by the National Association of Housing Officials (NAHO), and in 1943, it was translated and printed by the Argentine government.[1]

Although it is difficult to determine exactly how the study affected the housing industry, it is clear that it did have a definite effect on Coit's career, as she was then sought out time and time again to give lectures, talks on radio and television, and courses on housing and related themes. Her literary skills were also in demand. She served as book reviewer editor for the Architectural Record from 1940 to 1943.

Not only was her expertise solicited by professionals, as we shall soon see, but her notoriety as a woman architect, probably the first to win a Langley scholarship, made her popular in the layperson's circle as well. An article in the New York Times of July 14, 1942, reports a unique course offered by Coit and two other women. Its caption reads, "Woman Carpenter Gives Course As School Board Opens Projects. . .Lone Man, in Search of Plumbing Lore, Is Among 43 Pupils at the AWVS - CDVO Endorses the Program" **(Figures 50 and 51).**


**Figure 50.** Illustration from "Home Repairs: A Handywoman About the House."

**Figure 51.** Illustration from "Home Repairs: A Handywoman About the House."

Coit is quoted:

> "In these days of critical scarcity no subject is more important than a knowledge of how to lengthen the working life of useful equipment already at hand," she said. "As more and more professional labor is siphoned into war industries, most home owners are going to have to learn how to fix their own broken chairs, leaky plumbing and falling plaster."[2]

She strongly advocated that the layperson, especially women, take charge of their lives, not only in home repair, but in all aspects of homemaking and homebuilding. She was not telling women to enroll at MIT to become an architect, as she had done (although she would not have discouraged any woman with a strong desire from doing so), but rather, she constantly emphasized the belief that each individual has talents that can be used in cooperation with the architect and planner in designing and maintaining living space suitable for any given situation, especially if it be lower or middle income. She quotes Mrs. Richards' formula of 1908 as an introduction to an article written for the American Home Economics Association in 1947:

> The true office of the house is not only to be useful, but to be aesthetically a background for the dwellers therein, subordinate to them, not otherwise. . . Let there be nothing in the room which does not satisfy some need, spiritual or physical, of some member of the family.[3]

She continues by encouraging an alert attitude and careful analysis of habits and desires on the part of the family when planning to build, buy or rent a house. She categorizes these needs into surrounding, site and character of community; housing type and layout; and construction, materials and equipment.[4] In "surrounding" site and character of community, Coit mentions an emergence of communities with different types of dwellings as having

definite advantages. "A complete family cycle can be lived in such a community--from the apartment of a young couple to a row house, to a single house for a large family, back to an apartment again when the children are grown."[5]

In the same article, she further encourages the home dweller to take responsibility for the needs of his/her own family, both in choosing a dwelling or, if building, in seeing to it that the new home is adaptable to the family's needs. Once the dwelling is built and the laborers have gone, the family will have to live in its good and bad features: layout, materials, closet space, whatever.

> House interior layouts have been studied, evaluated, and documented in great detail. While many progressive changes have been achieved, difficulties that seem fairly easy of solution still remain. Parenthetically, many of these will remain until the clear-eyed homemaker becomes an articulate co-designer with the professional who makes the plans. Until then one must continue to endure what "they" give: contractor, equipment purveyor, furniture manufacturer, or even one's best friends bearing gifts, from housewarming to Christmas.[6]

The article concludes sounding very similar to the Langley report:

> Opportunity for self-development, for self-expression, for play and amusement are essential to man's well-being. Astonishing to many readers were some findings of an extensive study made a few years ago of factors basic to an understanding of America's housing problems by Dr. Joseph Earl Davis in his book Fundamentals of Housing Study. He said that among things desired by people, after health came experience of freedom resulting from 'plenty of room,' privacy, and creative expression of personality. 'Comfort' trailed long behind, preceded somewhat by 'convenience' and by 'esthetic satisfaction.'[7]

Lectures given to professional groups were characterized by their down-to-earth, practical nature, and, once again, kept in mind those most affected by the professional's decisions, i.e., the client or tenant. In a talk given to the Woman's Architectural Association, in February 1949, while already employed by the New York City Housing Authority, she encouraged the participants to get out and see for themselves the conditions in private and public housing. While official group tours were available for such outings, she preferred a more informal and effective approach. She found that snapping a photograph or two of children playing would often elicit a conversation with the mother, who then may even invite the photographer in to see the dwelling. Certainly women had an advantage over men in this approach. One could then compare how the professional saw the use of space with its actual use by tenants:

> . . .you see the dwelling, not as a neat, poched [sic, hand-written document] plan, with draftsman's furniture in it, but you see the pathetic piano, or the overstuffed 'suite' and the plant stand, or whatever it is that fouls up the dwelling layout because it is what the tenant has and wants. You begin to know how your client lives, which is the beginning of all wisdom for the architect.[8]

