1990

Hilton Village, Virginia: The Government's First Model Industrial Community

Margaret M. Mulrooney
College of William & Mary - Arts & Sciences

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HILTON VILLAGE, VIRGINIA
The Government's First Model Industrial Community

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A Thesis
Presented to
The Faculty of the American Studies Program
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts

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by
Margaret M. Mulrooney
1990
APPROVAL SHEET

This thesis is submitted in partial fulfillment of the requirements for the degree of

Master of Arts

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Approved, August 1990

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ABSTRACT

Although many historians have examined working-class housing in the context of the Progressive movement, few have explored the crucial relationship between housing reform and social conflict, where housing betterment was used to combat disorder in the urban community. In this thesis I will explore the use of model industrial housing as an instrument of social reform in the early twentieth century, focusing specifically on Hilton Village, Virginia, the government's first model industrial community.

Industrialization, urbanization, and mass immigration caused profound changes in the relationship between capital and labor. As the number of conflicts increased throughout the nineteenth century, astute observers began to realize that labor unrest was not entirely due to lack of adequate pay; it was also the result of poor living conditions. Believing that substandard dwellings not only nurtured the cycle of disease and poverty, but contributed to social and family demoralization, middle-class reformers advocated housing betterment as the solution to social disorder. Yet few individuals or institutions had the resources necessary to implement such a large-scale programs of reforms. When the federal government commissioned emergency housing for war workers in 1917, reformers finally gained a proving ground for their social theories. Using Hilton Village as a case study, I will argue that planned, well built workers' housing not only reflected Progressive-era reforms, corporate benevolence, and architectural genius, but was intended to offset class conflict by imbuing working-class families with middle-class standards of living.
HILTON VILLAGE, VIRGINIA

THE GOVERNMENT'S FIRST MODEL INDUSTRIAL COMMUNITY
CHAPTER I
INTRODUCTION

As Lizabeth Cohen noted, "historians have examined working-class housing primarily in the context of the Progressive-Era housing reform movement."\(^1\) That is, they have concentrated on assessing the role of housing in late nineteenth- and early twentieth-century social and labor reforms. Many of these studies have grown out of architectural or planning history, and as such, focus on stylistic analysis. This approach treats housing simply as an expression of the companies' benevolence, the designers' genius, or the reformists' influence. The works of John Reps and Leland Roth are part of this trend.\(^2\) Other studies attempt to analyze the role of housing in a specific community; that is, why it was built, what it did for the residents, and how the community responded. Stanley Buder's Pullman, Richard M. Candee's Atlantic Heights, and John S. Garner's The Model Company Town are some of the best examples of this genre. While each of these works has

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furthered our understanding of working-class life, none have adequately explored the crucial relationship between housing reform and social conflict, where model industrial housing was used to combat disorder in the urban community.\(^3\)

In this thesis I will explore the use of model industrial housing as an instrument of social reform in the early-twentieth century, focusing specifically on the model communities built by the government during World War I. The first of these federal developments was Hilton Village, located near Newport News, Virginia. The list of cities with government housing projects also includes Bridgeport, Connecticut; Portsmouth, New Hampshire; Wilmington, Delaware; Bristol, Pennsylvania; Camden, New Jersey; Perryville, Maryland; and Craddock, Virginia, among others. Using Hilton Village as a case study, I will argue that planned, well-built industrial communities not only reflected Progressive-era reforms, corporate benevolence, and architectural genius, but were intended to imbue working-class families with middle-class values.

The average working-class house in the early-twentieth century reflected the desires of its builder or seller rather than its occupant. The designers of Hilton Village

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noted "it is very seldom that a workingman builds his own house in accordance with his own ideas. He buys a house or rents, and has to take what the market affords." Variations in workers' dwellings over time and place, then, reflect not only changing attitudes about what constituted "appropriate" workers' housing but are linked to changing perceptions of the people housed. While the study of workers' housing from the perspective of its inhabitants is a valid and vital concern, I have instead chosen to examine the perspective of its creators; that is, the industrialists, designers, and housing reformers whose perceptions of the working class determined the physical appearance of Hilton Village. In this way, I hope to better illustrate how differences between working-class houses reflect the hierarchy of American laborers in the early twentieth century.

Historians still have difficulty defining the terms middle class and working class because both can be described through a wide range of social, economic, political, and ideological characteristics. In general, though, there are several basic traits that distinguish each group. Work is

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4 Henry V. Hubbard and Francis Y. Joannes, "Government Industrial Housing A Business Proposition," The American Architect 114, no. 2224, 159. Archaeologists Mary Beaudry and David Landon suggest that, as renters, working-class families were unable to make alterations to the physical structure and therefore expressed individuality through the manipulation of objects and interior spaces instead. See "Domestic Ideology and the Boardinghouse System at Lowell, Massachusetts," a paper presented at the Dublin Seminar for New England Folklife (July 1988).

5 Stuart Blumin divides these traits into five categories: work, consumption, residential location, formal and informal voluntary associations, and family organization and strategy. Blumin explores these categories and how they distinguish middle-class life experiences from those of the working class in "The Hypothesis of Middle-Class Formation in Nineteenth-Century America: A Critique and Some Proposals," The American Historical Review 90, no. 2 (April 1985), 312.
the most obvious point of departure, where manual labor de­
fines the working class and nonmanual labor, the middle
class. The distinction Americans made between "hand-workers
and pen weilders, operatives and clerks, the blue collar and
the white" had profound ethnic and religious connotations.6
During the nineteenth and early twentieth centuries,
working-class families were predominantly foreign-born.
Hailing primarily from Ireland and Eastern and Southern Eur­
oppe, these immigrants were overwhelmingly Catholic. After
the Civil War, native-born blacks were aligned with the
working class. The middle class, by contrast, was almost
exclusively white, Anglo-Saxon and Protestant. These at­
tributes, in turn, led to cultural and ideological differ­
ences. The middle class, for example, favored the self-
sufficient nuclear family as the basic social unit, while
the working class incorporated complex support networks of
extended families and friends. Because of its homogeneity
and established residence, the middle class enjoyed a high
degree of political solidarity and power. The working class
was heterogeneous and thus unorganized. Despite these dif­
ferences, the line separating middle class from working
class was vague. Most skilled laborers, for example, found
themselves caught in a social void by the turn of the cen­
tury. Close to the middle class in ethnicity, aspirations,

6Sam Bass Warner., Jr., The Urban Wilderness: A History of the American City, 77, qoted in Blumin,
316.
and ideology but removed economically, skilled workers, such as shipbuilders, were the chief beneficiary of most reform activity. In this way, reformers theorized, middle-class standards of living would trickle down to the unskilled masses and put an end to social unrest. The strategy ultimately failed, of course, because housing betterment alone could not resolve the larger problems of life in an industrial society.

The United States underwent a tremendous transformation during the decades immediately preceding World War I. Many Americans viewed the effects of industrialization, mass immigration, urban rootlessness, and depression with mounting alarm, but city dwellers were especially anxious. Those who could afford to move sought safety in the new "streetcar suburbs." Those left behind saw living conditions deteriorate rapidly.

By the early-twentieth century, decent, affordable, working-class housing was in short supply. Progressive studies like How the Other Half Lives (1890) by Jacob A. Riis; Prisoners of Poverty (1887) and Women Wage Earners (1893) by Helen S. Campbell; The Standard of Living among Workmen's Families (1909) by Robert C. Chapin; and Homestead: The Households of a Mill Town (1911) by Margaret Byington confirm that living conditions for industrial workers were notoriously bad. Most families lived in urban

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7 Blumin 312.
slums or isolated company towns. Accommodations ranged from boardinghouses to urban tenements, rowhouses, and detached cottages. Some of the housing was built by speculators, who then sold it to working-class families for profit. Others were built by laborers themselves. Most workers' housing, though, was either built by employers or speculators as rental units. While many laborers were eventually able to purchase a home of their own, renting remained the norm for most working-class families in the nineteenth and twentieth centuries.

With space at a premium, rents in urban tenements were high, and amenities few. Large families crammed themselves into a few rooms and often took in boarders to supplement their meager incomes. In some cases, entire buildings had only one water pump in the rear yard and one or two communal outhouses. Apartments and houses were small, dark, and faced onto narrow alleys or air shafts, while in many tenements only front and rear rooms had any windows at all (See Figures 1 and 2).

Despite the gloomy picture presented by reformers, living conditions in working-class districts were by no means uniform. Americans and English-speaking immigrants, for example, tended to occupy better-quality accommodations than their Eastern and Southern European neighbors. Skilled workers were usually better off than unskilled workers, and whites better off than blacks. Most reformers noted these
Figure 1

View showing the sleeping arrangements of lodgers in a New York tenement around 1890. Taken from Jacob Riis, *How the Other Half Lives*. 


Figure 2

View showing working-class living conditions in a New York tenement court. Taken from Jacob Riis, How the Other Half Lives.
differences in their investigations of working-class living conditions, but attributed them to nationality rather than occupation. As Daniel Horowitz noted in his analysis of Progressive budget studies, reformers therefore missed the important correlation between achieving a satisfactory standard of living and having a skilled job.8

These differences in living conditions were readily noted by Margaret Byington, who described an English-speaking enclave in the steel-making community of Homestead, Pennsylvania, as follows:

The common type of house has four rooms, two on a floor . . . Some of the houses contain five rooms. In a row of such houses, the dining room, back of the "front room," is lighted only by a window on the narrow passageway between houses, and is never reached by direct sunlight. The monotony of street after street is broken only by the bits of lawn and flowers in front.9

In these neighborhoods, children played in their backyards, while parents relaxed after a hard day's work. Violets and roses bloomed next to the family vegetable plot. Many dwellings had running water, if only from a spigot on the rear porch. These families also attempted to maintain a separate parlor, "the center of home life," according to Byington.

The furniture, though sometimes of the green plush variety, often displays simplicity and taste. A center table, a few chairs, a couch, and frequently either an organ or piano complete the furnishings. Usually there are pictures--the family portraits or some colored

8 Horowitz, 59. Most studies of working-class living conditions were written to shock the general public into action. Hence, descriptions of hard-working families with decent homes received far less attention.

lithographs—and almost always that constant friend of the family, the brilliantly colored insurance calendar.  

Interior photographs also show elaborate wallpapers and borders, heavy gilt picture frames, lace antimassars, carpets, curtains, and variety of knick-knacks (See Figure 3).

The homes of unskilled Slavic families were quite different. They were smaller and stood in the shadow of the steel mills. In one typical dwelling, Byington reported:

The kitchen, perhaps 15 by 12 feet, was steaming with vapor from a big washtub set on a chair in the middle of the room. On one side of the room was a huge puffy bed, with one feather tick to sleep on and another for covering; near the windows stood a sewing machine; in the corner, an organ—all these besides the inevitable cookstove . . . Upstairs in the second room were one boarder and the man of the house asleep. Two more boarders were at work, but at night would return home to sleep in the bed from which the others would get up.  

A mother and two small children were also in residence (See Figure 4). While the possession of an organ and sewing machine would have been commended by middle-class reformers as a sign of middle-class aspirations, the overcrowded rooms, boarders, and lack of privacy made this home a prime target for improvement. Conditions on the outside were even worse).

Turning from the alley through a narrow passageway you find yourself in a small court, on three sides of which are smoke-grimed houses, and on the fourth, low stables. The open space teems with movement. Children, dogs and hens make it lively under foot; overhead long
Figure 3

Interior view of a skilled American laborer's parlor around 1910. Taken from Margaret Byington, Homestead: The Households of a Milltown.
Figure 4

Interior view of an unskilled immigrant's one-room dwelling around 1910. Taken from Margaret Byington, Homestead: The Households of a Milltown.
lines of flapping clothes must be dodged. A group of women stand gossiping as they wait their turn at the pump—which is one of the two sources of water supply for the twenty families who live here. . . . Accumulations of rubbish and broken pavements render the courts as a whole untidy and unwholesome. Some of the houses have small porches that might give a sense of homeliness, but for the most part, they are bare and dingy. As the houses are built close to the street, the tenant can scarcely have that bit of garden so dear to the heart of former country dwellers (See Figure 5).  

Dreary as the interior and exterior seemed, Byington found the real horrors to be an inadequate water supply, meager toilet facilities, and severe overcrowding.

Similar conditions characterized company towns. A 1917 study of company housing conducted by Leifur Magnusson for the Bureau of Labor Statistics described the average company house. It determined that plain, four-, five-, and six-room houses were most prevalent, that construction was mostly of wood, and that such "modern conveniences as a bath, watercloset, sewer connections, and water or lighting system" were lacking. The vast majority of company houses rented for one week's wages, or less than $8 per month, a fact which prompted Magnusson to conclude that "over two-thirds of all company houses are well within the means of the low-paid, unskilled worker." Affordability, however, often relegated these low-skilled workers to substandard housing.

Middle-class definitions of affordable housing were

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12Ibid., 131 and 136.

Two views showing the contrast between housing for unskilled immigrants and skilled Americans around 1910. Taken from Margaret Byington, Homestead: The Households of a Milltown.
often incompatible with the workers' reality. Most families, for example, had one principal wage-earner. Although earning the same wage, a bachelor or a man with few dependents usually fared better than one with many children. Without job security, insurance or workmen's compensation, the effects of periodic layoffs, wage cuts, and illness were devastating to family finances. Death and disability were even worse. Nevertheless, few landlords took these factors into consideration when determining rents.

High rents, overcrowding, slipshod construction, and inadequate sanitation were among the most common complaints laborers and their families voiced. In addition, most communities exhibited extreme monotony, a total "disregard of the advantages of vegetation," and a "failure to maintain the houses and their surroundings properly." Most of all, Magnusson noted, "there has been a failure to study the desires of the workman in the matter of the type of house to be provided."14 By the turn of the century, replacing the delapidated, congested, and unsanitary dwellings in urban slums and company towns with model housing had become an important goal of the Progressive movement.

In *The Age of Reform*, Richard Hofstadter defines the Progressive Movement as a dual program of economic remedies designed to minimize perceived danger from the extreme left and right. While the middle class feared the restless mas-

14 Ibid., 37, 41, 47.
ses on one side, it had an equal fear of plutocracy on the other. Reformers therefore advocated two lines of action: minimize the exploitation of American laborers so as to avoid social strife, and regulate big business in order to restore and maintain competition. Their chief weapons were housing reform and trust-busting, respectively.

The Progressives maintained that substandard dwellings nurtured the cycle of disease and poverty and contributed to family and social demoralization. Embracing the idea that domestic architecture could "reinforce certain character traits, promote family stability, and assure a good society," these middle-class reformers advocated housing betterment as the solution to social strife, but few individuals or institutions had the resources necessary to implement such a large-scale program of reforms. When the federal government commissioned emergency housing for war workers in 1917, reformers finally gained a proving ground for their social theories.

By 1914, the tension between labor and capital had reached fever pitch. The war in Europe had put an end to immigration, and consequently, to the number of unskilled workers entering the United States. At the same time, mobilization created a greater demand for industrial goods at

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16Lubove, 55.
home and abroad. Unemployment fell and wages rose. As their bargaining power improved, American workers grew increasingly more militant. Between 1915 and 1916, for example, the number of strikes doubled from 1,589 to 3,789, more than any other year in American history.\textsuperscript{18} The government, in response, established tripartite commissions to oversee mediation efforts. The National War Labor Board, created in 1918, outlawed all strikes and lockouts for the duration of the war and made employers recognize the rights of workers to organize and bargain collectively. At the same time, the Board established an eight-hour work day and fixed wages. With federal support, workers joined unions in unprecedented numbers.\textsuperscript{19}

As a result of the war in Europe, Congress had established the United States Shipping Board "for the purpose of encouraging, developing, and creating a naval auxiliary and naval reserve, and a merchant marine to meet the requirements of the commerce of the United States with its territories and possessions, and with foreign countries."\textsuperscript{20} When the federal government declared war on Germany in 1917, the activities of the Shipping Board shifted into high gear. Although increased production aided employment, it exacer-


\textsuperscript{19}Ibid., 122-6.

\textsuperscript{20}U. S. Congress. Senate. \textit{Establishment of Shipping Board}, 64th Congress, 2nd session, 1917, S. pr., v. 1, no. 1106.
bated the severe urban housing shortage by luring thousands of men to work in yards throughout the United States.21

The example of Newport News, Virginia, illustrates the magnitude of the problem. Between 1914 and 1917, the population jumped from 20,205 to almost 50,000, while the number of houses, hotels, and apartment buildings remained about the same. A contemporary municipal survey found that every available room was rented out, and in most cases, the original tenant took in boarders. Many families made do with a single room for dining, cooking, and sleeping.22 Moreover, speculators and rent "gougers," or war profiteers as they were known, took advantage of the situation. They demanded such exorbitant prices that workers were compelled to move from place to place in search of decent, affordable living conditions. As one critic noted, when given a choice "a self-respecting man, particularly a man with a family to support" will not "subject his family and himself to uncomfortable, unattractive, and often unsanitary living conditions" even for high pay or "motives of patriotism."23

With a lack of housing, industrialists found it hard to attract enough men to fill their contracts. Especially hard hit were the war industries—munitions, cantonment, and

shipbuilding—which required skilled labor. Believing that the war effort was in jeopardy, industrialists and members of Congress worked together to find a solution. Meanwhile, the Emergency Fleet Corporation (EFC), a division of the Shipping Board, submitted a bill to Congress requesting funds to build houses as well as ships. Members of Congress remained skeptical until January 1918, when a dramatic speech during the hearings persuaded them. As architect Joseph D. Leland recalled:

Stopping to build cities and houses seemed a slow way to get out ships and a bit utopian anyway, but a two-fisted shipbuilder, [Homer] Ferguson of Newport News, took a day off and brought a startling story of how the great yards were running at half capacity for lack of decent housing for the men.24

Offering to buy the land himself, Ferguson called for federal assistance in building the houses. Testimonials from other shipyard officials indicated that similar conditions prevailed throughout the country. In response, Congress immediately approved the Housing Act, which appropriated $50 million and empowered the EFC to acquire land and begin construction of dwellings for shipbuilders. In all, more than 100 projects were planned.