In 1942, Coit obtained an emergency war appointment with the Technical Division of the Federal Public Housing Authority Office of Development and Reutilization Bureau as a scientific editor. Her duties were many. Some focused on the compilation, organization and editing of housing design notes. This participation led to two major publications: Manual of Instructions for Erecting Temporary Dwellings, in 1945, and Public Housing Design: A Review of Experience in Low Rent Housing, 1946. In the latter, she was singled out in the acknowledgments of the book for her efforts:

> . . .The basic responsibility for the pulbication rests with the Development and Reutilization Branch of the Federal Public Housing Authority under the leadership of Assistant Commissioner William P. Seaver. Under him in direct charge of the task was Gilbert L. Rodier, Director of the Technical Division, who was ably assisted by his entire staff but notably by Elisabeth Coit.[9]

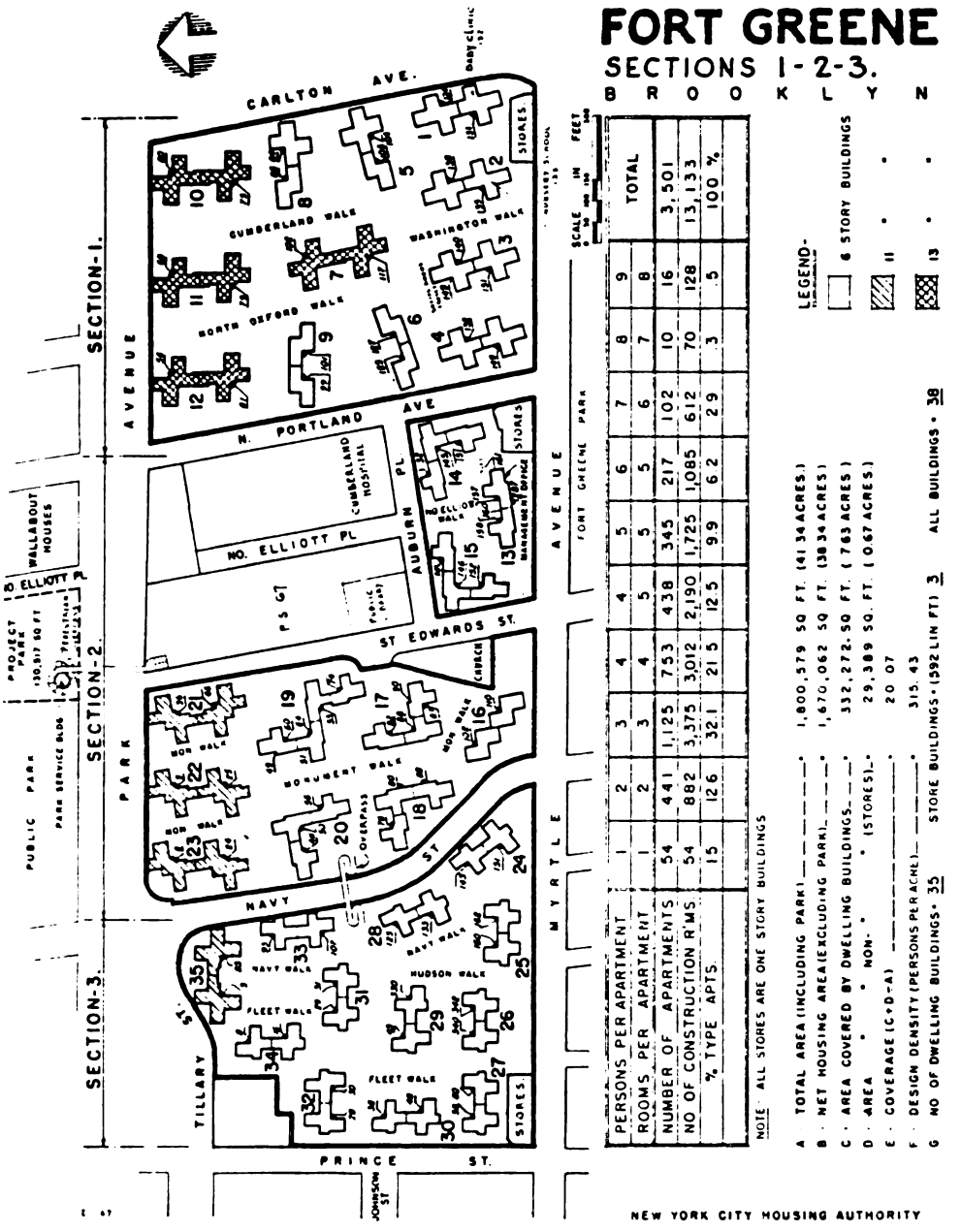
She was also called upon to assist foreign representatives on technical missions who were seeking information on U.S. housing design and construction methods. In this way, she met many people, one or two of whom she was to correspond with over the years.