The government's purpose was to provide emergency dwellings, reduce transiency, increase productivity, and thereby win the war. Housing reformers, industrialists, and architects had other plans. They saw the federal projects

as a potential remedy for the ills of industrial society. Taking the government's mandate to "provide for the contented, efficient worker" at face value, the officials in charge of construction used the federal projects to not only solve the housing problem, but as a weapon against the larger problems of social and labor unrest.

While reformers wished to use housing betterment to end social strife, industrialists manipulated it to offset labor unrest. By World War I, astute observers recognized that labor unrest was not entirely due to inadequate pay and long hours. It was also the result of poor living conditions and their psychological affect on workers' families.25

We are learning that the colossal turn-over in labor---impermanence of employment, constant shifting of laborers, and the loss of efficiency that results---is not only a frightful wrong to the laboring class as a whole, but a blot on society, a danger to the peace of the state, and a terrible handicap to national productiveness. We are learning that a discontented worker is a poor worker; and that a healthy, happy worker in a decent home is worth more, both to the state and to his employers, than one who is an unhealthy, unhappy wanderer from one factory and slum to another factory and slum.26

The solution to labor unrest, too, was environmental melioration, for quality houses would promote a stable work force, stimulate employee loyalty, and suppress union activity.

Most Americans agreed that substandard accommodations had to replaced, but with what? Few suitable examples of


26 "The Workingman and His House," Architectural Record 44, no. 4 (October 1918), 305.
low-cost workers' housing existed before 1914. The situa-
tion was complicated by an inherited nineteenth-century
conviction that different classes required different accom-
modations (See Figure 6). Housing expert Leslie Allen noted
that there were two classes of workmen:

First, the unskilled wage earners, mostly foreign or
negroes, uneducated, unused to American houses and
American standards of living, earning a low wage; and
second, the skilled mechanics, earning high wages,
mostly American, living according to American stan-
dards, demanding more and willing to pay more for
comforts that the foreigner does not consider essen-
tial.27

Comforts not considered essential for unskilled labor in-
cluded closets and bathtubs. Leifur Magnusson found that
the appearance of industrial housing depended upon "the
character of the labor to be housed, native or immigrant,
skilled or unskilled, high-paid or low-paid; climatic con-
ditions; accessibility of material; building costs; and
availability of building labor."28 Such statements explain
not only the many-faceted character of workers' housing in
the United States in the early twentieth century, but offer
insight into why by World War I designing appropriate, sub-
stantial yet inexpensive worker's housing became one of the
greatest challenges facing American architects. Hilton Vil-
lage and the other federal communities were created to meet
that challenge.

28 Magnusson, 39.
Figure 6

Two views showing the contrast between typical miners' dwellings in Pennsylvania and a "Better class" house for skilled laborers in New England. Taken from Leifur Magnusson, "Employers' Housing in the United States."
FIG. 4.—GROUP OF HOUSES IN BITUMINOUS COAL REGION OF PENNSYLVANIA.

Note the placing of houses on hillside and the uniformity of architecture: also, all houses are painted red with white trim. Single houses are placed in one row, double houses in another. The larger outbuilding in the yard is an outside bathhouse and laundry, but has no modern equipment in it. Each family has 1 room in both double and single houses. 2 rooms upstairs and 2 downstairs. Double houses rent for $8 per month for each family; single houses about $5.50.

FIG. 5.—FIRST-FLOOR PLANS OF ONE-FAMILY HOUSE.

Four-room house. Two rooms downstairs and 2 rooms upstairs; rent, in 1914, about $100; rent, $8 to $8.50 per month.

FIG. 6.—FIRST-FLOOR PLAN OF DOUBLE HOUSE.

Four rooms to each family: 2 rooms downstairs and 2 rooms upstairs. Cost per dwelling or renting unit, in 1914, $80; rent per family, $8 per month.

FIG. 7.—BETTER CLASS COMPANY HOUSE IN NEW ENGLAND.

Electric light; stove heat. Ten, $100.00 per month. Lot, 30 by 100 feet.

FIG. 8.—FIRST-FLOOR PLAN.

FIG. 9.—SECOND-FLOOR PLAN.
CHAPTER II
"GOOD HOMES MAKE GOOD WORKMEN"

In 1915 The American Magazine published an article entitled "The Golden Rule of Business IX: Good Homes Make Good Workmen."¹ Written by muckraking journalist Ida Tarbell, the article focused on housing betterment programs undertaken in the coalfields of southwestern Pennsylvania. As the title suggests, both Tarbell and the industrialists she interviewed firmly believed in the ability of domestic architecture to elicit certain behavior from its inhabitants. This belief has characterized attitudes about American housing from the seventeenth-century's Puritan settlements to today's public housing projects.² Thus, when industrialization began to threaten the status quo during the late nineteenth and early twentieth centuries, architects, industrialists, and reformers naturally turned to housing betterment as a way to reinforce higher social values and diffuse the threat of social disorder. But since each group interpreted social values and social disorder differently, the application of housing betterment reflected


three separate yet related aims: to solve the housing problem, quell labor unrest, and reduce social unrest.

The pursuit of social objectives through environmental melioration was a hallmark of the Progressive Movement.\(^3\) Witnessing the rapid rise of poverty, disease, and demoralization among urban families, most Americans believed that unregulated living conditions and the free market in real estate, which raised rents beyond the reach of most working-class families, exacerbated protest and violence from below. Since workers were apparently unable to help themselves and housing speculators seemed unwilling to change their policies voluntarily, conscientious middle-class social reformers stepped forward to speak on labor's behalf.\(^4\)

Using what Roy Lubove called the "rhetoric of conservation," Progressive reformers resolved to put an end to the wanton waste and exploitation of human resources in America's industrial cities. The solution, they believed, was to increase public awareness and participation in matters of urban land use. Espousing the ideal of a rural-urban continuum, reformers set out to revise existing urban land-use policies. The key to obtaining that continuum was the integration of more parks and open spaces. By bringing


"environmental amenities hitherto reserved for those who possessed mobility and wealth" into the city, reformers hoped to promote "the democratization of the country estate and suburb, with their attributes of spaciousness and beauty." Parks would also improve health, safety, and social stability within the urban community by acting as fire buffers between clusters of buildings and by providing city dwellers with alternatives to "unwholesome, vicious, and destructive methods of seeking recreation." Parks, then, not only had a practical, aesthetic function, but were an instrument of social control in the urban community.6

House design was another important instrument of social reform since, as one expert remarked, "The human tool is just like the machine tool in this respect--the better it is housed and cared for, the greater will be its efficiency and its output."7 Noting that inadequate provisions for light and air contributed to unhealthy conditions, reformers advocated enlarging or adding more windows and screens. They also recommended an increase in the number of rooms and their average size to alleviate overcrowding. For the most part, this new space was for sleeping. Architects suggested one bedroom for parents, and two more to separate male and female children. On the outside, they varied roof shapes,

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5Lubove, 2-4.
6Ibid., 5-6.
exterior paint colors, alignment to the street, porch location, and building materials. Such simple alterations removed the cookie-cutter appearance typical of most workers' housing. Despite claims that improved workers' housing was a panacea for the ills of industrial society, middle-class reformers could not force private owners to implement their social design theories. Since most working-class housing was privately owned, few substantive reforms were implemented before World War I.

Undaunted, architects and housing economists like Edith Elmer Wood and Frederick Ackerman supported the restrictive legislation governing structural and sanitary standards as another approach to housing betterment. Their efforts resulted in the highly successful New York State Tenement House Law of 1901, which condemned structures failing to meet its exacting standards. While such legislation eliminated the worst housing, it could not compel speculators to build model dwellings instead. In fact, some standards were so strict that many speculators stopped building tenements altogether. As a result, housing conditions in urban slums worsened. Pointing to the examples of England, Germany, and Belgium, some reformers began to lobby for government subsidies of Progressive public housing projects. Lawrence Veiller, founder of the National Housing Association and author of the New York State Tenement Law, opposed such measures on the grounds
that federal involvement was socialistic and ultimately self-defeating. The leading disciple of the housing reform movement between 1900 and World War I, Veiller used his considerable influence to drown out pro-subsidy cries.\textsuperscript{8}

The only other recourse for reformers was private money, but since other investments were more profitable, only a little surplus capital found its way into housing betterment programs.\textsuperscript{9}

It was industrialists, not reformers, who implemented most housing betterment programs before the war. Their programs sprang from a long standing tradition of using workers' housing to offset labor unrest. This practice dates to the beginning of the American factory system in the late eighteenth century, when employers began supplementing scant accommodations near the worksite to attract workers. Although employers did everything they could to instill productive behavior in their work force, their efforts were limited by a lack of influence during non-working hours.

\textsuperscript{8}Lubove, 4, 7 and 55.

\textsuperscript{9}One exception to this rule was the Russell Sage Foundation, established in 1907 by Mrs. Russell Sage "for the improvement of social and living conditions in the United States of America." According to an official foundation history, Margaret Olivia Sage inherited $65 million upon her husband's demise in 1906. Since there were no restrictions on the fortune, Mrs. Sage immediately began giving away the millions her husband had painstakingly accumulated. Her attorneys, Robert W. and Henry W. de Forest served as financial advisors. Robert de Forest, president of the Charity Organization Society of the City of New York since 1888, was well informed about conditions in the urban slums. In December 1906 he wrote Mrs. Sage a long memorandum outlining "suggestions for a possible Sage Foundation." Understanding that her inclinations tended toward "social betterment--improvement of the hard conditions of our working classes, making their homes and surroundings more healthful and comfortable and their lives happier; giving more opportunity to them and their children," he proposed ten initial projects. The first included small working-class houses in the suburbs. Forest Hills Gardens, a planned suburb in Queens, New York, was a direct result of this memorandum. Its particular relevance to Hilton Village will be addressed in Chapter III. For more information on philanthropist Margaret Sage and the social betterment programs of the Russell Sage foundation, see John M. Glenn, Lilian Brandt, and F. Emerson Andrews \textit{Russell Sage Foundation 1907-1946} (New York: Russell Sage Foundation, 1947), Chapter 1.
Company housing solved this problem. By holding the lease on an employee's residence an employer extended his reach from the factory to the home and gained a greater degree of control than was possible in a normal management-labor relationship. Company housing thus evolved into something more than mere shelter.

This intrusion into the private family sphere was justified under paternalism, which despite ties to European feudalism, stemmed from an implicit understanding that

> Even in Republican America, where no nobility or rigid system of classes arrogated to itself a monopoly of rank, there was a visible order based on the exercise of power by men of capital. With that power came a responsibility to use one's position as God's steward on Earth: to punish those who made mistakes or behaved wrongly, as parents punished children.\(^{10}\)

Also like parental authority, paternalism carried a responsibility to protect workers from baneful influences and provide them with subsistence. Protection involved insulating workers from the vagaries of the labor market, noxious moral influences, and unethical conduct on the shop floor. Provisions often included surety of labor, housing, stores, jobs for kin, and occasionally, churches, schools and recreational facilities.\(^{11}\) In exchange, employers expected loyalty and hard work. There were other kinds of labor management, to be sure, but since paternalism used a

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familiar form of authority, employers considered it especially appropriate for facilitating the cultural transition of artisanal or agricultural laborers to the factory. Yet employers could only sustain paternalism in a context where the absence of profit-threatening competition in the firm's product line insulated both proprietors and hands from the rigors of technological and organizational development. Thus, while paternalism appeared across time, place, and industry, it was inevitably replaced by another form of labor relations when the cultural transition was no longer necessary, or when the pressure of participating in a capitalist economy forced employers to rationalize, economize, and reorganize their methods of production. The primary beneficiaries of these changes, though, were the stockholders, individual owners, and managers, not laborers.

As competition increased in the nineteenth century, many large-scale employers implemented supervision, time-keeping, labor-saving devices, and even improved housing as part of the need to increase productivity, reduce fixed costs, and raise profits. Workers soon came to be seen as an abstract "labor pool" and not as individuals. With this change in perception, working conditions deteriorated.

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12 Ibid., 248.

Frustrated by long hours, low wages, unsafe surroundings, and limited mobility, the dissatisfaction and outrage of the working class manifested itself in an even higher degree of unrest.

With the rise of large corporations, paternalism gave way to welfare capitalism, an approach to labor relations based on the provision of "any service for the comfort or improvement of employees which was neither a necessity of the industry nor required by law." The provision of housing fell under this classification. By the late nineteenth century, housing betterment had become a defense against trade unionism and the threat it represented to industrialists' social, political, and economic autonomy. The dangers were twofold. First, the goals of organized labor were antithetical to those of organized capital. Second, trade unionism bore a frightening resemblance to socialism. Organized labor was thus not only contrary to the capitalist system, but signified a direct threat to democracy and the American way of life. "If unorganized labor had made the capitalists rich, organized labor could take it all away," especially if the industrial workers, mainly immigrants, were not given a chance to share the newly created national wealth.

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While designed explicitly for combatting trade unionism, welfare capitalism was also a hedge against labor's so-called "evil tendencies:" ignorance, slovenliness, laziness, and insobriety, which caused inefficiency; extravagance, which stimulated demands for higher wages; and disloyalty, which prompted transiency, militancy, and unionism. Embodying principles of economic determinism, "the ultimate goal of welfare capitalism was no less than the propagation of an improved American working man: thrifty, clean, temperate, intelligent, and especially industrious and loyal."16 The fact that temperance, thrift, loyalty, and similar traits increased productivity and profits was merely an added bonus.

Although industrialists wanted to see employees decently housed, they were reluctant to build large-scale, planned communities of the sort reform groups recommended. Most firms who provided housing saw it as "a necessary evil," and not as an opportunity to discharge social obligations or to pioneer residential design.17 Companies needed happy, contented workers, but there was no guarantee that bigger, better, costlier houses would really solve the labor problem. As evidence, industrialists cited the example of Pullman, Illinois, where a superior physical environment did little to avert labor strife in the 1890s.

16 Brandes, 33.
17 Ibid., 12.
Since few businessmen were willing to spend money on such a risky proposition, the housing reforms made under welfare capitalism were modest in nature.

The execution of large-scale reforms required experience and talent as well as money. When the federal government intervened in 1917, it took care of all three by appropriating $50 million and hiring some of the most prominent architects, landscape architects, housing reformers, engineers, and planners of the day. These designers included such nationally recognized personages and firms as John Nolen, Electus D. Litchfield, Henry Hubbard, Kilham and Hopkins, Mann and MacNeille, and George B. Post and Sons to design the projects. Back in Washington, D. C., New York engineer Otto M. Eidlitz presided over the U. S. Housing Corporation, the operating instrument of the Bureau of Industrial Housing and Transportation of the Department of Labor. Architect Joseph D. Leland was the corporation's vice-president, Burt L. Fenner of McKim, Mead and White served as general manager, and Frederick Law Olmsted, Jr., was Chief Town Planner. B. Antrim Haldeman headed the Housing Department of the Emergency Fleet Corporation, while Frederic L. Ackerman ran the Design Section, and Robert D. Kohn led the Production Division. Morris Knowles was Chief Engineer. Having thus secured "the most competent and highly trained men, experts of high standing to direct and administer its affairs," the government directed its
attention elsewhere.\textsuperscript{18}  

The involvement of nationally renowned architects, planners, and engineers was both a boon and a bane to the government's housing projects. On the one hand, they were well established in their fields and so brought considerable expertise to the drafting table. On the other hand, these experts "were strong individualists, had done things worth while, and many had not, at least for years, worked under the direction of others or in multiple harness."\textsuperscript{19} As a result, clashing egos greatly slowed the design process. The biggest impediment, however, was the decision to build permanent houses.

Despite a federal mandate to build war workers' houses as quickly and as cheaply as possible under the circumstances, the architects opted to build permanent structures, saying that "emergency" housing was "little better than scrap." Thrown up in a hurry, with shoddy materials and poor construction techniques, temporary houses were fine for "those who have known no better and who can afford no other, but for the trained and well-paid man, permanence as well as decency will be necessary."\textsuperscript{20} Permanent houses would also serve as models for the rest of

\textsuperscript{18}Sylvester Baxter, "The Government's Housing Activities," \textit{Architectural Record} 44, no. 6 (December 1918), 562-563.  


the nation to emulate.

With unlimited federal funds and an authorization to design entire communities from scratch, Progressive-era architects saw the federal housing projects as an opportunity to put their design theories to the test and prove once and for all that decent, affordable working-class housing could be built to the satisfaction of both residents and landlords. Speculators would read about the projects' success, implement the architects' designs, and thereby solve the housing problem.\footnote{With such an eminent list of participants, the government's housing projects were expected to set a new standard for industrial communities in the United States. When the lavishly-illustrated report of the U. S. Housing Corporation came out in 1919, one supporter expressed his opinion that the book "should be in the hands of every architect in this country," and further, that "this report may fairly be said to be of greater importance than any work on housing" yet published. See \textit{The American Architect} 114, no. 2282 (Sept. 24, 1919).}

And furthermore, the high visibility of the government's wartime housing projects would show the public that professional architects were the true housing experts. In this way, architects came to see model industrial housing as a solution to their own problems as well as industry's.

Between 1880 and 1918, innovations in building technology and construction materials combined to threaten the status of the American architect by rendering their services all but unnecessary.\footnote{Michael J. Doucet and John C. Weaver, "Material Culture and the North American House: The Era of the Common Man, 1870-1920," \textit{Journal of American History} 72, no. 3 (December 1985), 561.} The balloon frame, for example, consisted mostly of lightweight, pre-cut structural members that could be nailed together with little or no effort. Compared to the traditional braced frame, with its...
heavy posts and beams, the balloon frame "converted building in wood from a complicated craft, practiced by skilled labor, into an industry." Although cheap housing offered a partial solution to the problem of crowded, unsanitary, urban tenements, and kept alive the ideal of homeownership among laborers, it also greatly debased the building arts. Mail-order houses from Sears Roebuck, Montgomery Ward, and Aladdin reinforced the idea that "Anybody, however ignorant or however culpable, can run up houses for sale." With this movement away from craftsmanship came a noticeable reduction in status for both houses and builders. Hence, architects increasingly balked at designing low-cost workmen's dwellings, but in the process, they allowed their treasured status as master builders to be gradually eroded by amateurs who were willing to meet the demand. By World War I, recovering this lost prestige had become a top priority. The only question was: How?