In 1947, Coit moved back to New York City and was hired by the New York City Housing Authority a year later. During her transition year, Coit worked for the firm of Mayer and Whittlesey as a research associate. Albert Mayer and Julian Whittlesey were partners together in the nineteen-forties and -fifties. They designed housing for India, as well as for a number of American locations, such as New Haven, Connecticut; New York City and New York State; and for the Federal Public Housing Authority. Albert Mayer was appointed to a team of architects to design the Fort Greene Houses in Brooklyn, New York, an International style complex, completed in 1944 **(Figures 52** and **53).** Julian Whittlesey was one of three architects appointed to design two housing projects, the James Weldon Johnson Houses in New York City **(Figures 54** and **55),** completed November 1948, and the Colonial Park Houses, also in New York City **(Figure 56),** completed after 1949. Both, again, were influenced by the International style.

She also held membership on the Housing Committee of the New York Chapter of the AIA, which, from 1947-1949, undertook a study that resulted

**Figure 52.** Harrison and Fouilhoux in association with Candela and Mayer, Fort Greene Houses, Brooklyn, New York, 1944, (The Significance of the Work of the New York City Housing Authority).

in a publication entitled, The Significance of the Work of the New York City Housing Authority, part of a broader series on large-scale housing in New York. Included on the list of members were Chairperson Arthur C. Holden, Vice-Chairpersons Perry Coke Smith and Henry S. Churchill, and members Malcolm G. Duncan, William I. Hohauser, George Nemeny, Clarence S. Stein, John A. Wahl, and Roland Wank, all architects with housing backgrounds. Publication of the committee's findings was made possible through a grant from the Arnold W. Brunner Scholarship Fund of the New York Chapter of the AIA. Even though Coit spent only the first year on the committee (she was hired by the Housing Authority before her term expired), she was again singled out for her extra efforts. Note that these extra efforts, as was often the case, dealt with work




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|
| PERSONS PER APARTMENT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| ROOMS PER APARTMENT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| NUMBER OF APARTMENTS | 54 | 441 | 1,125 | 753 | 438 | 345 | 217 | 102 | 16 | 3,501 |
| NO OF CONSTRUCTION R'MS | 54 | 882 | 3,375 | 3,012 | 2,190 | 1,725 | 1,085 | 612 | 128 | 13,133 |
| % TYPE APTS. | 1.5 | 12.6 | 32.1 | 21.5 | 12.5 | 9.9 | 6.2 | 2.9 | .5 | 100 % |

**Figure 53.** Fort Greene Houses floor plans (The Significance of the New York City Housing Authority).

**Figure 54.** Whittlesey, Prince and Reiley, James Weldon Johnson Houses, New York City, New York, 1948 (The Significance of the Work of the New York City Housing Authority).

that was far from glamourous: ". . .and also to Elisabeth Coit, AIA, who compiled Appendix A prior to her resignation from the Committee to accept an appointment to the staff of the New York City Housing Authority."[10]

In its conclusions, the Committee expressed concern over the image of public housing in the eyes of the public, a concern again expressed most recently by Richard Pommer (at the end of **Chapter 2),** and others. The Committee found that:

> The Authority has been handicapped by the assumption on the part of the public that public housing, and therefore, that its tenants should be made slightly uncomfortable. The implication is that public housing tenants ought to be influenced to seek 'better' housing at an economic rent as soon as they find it possible.[11]
>
> Had the Authority been free to exercise the same originality and courage in design that has been demonstrated in Sweden's public housing, the American public by this