Ironically, the answer was to get involved in the new industrial communities springing up across the country. Incensed at the "high-handed way" in which architects were being ignored in the pre-war housing crisis, The American Architect asked its readers, "Has the architect any status at present in the housing problem?" The question was rhetorical, for the purpose of the article was not to

23 Ibid., 565.
24 Ibid., 566.
explore the existing condition of the field, but rather, to
determine the steps required to change it. After all, there
was nothing "extremely difficult architecturally or
insoluble practically in the problem of housing workmen."
Architects could have built workers' housing all along; they
had simply chosen not to. As The American Architect
indicated, the time had come for architects to reassess
their position:

The status of the architect has always been a matter of
question to the lay public. To many he seemed but a
soulful artist, intent upon the creation of visionary,
idealistic dream-buildings, and highly contemptuous of
the unspeakable warehouses and other plebeian buildings
which the humble client would have him plan. To
others, he has seemed a clever sort of person, who by
some means edged his way in between owner and
contractor and sliced off a neat share of the profit on
everything he undertook. He has never, or at least
seldom, made himself the indispensable factor in the
building industry that he might be. He has lost sight
of his essential relationship to the building problem
in his function as master builder, and has acquired
little else to take its place.25

To correct this oversight, the article advised its readers
to forget that they had once been designers of houses and to
become planners of cities and towns. Borrowing from the
"better mousetrap" principle, the author explained that "a
man who demonstrates his worth in this greatest of present-
day architectural problems--the question of industrial
housing--will find himself with other and weightier things
to do than to rail at a fate which leaves him useless in
this hour of the nation's need." Thus, while many

architects joined the crusade for housing betterment, their enthusiasm was fueled more by egoism than by altruism.

Ultimately, a kind of egoism kept all three groups from reaching their goals. By expecting housing to subdue restless industrial workers, reformers, industrialists, and architects let their own needs supercede those of the working class. Part of the problem was ignorance, for despite their presumed authority on the subject of suitable surroundings for laborers, most architects, reformers, and industrialists were blind to the actual needs and desires of the working class. As the American Architect finally admitted, probably "not one in a hundred architects knows . . . how the average American workingman lives, to say nothing of the many other nationalities of which the laboring class in this country is composed."26 Another problem was prejudice. In their zeal to instill the masses with middle-class values, housing reformers and architects either overlooked or denounced domestic practices that were inconsistent with their own standards of living.27 Distanced by their higher economic and social status, many Americans exhibited a judgmental attitude in their behavior toward and treatment of labor. Industrialists, too, clearly misunderstood the needs of the working class, for they

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26Ibid., 589.

thought of decent housing as a privilege, not a right. But the message of continued unrest was clear: kitchen cabinets, indoor plumbing, and park-like settings could not compensate for higher wages, shorter hours, safer conditions, and union representation.
CHAPTER III
BUILDING A MODEL VILLAGE

Sunday, July 7, 1918, was a red-letter day for the city of Newport News, Virginia, for it marked the opening of Hilton Village, the government's first model industrial community for shipbuilders. The Newport News Shipbuilding and Drydock Company, the city's largest employer, initiated the project in 1916. Its president, Homer Ferguson, was anxious to solve the local housing problem. A canny businessman, he had foreseen the probability of government intervention and hoped that having completed plans for 500 houses would put his company first in line when government funds became available. Ferguson's careful planning paid off. On January 10, 1918, the Newport News Daily Press announced "Government to Spend $1,200,000 Here for Houses."¹

The original specifications for Hilton Village called for enough accommodations to comfortably house more than 1,300 employees, excluding spouses and children. No suitable plots of land were available in Newport News proper, so the shipyard purchased a flat, heavily wooded, 200-acre site three miles to the north along Old Warwick

¹"Government to Spend $1,200,000 Here for Houses," Newport News Daily Press 10 January 1918, 1.
County Road. Located between the bluffs of the James River and the Chesapeake and Ohio Railroad right-of-way, the site was ideal for residential development.²

The design of Hilton Village incorporated the most innovative industrial housing and community planning principles of the day. On the advice of Frederick Law Olmsted, Jr., the shipyard engaged Joseph D. Leland and Henry V. Hubbard as architect and landscape architect, respectively. Leland accepted an appointment as vice-president of the Department of Labor's Housing Bureau within a few months and was succeeded by Francis Y. Joannes in December.³ When the government assumed control of the project in 1918, it retained Hubbard and Joannes' services. Both men were at the top of their professions and exhibited a knowledge of Progressive housing reforms.⁴

²Ruth Hanners Chambers, Hilton Village: The Nation's First Government-Built Planned Community (Hilton Village: privately printed, 1967), 10. In addition, the shipyard commissioned four apartment buildings to be built on Washington Avenue opposite the shipyard in Newport News.

³Ibid., 9. In 1917, Olmsted was appointed Chief Planner of the U. S. Housing Corporation, which oversaw construction of all federal projects. While his appointment received only passing mention in Stuart Brandes' American Welfare Capitalism, Olmsted's involvement and influence on Hubbard have particular relevance to Hilton Village. See Brandes, American Welfare Capitalism, 1880-1940 (Chicago: University of Chicago Press, 1984), 26.

⁴In 1900, Hubbard became the first American to earn a degree in landscape design. After graduating from Harvard, he went to work for the Olmsted brothers, and travelled extensively with them throughout France and Germany. In 1906 Hubbard entered into a partnership with H. P. White and J. S. Pray in Boston. The following year, he returned to Harvard as the first professor of its new School of Landscape Architecture. Hubbard continued to practice privately while he taught, and in 1910 he founded Landscape Architecture, the field's first professional periodical. In the 1910s Hubbard accepted numerous government appointments, and served subsequently as a designer for the Cantonment Construction Branch of the Army, the U. S. Housing Commission, and the U. S. Shipping Board, and as assistant manager of the Town Planning Division of the U. S. Housing Corporation. Working under the direction of the division's chairman, Frederick Law Olmsted, Jr., between 1917 and 1918, he supervised and orchestrated the construction of numerous wartime housing projects, including Hilton Village. Joannes attended the Art Institute and the Armour Institute of Chicago before going on to study architecture at Cornell. After graduation, he too went to France, where he completed his training at the Ecole de Beaux Arts in Paris. Once back in the United States, Joannes set up private practice in New York City. Joannes' involvement in the government housing projects seems to have been limited to Hilton Village, but after the war, he went on to accept numerous public and private commissions,
The arrangement of streets, buildings, and parks, the choice of architectural treatment, and the manipulation of interior space at Hilton Village all reflect the incorporation of Progressive reforms. For example, Hubbard rejected the typical gridiron plan with its narrow streets, back alleys, and tight rows of housing. Instead, he took advantage of the tract's natural topography and laid out a formal plan with a broad, 100 feet-wide central avenue and two flanking, 50 feet-wide streets running perpendicularly between the river and Warwick Road (See Figure 1). He also planned four minor streets running parallel to the river, and a fifth road following the curves of the river bluffs.5 Stretching from the river to Warwick Road, the central avenue, or Main Street, terminated in a public square. Hubbard designated three sides of the square for two churches and one apartment building. Two rows of ten stores each flanked the end of Main Street on the fourth side. Another small street ran from the northwest corner of the square down to the railroad and another square at the station. The community ballpark bordered the railroad. At the other end of Main Street were lots for the community building and two more churches. The land behind the community building, with its meandering stream and sloping

Figure 1

Plan of Hilton Village. Taken from Henry Hubbard and Francis Joannes, "Government Housing an Industrial Proposition."

Harry V. Hubbard, Landscape Architect; Francis Y. Joannes, Architect; Francis H. Bulot, Sanitary Engineer.
terrain, formed a picturesque river-side park.

Hubbard's plan for Hilton Village owes a great deal to the influence of his mentor, Frederick Law Olmsted, Jr., especially the latter's work at Forest Hills Gardens. Commissioned by the Russell-Sage Foundation in 1910, Forest Hills Gardens was a planned residential development for working-class families in Queens, New York.6 The goal was a totally homogenous community. The houses, designed by Grosvenor Atterbury, another prominent Progressive architect, were a harmonious blend of "Gothic" and "Tudor" styles executed in stucco and brick.7 Continuous green lawns formed a visual link between them. Even the residents complimented one another; close proximity made homogeneity of the occupants advisable.8 Like the company town, the planned residential suburb had to convey an impression of order, stability, and above all, efficiency. In the process, residents' individual needs and desires were suppressed to maintain a communal ideal that existed only in the minds of the designers. Hubbard clearly admired Forest

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7The terms "Gothic" and "Tudor" to describe Atterbury's designs are somewhat misleading, but undoubtedly reflect contemporary usage. Today the houses would be classified as English Vernacular Revival, a style which emulated seventeenth-century domestic buildings in the English countryside. First utilized by William Morris, Philip Webb, Richard Norman Shaw, and other leading designers of the English Arts and Crafts Movement, the style fulfilled their search for an appropriate national architecture. Called "Old English" or "Tudor" at times, it mimicked buildings from the Elizabethan era. Its sister style, mistakenly labelled the "Queen Anne," derived from the same vernacular sources but with more elaborate results. I am grateful to Camille Wells for pointing out this discrepancy. See Richard Guy Wilson, "American Arts and Crafts Architecture: Radical though Dedicated to the Cause Conservative" in The Art that is Life: The Arts and Crafts Movement in America, 1875-1920 edited by Wendy Kaplan (Boston: The Museum of Fine Arts, 1987), 101-194, passim.