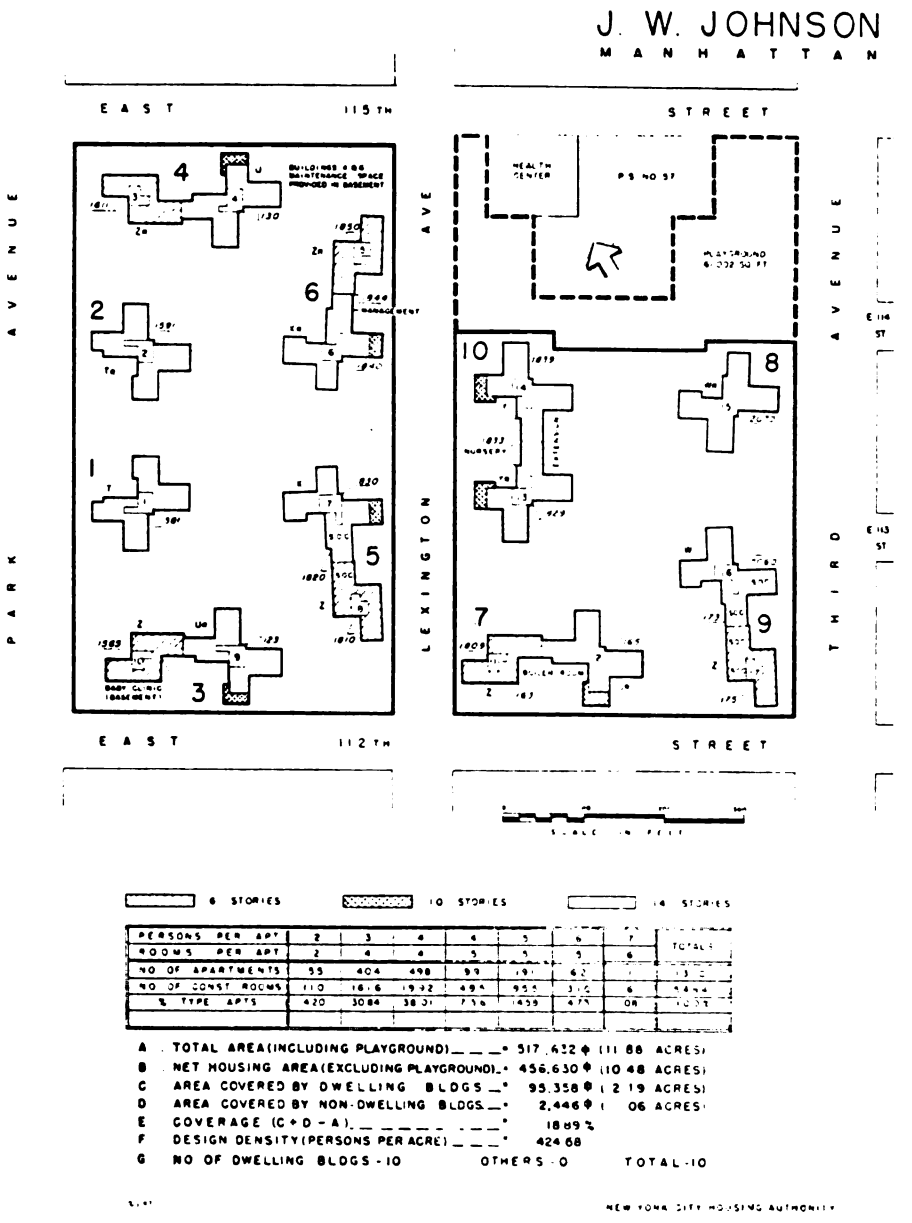
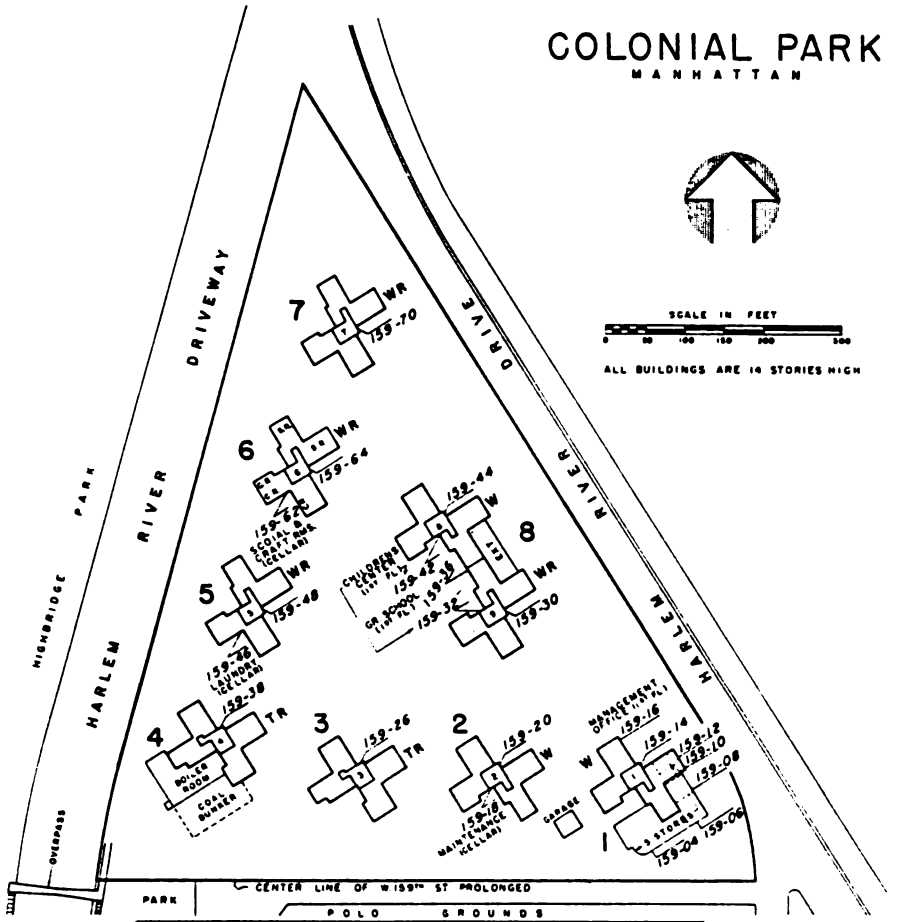



**Figure 55.** James Weldon Johnson Houses, floor plans, (The Significance of the Work of the New York City Housing Authority).




| | | | | | | |
|---|---|---|---|---|---|---|
| PERSONS PER APARTMENT | 2 | 3 | 4 | 4 | 5 | TOTAL |
| ROOMS PER APARTMENT | 3 * | 4 | 4 | 5 | 5 | |
| NUMBER OF APARTMENTS | 95 | 34 | 665 | 95 | 95 | 984 |
| NO. OF CONSTRUCTION RMS. | 285 | 136 | 2660 | 475 | 475 | 4031 |
| NO. OF RENTAL ROOMS | – | – | – | – | – | 4472½ |
| % TYPE APARTMENTS | 9.7 | 3.4 | 67.5 | 9.7 | 9.7 | 100.0 % |

* C.S. COUNTED AS ONE CONST ROOM

| | | |
|---|---|---|
| A. TOTAL AREA | 475,672 | SQ. FT (10.92 ACRES) |
| B. NET HOUSING AREA | 475,672 | SQ. FT (10.92 ACRES) |
| C. AREA COVERED BY DWELLING BLDGS. | 58,570 | SQ. FT ( 1.34 ACRES) |
| D. AREA COVERED BY NON-DWELLING BLDGS. | 13,101 | SQ. FT ( 0.30 ACRES) |
| E. COVERAGE (C + D + A) | 15.07 | % |
| F. DESIGN DENSITY (PERSONS PER ACRE) | 349 | |
| G. NO. OF DWELLING BUILDINGS | 8 | |

**Figure 56.** Whittlesey, Prince and Reiley, Colonial Park Houses, New York City, New York, 1949 (The Significance of the Work of the New York City Housing Authority).

> time would have had the benefit of far more worthy examples upon which to base its judgment and demands for similar efforts from private industry.
>
> The public is at present educated to expect a higher standard for public buildings, even of a correctional nature, than it is for public housing[12] **(Figure 57).**

Once again, then, we are reminded that Elisabeth Coit was not only working in a professional environment unfavorable to women, but also in a realm of architecture not highly thought of by the public-at-large.

From 1948 until her retirement in 1962, Coit was Principal Project Planner in the Design Division of the New York City Housing Authority. She acted as a liaison between architects who were contracted to design the housing projects and the NYCHA, provided visiting foreign and U.S. officials and technicians with housing and construction information, kept a check on plans and drawings for the half-dozen or more projects always in progress, and served as editor of a manual of procedures, requirements and advice directed to the architects.[13] This document, "Memo to Architects," was under constant revision as standards and regulations were continuously being updated. From the point of view of the outsider, her work at the Housing Authority appears to be rather anonymous. Even though she was editor of "Memo to Architects" for several years, neither her name nor anyone else's was mentioned within its covers. To those within the Authority, her work must have been invaluable. When she retired in 1962 at the age of seventy, the NYCHA Bulletin noted under a photograph of Elisabeth Coit and nine of her colleagues, all male:

> **Retires** - A group of colleagues and friends extend their best wishes to Principal Project Planner Elisabeth Coit at a gathering prior to her retirement. Miss Coit has, for 14 years, occupied one of the most

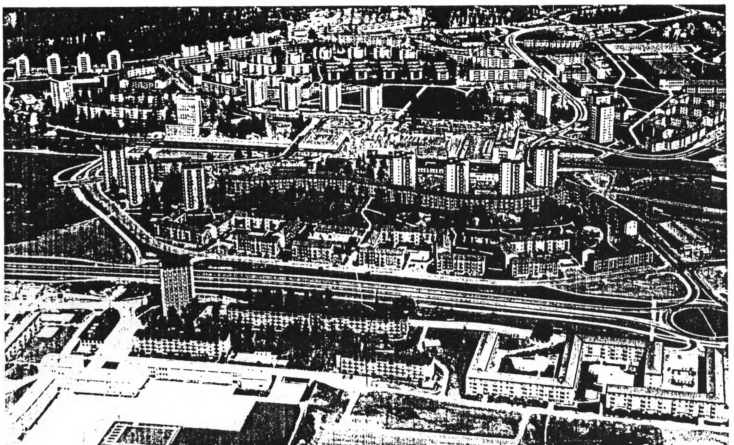


**Figure 57.** Sven Markelius, Vallingby, Sweden, begun 1953 (Arnason, A History of Modern Art).

> challenging and demanding posts in the Authority. She is widely admired and respected not only for her extraordinary technical competence but also for her charm and graciousness. . .[14]