8Stilgoe, 230.
Hills Gardens, for Hilton Village incorporated many of its features. But in following Olmsted's design too closely, Hubbard copied its problems, as well.9

Olmsted espoused three main principles of landscape city planning. First, main thoroughfares should be direct, ample, and convenient no matter how they cut the land (See Figure 2). Forest Hills Gardens had three main streets, which measured 80 feet, 125 feet, and 80 feet-wide, respectively. Second, all minor roads must be quiet, attractive, residential streets. They should be laid out to discourage their use as thoroughfares, and kept narrow to increase the area of lawns and front gardens. The goal was to achieve "short, quiet, self-contained and garden-like neighborhoods." Secondary streets in Hilton follow this restriction exactly, measuring "but 20 and 24 feet wide, because they are, and should remain, local streets with no possible press of traffic." Third, Olmsted stressed the necessity of parks and open spaces. Open spaces at Hilton included 5.23 acres of playing fields and 6.54 acres of parks, school, and church grounds. Hubbard also stressed a garden-like atmosphere, and designed medians in all minor streets to act as "little neighborhood open spaces for interest and additional feeling of room" (See Figure 3).10

9While Olmsted's design for Forest Hills Gardens clearly inspired Hubbard's plan for Hilton Village, I have found no evidence to support a similar relationship between Atterbury and Joannes. A comparison of the two architects has therefore been omitted.

10Hubbard and Joannes, 337 and 340; Stilgoe, 226.
Figure 2—View of River Road. Taken by E. P. Griffith, date unspecified. Courtesy of the Newport News Public Library, West Avenue Branch.
Figure 3

View of secondary street showing jog in sidewalk. The median it accommodated, however, was never built. Taken by author, 1990.
Olmsted was not alone in proposing these principles, but his preference for "enclosed private parks" over private backyards was highly original.\textsuperscript{11} Located in the center of each residential block, the parks "vanquished the ugly service yard with its flapping clothes line, prominent garbage can, and deplorable ash heap."\textsuperscript{12} Although reserved solely for the use of adjacent families, Olmsted felt that the parks required certain restrictions to protect their communal nature. Fences, for example, were strictly prohibited on the grounds that individual enclosures would not only visually disrupt the communal aesthetic, but could actually foster inappropriate behavior.\textsuperscript{13} Shared yards would literally and figuratively discourage families from airing their dirty linens in public. Olmsted favored an unusual arrangement of four dwellings around a shared front yard for the same reason (See Figures 4 and 5). As a result of this arrangement, Forest Hills Gardens presented an overwhelmingly serene, ordered appearance to the public.\textsuperscript{14}

By 1916, the homogeneous structure of Forest Hills Gardens was collapsing. Although intended for working-class

\textsuperscript{11}Olmsted's principles of city and town planning compare very favorably to those of John Nolen, among other designers. See John Nolen, \textit{The Industrial Village} (New York: National Housing Association, 1918).

\textsuperscript{12}Stilgoe, 233.

\textsuperscript{13}Olmsted's theory stemmed from a pervasive sense that fences and hedges suggested something to be hidden from passersby; that is, eccentric, private activity. Some contingents further asserted that fences were undemocratic because they blocked views that belonged to everyone. Enclosures were therefore un-American. Ibid., 199.

\textsuperscript{14}Ibid., 230 and 233.
Figure 4

View of English Vernacular Revival row houses at Forest Hills Gardens. Taken from John Stilgoe, *Borderland*.
Figure 5

View of houses at Forest Hills Gardens showing Olmsted's unusual shared yard. Taken from John Stilgoe, *Borderland.*
families, Atterbury's houses proved too expensive. Middle-
class merchants, teachers, salesmen, engineers, doctors,
lawyers, and bookkeepers moved in instead.\textsuperscript{15} Roads planned
for horses and pedestrians were incompatible with
automobiles and gawking visitors from the city. Moreover,
there were no provisions for garages or driveways, which
meant that residents had to lay their drives over Olmsted's
prized lawns. Protective fences and hedges also began to
sprout. While communal yards had enormous aesthetic appeal,
they contradicted some commonly held notions about suburban
living, chiefly that the detached suburban house should
afford residents the privacy they lacked in urban homes.\textsuperscript{16}

Progressive, middle-class Americans were preoccupied
with privacy.\textsuperscript{17} In fact, reformers cited a lack of it as
one of the greatest urban evils. Communal toilets,
bathrooms, stairs, and laundries, boarders in the home, and
multiple family dwellings were thought to threaten the ideal
middle-class home. The concept of home, above all things,
meant "the possibility of keeping your family away from
other families. There must be a separate house, and as far
as possible, separate rooms, so that at an early period of

\textsuperscript{15}Stilgoe notes that "Although already sensitive to the criticism that its educational work seemed
not to be focused on providing quality housing for workingmen anxious for borderland life--a goal that
intrigued Atterbury perhaps more than any other member of the development group--the foundation
nevertheless proceeded effectively to restrict residence in Forest Hills Gardens to middle-class, white, Protestants." Ibid., 230 and 235.

\textsuperscript{16}Ibid., 227.

\textsuperscript{17}Ibid., 196.
life the idea of rights to property, the right to things, to privacy, may be instilled."\textsuperscript{18} The detached, single-family house, then, promoted respect for private property, while collective housing harbored associations with communism--defined in this period as "the idealistic sharing of property in biblical communism and in American communitarian settlements," not as a specific political agenda.\textsuperscript{19} By removing the working-class family from its communitarian environment, reformers hoped to repel baneful urban influences. But with its emphasis on enforced conformity, Forest Hills Gardens went too far. With no flexibility and little room for individual expression, the community was as unsatisfactory as any company town.\textsuperscript{20}

The problems of Forest Hills Gardens were evident by 1916, yet Hubbard proceeded with his version at Hilton Village. Once the primary plan was ready, Hubbard turned his attention to house placement. Lots at Hilton were about 50 feet wide and from 118 to 130 feet deep. Deep lots allowed room for a small outbuilding at the back of each property and made room for the gardens demanded by most families. Hubbard then varied the setback for each house so as to soften the angular effect of the street plan. He reserved the larger house lots along the river for "those


\textsuperscript{19}Ibid., 127.

\textsuperscript{20}Ibid., 238 and 258.
who can afford to spend more than the average and who will
probably buy and build for themselves."21 The final
subdivisions, however, could not be completely determined
until Joannes finished the plans and elevations.

Joannes had a rough schedule of house types with 80
four-room units, 35 five-room units, 340 six-room units, 18
seven-room units, and 28 eight-room units for a total of 501
houses. As for the designs, "There are twelve basic types
with eighteen minor variations, making thirty types in all.
These are used either singly or in combinations of two or
more to form thirty-one group types."22 Thus, type A1, a
detached five-room house, was abutted against its mirror
image to form type AA1, a semi-detached structure. Type E1,
a six-room detached dwelling, was turned on its side and
then abutted against its mirror image to form type EE1, also
a semi-detached structure. Various units were also combined
into long rows along Warwick Road (See Figures 6 and 7). To
avoid monotony, Hubbard and Joannes made sure that no two
structures on a street were alike. Variations in porch and
facade treatment further downplayed the similarities between
types. All together, the community had 178 detached houses,
111 semi-detached houses, and 101 houses in rows of varying

21 Hubbard and Joannes, 336.

22 Letter from E. A. Wightman, Town Planner, Branch of Design to J. P. Keisecker, Hilton Village
Project Manager, Shipbuilding Housing Corporation, 16 July 1919, in Record group 32, Records of the
United States Shipping Board, Entry 281, subseries Public Housing and Transportation Division, Design
Branch Projects Files, Box 1.
Figure 6

Some typical elevations. Taken from Henry Hubbard and Francis Joannes, "Government Housing an Industrial Proposition."
Typical Elevations of Street Fronts and House Rows

ON VILLAGE—A Housing Development Near Newport News, Va., for the Newport News Shipbuilding & Dry Dock

Francis Y. Joannes, Architect
Figure 7

Some typical plans. Taken from Henry Hubbard and Francis Joannes, "Government Housing an Industrial Proposition."
size.\textsuperscript{23}

Believing that "Americans will not live contentedly in a housing development that looks like a toy village or a state poor farm," Joannes carefully considered style.\textsuperscript{24} With few examples to follow in the United States, industrial housing designers often turned to Europe for inspiration, especially Germany and England, where architects had been experimenting with low-income housing since the late nineteenth century. Industrial communities like Alfredshof and Altenshof near Essen were of particular interest to American architects, but the declaration of war in 1917 deflected interest away from German towns.\textsuperscript{25} British "Garden Cities" like Letchworth, Hampstead, Bourneville, and Port Sunlight thus took on greater significance.