In 1955, Elisabeth Coit became one of forty-three newly elected Fellows of the AIA.[15] She was the only woman then and one of the very few women ever to be elevated to such a rank within the AIA. She was cited for her excellence in literature and public service. This type of recognition surely indicated that the effects of her diligent efforts toward the advancement of housing, especially low-income housing, must have been substantial. The Langley report, her in-depth involvement in the publications of Public Housing Design and "Memo to Architects," her numerous journal articles, and her position as book review editor for the Architectural Record all greatly influenced the field of housing. Her many years of service in the public sector made her an invaluable source of information, both technical and practical. Her radio talks, lectures and magazine articles gave broad currency to her ideas and knowledge.

Her professional writing continued well into her lengthy retirement of over twenty years. Most notable is a 1965 study sponsored by the Housing and Home Finance Agency of the Public Housing Administration (PHA), a Federal agency. Entitled "Report on Family Living in High Apartment Buildings," it begins with the premise that what is successful in a rowhouse or walk-up apartment is not necessarily appropriate in a high-rise structure. The report approaches her subject in a fashion similar to that of the Langley report: through a compilation and evaluation of data, which then lead on to identification of problems inherent in high-rise housing.[16] She then offers suggestions, for example, regarding the safe use and maintenance of elevators. Coit describes them as ". . .the most fascinating bit of play equipment that an

indulgent authority can provide for its children."[17] She suggests self-service buttons placed out of the reach of small fingers and patterned, stainless steel interior walls to discourage crayon and other types of marks (**Figures 58** and **59**).

**Figure 60** represents another suggestion based on a British solution to enhance the appearance of lobbies by introducing bright colors and patterns to the walls. Here, children's drawings are reproduced in ceramic tile.

The report, released in May of 1965, must have been a success. By December of the same year, the Government Printing Office had sold 3,800 copies, and the Public Housing Administration had sent out more than 2,000 copies.[18] An official in the PHA called it ". . .an invaluable tool for use in future design seminars,"[19] while a book reviewer deemed it ". . .required reading for housers."[20]

Coit's activities in an editorial capacity continued as well. From 1967 until the mid-seventies, she edited the New York Metropolitan Chapter of the National Association of Housing and Redevelopment Officials (MET-NAHRO) newsletter, for which she was given a special award by its Executive Board in 1975.[21]

Elisabeth Coit also wrote poetry. During an excursion to Europe aboard the Greek ship, **TSS Nea Hellas**, two of her poems were printed in the ship's daily news bulletin. Here is one, entitled "Newyorkophilia:"

> I love many city sights,
> Fire engines, subway lights,
> Flower carts and oil on puddles,
> Gamins shooting craps in huddles
> But far better than all these,
> Flaming cast-off Christmas trees.
>
> Echoit.[22]

**Figure 58.** "Small Lobby," photograph in "Report on Family Living in High Apartment Buildings," by Elisabeth Coit.

**Figure 59.** "Family Participation," photograph in "Report on Family Living in High Apartment Buildings," by Elisabeth Coit.

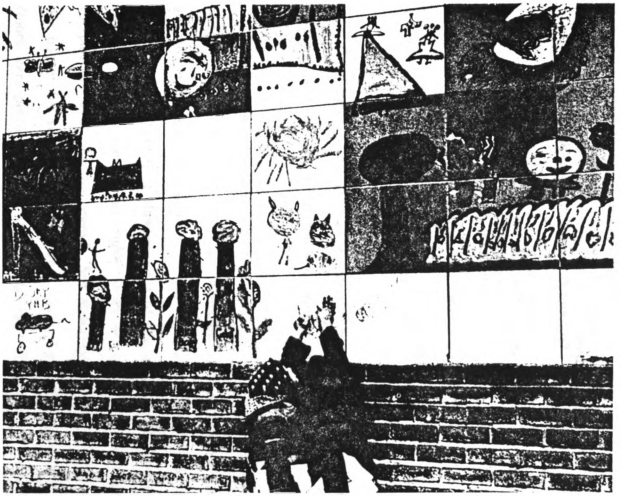


**Figure 60.** "Children's Work Reproduced in Tile," in "Report on Family Living in High Apartment Buildings," by Elisabeth Coit.