In accordance with other nineteenth and twentieth century conservative reform movements, British reformers embraced a pre-industrial aesthetic. "Some advocated a return to medieval craft systems; others retreated to utopian communities; and still others established schools of design, sought new ways to organize industry, and initiated

\textsuperscript{23}See Chambers, 13-15; and Hubbard and Joannes, 342.

\textsuperscript{24}"Government Industrial Housing a Business Proposition," \textit{The American Architect} 114, no. 2224, 160.

\textsuperscript{25}Stilgoe, 253-256. Writing for the \textit{American Architect} in 1918, Sylvester Baxter commented that "The predominating influences upon the shaping of the art in this country came from the important town planning movements in Great Britain and Germany. That of Great Britain has borne fine fruit in the creation of garden cities, garden suburbs and the like." Of the German movement, he notes, however, that "Our American town planners have studied and assimilated the methods and ideals thus developed and now, in large measure, have bettered the instruction--by an irony of fate turning their made in Germany acquirements, in this, their magnificent task, against Germany herself as a potent instrumentality for efficient warfare." from "The Government's Housing Activities," in \textit{The Architectural Record} 44, no. 6 (Dec. 1918), 563. See also Lubove, 10-12.
Drawing on the works of William Morris, Philip Webb, Richard Norman Shaw, and other leading designers of the English Arts and Crafts Movement, British architects produced houses which mimicked domestic buildings from the Elizabethan era. Called "Old English" or "Tudor" at times, the English Vernacular Revival fulfilled their search for an appropriate national architecture. A similar search engaged American architects, but "the ingrained cultural-inferiority complex toward England and Europe meant a strong reliance on imported imagery." Consequently, German and especially English-inspired houses and churches were constructed throughout the United States. Joannes was undoubtedly familiar with developments abroad, since many of the houses at Hilton are English Vernacular Revival in style (See Figures 8 and 9).

Although European industrial communities greatly influenced house design and town planning here, most American architects maintained that foreign developments had been built under different conditions and for different kinds of laborers.

In those countries the labor class, as a whole, is practically of one nationality and has uniform habits of living. In America, we have people of almost every nation under the heavens, each differing in more or less essential points in its habits; and these habits have been bred into them and their descendants for

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26 Wilson, 52.
27 Ibid., 112.
Figure 8

Two views of English Vernacular Revival houses at Hampstead around 1918. Taken from The Architectural Record 44, no. 2 (August 1918): 142-144.
Figure 9

generations.\textsuperscript{28} Unlike their foreign counterparts, American industrial developments had to incorporate suitable accommodations for each class of labor to be housed. Moreover, architects believed that American workers would not tolerate the cooperative approach employed in British and German towns since they presumably shared the middle-class goal of individual homeownership.\textsuperscript{29} Advances in workers' housing overseas were therefore seen as limited in their applicability to America's industrial problems. As a result, most housing for war workers took the form of detached and semi-detached dwellings and were Colonial Revival in style (See Figures 10 and 11).

As an ideological movement, the Colonial Revival has been called "a multifarious and often urgent response to social stress and crisis."\textsuperscript{30} Menaced by the effects of mass immigration, urban rootlessness, economic depression, and industrialization, middle-class Americans of the late nineteenth century sought comfort in the pre-industrial


\textsuperscript{29}Edwin Longstreet Shuey, Factory People and their Employers (New York: Lentilhorn and Co., 1900), 128; Alfred Bossom, "Homes for War Workers," Architectural Record 154, no. 3, 216. Many English communities employed a system of ownership called "co-partnership," which allowed residents to own properties cooperatively without being mortgaged to one company forever. Cooperative ownership did not succeed in the United States, for Americans were considered too individualistic in nature. See Richard Candee, Atlantic Heights: A World War I Shipbuilders'Community (Portsmouth, Maine: Portsmouth Marine Society, 1985), 113.

Figure 10—View of semi-detached Colonial Revival house. Taken by E. P. Griffith, Jan. 7, 1919.

Newport News Public Library, West Avenue Branch.

HILTON VILLAGE
NEWPORT NEWS, VA
Figure 11—View of detached Colonial Revival house. Taken by E. P. Griffith, Jan. 7, 1919. Newport News Public Library, West Avenue Branch.
past. Focusing on the late eighteenth century, "the golden age of prosperity, the period of the stylish white house expressing order, balance, rationality, and security," Americans centered their colonializing activities on the domestic sphere. Among the well-to-do, collecting fine colonial furnishings and decorative arts became popular, for hand-made objects were increasingly seen as superior to machine-made goods. Displayed in museums and private homes, colonial artifacts represented "the best of America's past" and loyalty to traditional American virtues. The most powerful material manifestation of the past, though, was architecture. Since actual eighteenth-century houses were hard to come by, Colonial Revival replicas arose in their place.

The beginning of the Colonial Revival in architecture can be traced as far back as the 1850s, when some Americans began to clamor for a national building style distinct from European modes. Surviving colonial houses were singled out for imitation because they represented a direct link with the venerable past and because they supported America's newfound conviction that it had a genteel elite equal to that of Europe. By evoking images of the Founding Fathers, the Colonial Revival promoted patriotism and fostered a greater

31 Ibid., 12 and 36.
sense of America’s self-worth. In this light, the Colonial Revival can be seen as a positive and creative response to the problems of industrialization. Yet as Alan Axelrod points out, the Colonial Revival also had a negative side, for its arrogation of the past reflected an unhealthy rejection of the present. The Colonial Revival has therefore been called "an act of cultural desperation" prompted by the inability or unwillingness of middle-class Americans to adjust to their rapidly changing world.33 One example of this dichotomy is the sudden application of the Colonial Revival to model industrial housing during the crisis years of World War I.

Although generally considered a middle-class movement, and heavily laden with elitist associations, the Colonial Revival in architecture was considered especially appropriate for working-class houses. For one thing, it was cheap and easily replicated. The plain, boxy shapes, uncomplicated plans, simple ornamentation, and reliance on frame construction made for a relatively inexpensive architectural style as compared to Gothic or Greek revivals.34 Furthermore, the Colonial Revival was inspiring. Middle-class reformers asserted that Colonial Revival surroundings would instill workers with middle-class values. And last, employers and reformers both hoped that

33Axelrod, 14.

by reviving images of the pre-industrial craftsman, "an educated and thinking being who loved his work without demanding a wage or labor union membership," colonial buildings would diffuse labor unrest.35 This transformation of the Colonial Revival from an architecture of elitist, middle-class aspirations to one suitable for American labor is significant since it occurred during a period of tremendous social upheaval. But more important is the indication that visible expressions of middle-class respectability and status were consciously incorporated into skilled-workers' housing.

The application of predominantly middle-class domestic features to working-class housing is especially apparent in the architectural standards for Hilton Village and its contemporaries. Although built for working-class families, most reformers, architects, and industrialists insisted that the federal projects include more amenities than houses commonly built for rank and file laborers. Skilled American workmen presumably had higher standards of living than their unskilled, foreign counterparts, thus only housing appropriate for their class would satisfy them. Morris Knowles, Chief Engineer for the U. S. Housing Corporation described the essential features of this housing:

1. Permanent waterproof construction.
2. Cellar, except where impractical or unnecessary.
3. Adequate provision for heating.

35Ibid., 360.
4. Gas piping for kitchen range and hot water heater.
5. One room for parents and enough rooms to properly segregate children.
6. Room sizes to accommodate minimum furniture. Living Room, at least 12 feet by 14 feet; dining room, not less than 120 square feet, with 10 feet the least possible dimension; double bedroom, not less than 120 square feet, with 9 feet 6 inches the least dimension; single bedroom, 80 square feet, with a minimum dimension of 7 feet 10 inches; bathroom, 35 square feet with a minimum width of 5 feet; kitchen, 98 square feet, or no less than 7 feet in width.
7. Row or group houses to be not more than two rooms deep for proper ventilation.
8. Separate entrances and cellars, and independent plumbing, heating, and lighting systems for duplexes in order to preserve privacy.
9. A closet in every bedroom.
10. Closets for necessary china, staple supplies, etc. in kitchens.
11. Another entrance besides the front door.
12. In no case shall a stair have a rise of over 8 inches and a tread less than 9 inches.
13. Adequate ventilation in cellar and attic.
14. At least one window in every bedroom.
15. No room should have less than 12 square feet of window area.
17. Window frames with allowances for screens.
18. Running water in kitchen. Hot water is desireable.
19. Laundry trays in cellar or combined tray and sink in kitchen.
20. Electricity wherever possible.
21. Room for dining, separate from kitchen.
22. Bathroom with enameled tub, sink, and water closet.
23. Provision for refrigerator adjacent to kitchen.
24. Electric switches conveniently located near doors.
25. Hot air furnaces.
26. Mechanical door bells.
27. Coal bins.
29. Combination gas and electric fixtures for lighting in kitchen and bathroom.
30. Front porch with minimum of 96 square feet. Rear porch.
31. Rift-sawed yellow pine or oak floors.
32. Open fireplace in living room.
33. Coat closet in hall or living room.\(^\text{36}\)

\(^{36}\)Knowles, 302-307.
These features were then combined to form three different grades of housing. The first twenty requirements, or Grade C, comprised the minimum standards for unskilled, foreign labor. These plus the next seven features created an intermediate house, Grade B, for either the unskilled American worker, or the skilled American without sufficient resources to afford the Grade A house. With all 33 requirements, Grade A was the largest and most expensive house. It was reserved solely for the highest paid skilled laborers, shop foremen, or certain clericals. That there were three distinct sets of requirements confirms the hierarchical way industrial housing designers perceived laborers and their needs. More important, though, is the way housing requirements for skilled labor reflect concurrent changes to the middle-class house.