One whimsical poem, a response to a comment by the chairman of the City Planning Commission, that no tree existed sturdy enough to withstand New York City, was noted in the February 3, 1965, issue of the New York Times. It reads in part:

> Commissioner, do you indeed
> Despise the city's handsome weed
> That fills New Yorkers' summer need,
> The gracious-leaved Ailanthus?
>
> So forward-looking in your stance
> You don't enjoy the backyard plants.
> Plebeian, yet with elegance,
> This paradox, Ailanthus.
>
> Do, please, your prejudice forget,
> And learn to love the city's pet
> Whose palmy fronds with clusters set
> Fail never to enchant us.[23]

Coit drew no less than an equally whimsical response in verse from the chairman and his spouse. It too was printed in the article.

Among her other activities that continued into her retirement was consultative work for various firms and agencies. She sometimes was asked to act in the capacity of a quality control expert, examining structures being built. Her nephew, Robert Coit Hawley, tells of her awareness in certain instances that her being a woman was cause for an occasional contractor or two to try to "pull the wool over her eyes." She apparently always carried a marble in her pocket for such occasions when a contractor would assure her that the floors were perfectly level. She, of course, knowing better, would take the marble out of her pocket, place it on the floor and watch it roll, exclaiming, "Oh, really?!"[24]

In 1970, at the age of seventy-seven, Coit was appointed by Mayor John Lindsay to serve on the Landmark Preservation Committee, which voted to preserve buildings that were both aesthetically significant and of historical value to the City of New York. Among those preserved by the committee were Grand Central Station, Carnegie Hall and Radio City Music Hall. Coit served on the Landmarks Committee into her mid-eighties and, as mentioned earlier in this paper, insisted on visiting every site under consideration, almost always via public transportation.

Toward the end of her life, she received some well-deserved recognition for her many accomplishments. In 1969, The New York Chapter of the AIA gave her a special award as "Pioneer in Architecture." That same year, she was the recipient of the Wilson College Centennial Celebration Award and, in 1984, the Alliance of Women in Architecture bestowed on her a special award.

Finally, in her nineties, Elisabeth Coit moved from Manhattan to a nursing home in Amherst, Massachusetts, close to her original roots. Her sister Mary, with whom she had lived during most of her retirement years, had died, and her health was failing. Her obituary of April 7, 1987, in the New York Times, labelled her an architect and landmark authority. Thus she had not sunk into oblivion, as so many other women architects had. A memorial service at a family home in Rockport, Massachusetts, included, among others, the following drawings reminiscent not only of her artistic ability but also of her sense of humor and love of life **(Figures 61-66).**

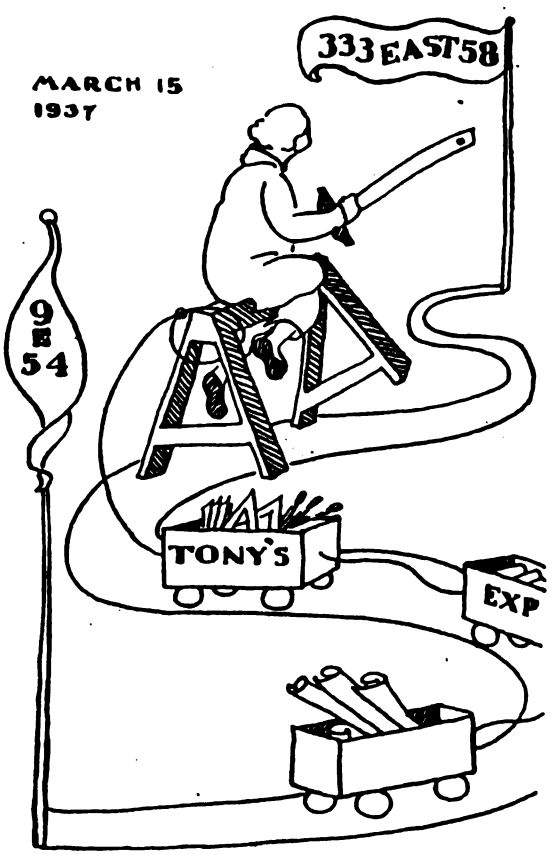



**Figure 61.** Elisabeth Coit, "Tony's Express," drawing, March 15, 1937.


**Figure 62.** Elisabeth Coit, "Christmas Greetings."

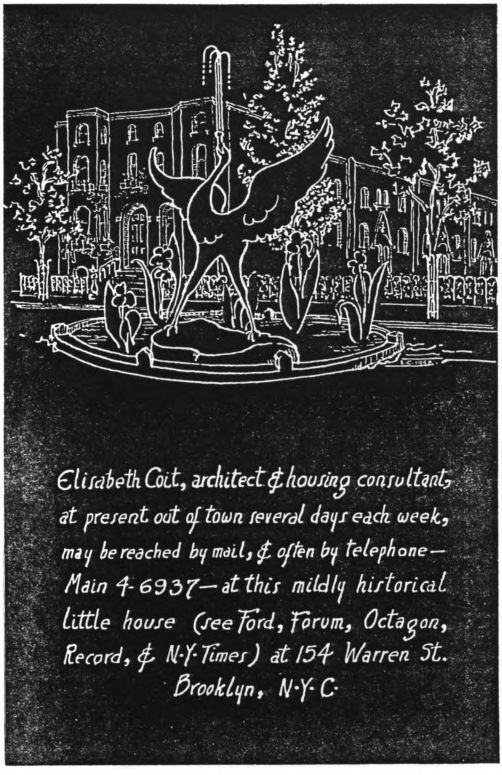



**Figure 63.** Elisabeth Coit, drawing.


**Figure 64.** Elisabeth Coit, Memorial service cover adapted by family from an Elisabeth Coit drawing, April 12, 1987.

**Figure 65.** Elisabeth Coit, drawing.

**Figure 66.** Elisabeth Coit, drawing.

## Chapter 5. Endnotes

[1]It is unknown to the writer why the Argentine government, in particular, chose to translate and print the article.

[2]"Woman Carpenter Gives Course As School Board Opens Project," New York Times, 14 July 1942, n. p.

[3]Elisabeth Coit, "Pointers in Dwelling Design," Journal of Home Economics 39 (January 1947): 17.

[4]Ibid.

[5]Ibid., p. 18.

[6]Ibid., p. 19.

[7]Ibid., p. 22.

[8]_____, Lecture for Women's Architectural Association (February 1949), p. 7.

[9]National Housing Agency, Federal Public Housing Authority, Public Housing Design: A Review of Experience in Low-Rent Housing (Washington, D. C.: Government Printing Office, 1946), p. v.

[10]The Committee on Housing of the New York Chapter of the American Institute of Architects, The Significance of the Work of the New York City Housing Authority, "Large Scale Housing in New York, Monograph #1," New York, 1949, p. 4.

[11]Ibid., p. 97.

[12]Ibid., p. 100.

[13]New York City Housing Authority, "Memo to Architects," New York, 1952.

[14]"New York City Housing Authority Bulletin," 14 (July-August 1962), n. p.

[15]"Portrait," American Institute of Architects Journal 24 (July 1955): 25.

[16]Elisabeth Coit, "Report on Family Living in High Apartment Buildings" (Public Housing Administration, Housing and Home Finance Agency, 1965): 1.

[17]Ibid., p. 14.

[18]Letter to Elisabeth Coit from Thomas B. Thompson, Assistant Commissioner for Development, Department of Housing and Urban Development, Housing and Home Finance Agency, Public Housing Administration, Washington, D. C., 7 December 1965, Elisabeth Coit Papers, Schlesinger Library, Radcliffe College, Cambridge, Massachusetts.

[19]Ibid.

[20]Roger G. Spross, "Book Review," Empire State Architect (March - April 1966): 30.

[21]Elisabeth Coit Papers, Schlesinger Library, Radcliffe College, Cambridge, Massachusetts.

[22]Ibid.

[23]William E. Farrell, "Stubborn Tree Evokes the Muse in an Architect and a City Aide," New York Times, 3 February 1965, p. 25, col. 5.

[24]Robert Coit Hawley, telephone interview, 12 September 1988.

## CONCLUSION

Elisabeth Coit, architect, planner, traveller, writer, and expert on housing, left behind not a legacy of concrete and brick, but rather a solid image as a role-model. As a woman, she chose to pursue a career during a time in which only her family would give her encouragement and support. As a career woman, she chose a profession very few other women had pursued, and in which even fewer were able to succeed. Thus, support from others in her profession did not come from women, but rather, from those male colleagues who could tolerate a woman as an architect. As such, she chose to focus her efforts on housing. She rejected the notion that the lower and middle class home could be designed as ". . .a somewhat abbreviated edition of the large scale home," advocating solutions that fit the needs of the lower and middle classes. By projecting herself into the daily existence of the tenant and by not ignoring even the smallest of details, she became acutely aware of those needs. As an expert on public housing, she became an advocate for lower-income tenants during a time in which it was not fashionable to speak on their behalf.

Her pragmatic approach has not only set a glowing example for the many others who have followed in her footsteps, but her perseverance and commitment have given great encouragement to those of us who have known her only through this thesis. She truly was a pioneer in architecture.

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# BIBLIOGRAPHY

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