The Progressive Era's push for modernization, efficiency, and reform spilled over into the homes of middle-class Americans. Every aspect of the domestic environment became simpler and more functional. Gone were the ornate furnishings, plush fabrics, and Victorian bric-a-brac of the nineteenth century. In their place stood simple Colonial or Mission pieces. Built-in cupboards and more closets reduced the number of blanket chests, wardrobes, and china cabinets. Heavy rugs gave way to bare wood floors.

37 Ibid., 306. Rooms sizes in the Grade A house were as follows: Living room, 180 square feet; dining room, 140; double bedroom, 130; single bedroom, 90; bath and kitchen, same as before. All rooms in the B and C houses were of equal dimensions.
Washable tiles or enameled metal appeared on kitchen walls and linoleum covered the floor. After 1900, the bathroom became an essential part of the middle-class home, as were new appliances, central heating, and plumbing. To compensate for the increased expense of these technological improvements, designers drastically reduced square footage. Kitchens especially shrank as domestic production of goods declined. Unlike the working-class kitchen, where family members and friends gathered throughout the day, the modern middle-class kitchen was "a home laboratory." Dining necessarily shifted to a separate room.38 Believing that the modern, middle-class home was the key to the larger political, social and aesthetic changes they wanted, reformers offered its essential components to skilled laborers.39

Hilton Village incorporated all of the features required by middle-class Americans, yet there is evidence that its residents did not need or want everything they got. In the first place, many working-class families rejected small kitchens or kitchenettes in favor of one large enough for dining. Similarly, many families disliked built-in furniture since they had pieces of their own.40

38 Wright, 158-172, passim.
39 Ibid., 155.
Furthermore, such little extras raised construction costs, and ultimately, rents. Designers nonetheless insisted on certain features. Fireplaces are a good example. Despite the temperate climate in Virginia, most houses in Hilton Village have a fireplace and hot-air heating system. A fireplace was "a social benefactor, a promoter of domestic felicity, the central feature and altar of a sacred rite, an emblem of all that is holy in the human spirit and affection . . . and a powerful element in promoting that stability, that sense of something permanent and changeless amid the shifts and currents of our national life." In this view, every home, regardless of size, cost or climate, had to have a fireplace. Thus, even dining rooms, kitchen cupboards, and fireplaces, as elements of the middle-class domestic ideology, became important tools for imparting middle-class values (See figure 12).

The most important tool, however, was homeownership, for elevating architecture and quality amenities meant very little if the house belonged to someone else. Middle-class Americans have historically maintained a preference for the detached, single-family dwelling over any other form of housing. This predilection rested on the belief that individual homeownership was the key to democracy, for

\[\text{Pittsburgh: The University of Pittsburgh Press, 1974,} 56.\]

\[41^{\text{Of Fireplaces,}} \text{The Architectural Record 154, no. 4, (October 1918), 329 and 336.}\]

\[42^{\text{Wright, xvi.}}\]
Figure 12

Some typical floorplans. Taken from Henry Hubbard and Francis Joannes, "Government Housing an Industrial Proposition."
property conferred a voice in government. Throughout much of the nineteenth century, employers refused to sell workers property in order to retain the profits and control that ownership conferred. By the early twentieth century, however, the rise of trade unionism forced employers to extend homeownership to skilled laborers—the most ardent union supporters—in the hope that property would offset their desire to organize. Industrialists believed that homeownership would promote social and political stability by making workers more provident in both savings and actions.43 Housing reformers, who also advocated homeownership, reasoned that if skilled workers, mostly Americans and English-speaking immigrants, could be converted to a middle-class lifestyle, then the unskilled masses would simply follow. As a result, all of the federal projects adopted a "rent-to-own" policy.

Bit by bit, Hilton Village began to take shape. All of the houses were constructed with standard balloon frames, brick chimneys, and slate roofs (See Figure 13).44 Families began moving in during the fall of 1918, but the project was still 29 percent unfinished when Armistice came in November. As a result of time and financial

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43 Wright, 185.
44 The lumber, southern pine, was brought from North Carolina. Bricks and cement pipe were manufactured on site with materials obtained in Maryland and Virginia. Hollow tile came from Ohio, metal lathe from Pittsburgh, roofing materials from Cincinnati, and clay pipe from Louisville. Materials list, Box 9, General Files, Design Branch of the Public Housing and Transportation Division, Entry 281, RG 32.
Figure 13—View showing construction of houses along Main Street. Taken by E. P. Griffith, Aug. 1, 1918.
constraints, the Design Branch eliminated 29 dwellings, so that 472 was the final count in January.\textsuperscript{45} Three other Newport News projects were cancelled as well: a dormitory for 1,092 shipworkers; a housing development for blacks; and a 465-unit annex to Hilton Village. The railroad station, apartment building, individual garages, and community building were never built. In addition, budget cuts caused Hubbard's original idea for little parks in the center of each minor street to be omitted.\textsuperscript{46} Sidewalks, curbs, gutters, streetlights, and plantings, however, were retained (See Figure 14).

Within a few years, Hilton Village was on its way to becoming a true suburb with four churches, a school, a theater, a fire department, stores, and its own social clubs. Moreover, the lengthy process of federal divestment was almost over. In 1922, the Newport News Land Corporation assumed final ownership of the property and began selling houses to individuals. By World War II, Hilton Village was an independent municipality with all of the attributes and benefits its creators had envisioned. But as Chapter IV will show, Hilton's success stemmed from the determination of its residents, and not the benevolence of its builders.

\textsuperscript{45}Progress report, 28 January 1919, RG 32, USSB, Entry 281, Public Housing and Transportation Division, Design Branch, Box 8.

\textsuperscript{46}Chambers, 25.
Figure 14--Streetscape. Taken by E. P. Griffith, date unspecified. Newport News Public Library, West Avenue Branch.
CHAPTER IV
REFORM AND REALITY

The specific events which unfolded at Hilton Village after Armistice can help illustrate the problems ascribed to model industrial communities in general. Despite their rousing success from a design perspective, the government projects were functional failures. First, the houses proved too expensive for their residents. While skilled American workers wanted the trappings of middle-class respectability, they lacked the financial resources to secure them. Second, model dwellings took longer to build than emergency housing. By the time the houses were finished in the 1920s, the economy had shifted and the demand for labor was over. As a result, the federal communities neither solved the housing shortage, nor aided the war effort. Third, the final cost far exceeded budget appropriations. Declaring the project to have been a wanton waste of federal funds, Congress revoked its support of housing reforms. Skeptical to begin with, speculators and industrialists quickly followed suit. The government's model industrial communities therefore failed to accomplish any of their intended goals.

From the shipyard's point of view, Hilton Village came too late. Most of its federal contracts were cancelled
after Armistice and by the time the houses were finished in 1920, there was no longer a need for so many skilled laborers. In addition, model housing had not offset labor disputes or deterred trade unionism. Continual labor disputes plagued the Newport News area during the war years as electricians, plumbers, carpenters, pipefitters, and painters struck repeatedly over the issues of wages and job autonomy. At Hilton Village, these strikes caused considerable construction delays. While most of these men were members of the building trades, enough worked at the shipyard to cause considerable concern. In addition, tanktesters and boilermakers at the shipyard walked out in August 1918, in protest over the subcontracting system imposed on them by the Emergency Fleet Corporation (EFC). Most of the strikes were peaceful, and few lasted very long, yet the sheer quantity was an ill omen. Despite all efforts to the contrary, employees of the Newport News Shipbuilding and Dry Dock Company organized in February 1919, under the auspices of the Atlantic, Gulf, and Great Lakes Metal Trades Federation.¹

Strikes in the construction industries were not the only reason Hilton Village took so long to build. Begun in June 1918, the project was behind schedule from the start. According to various memoranda and weekly progress reports, there were three main problems. First, there was continual

friction between the Mellon-Stuart Company of Pittsburgh, which had won the contract for all construction work, and the Shipbuilding Realty Company, a special subsidiary of the ship company which administered the project for the EFC. Second, Newport News had a severe shortage of unskilled labor since all available hands were employed by the shipyard. Mellon-Stuart had brought more than 1,000 of its own men to Virginia, but they either quit or were drafted. A June 13, 1918, article noted "Labor Shortage Retarding Work at Village of Hilton."² The third and last problem was bureaucracy. Any changes on site—not matter how minor—had to be approved by the project manager, the architect, and a series of federal officials. In this manner, the government hoped to maintain some degree of control over construction and expenditure. Frederick L. Ackerman, Chief of the Design Branch, expressed his opinion that "living in the design branch is one merry round of playing tag with approvals. I am like the little dog upon the football field, who in the thousand whistle calls, hears his master's voice." Everyone on staff had to put in his or her two cents, which only served to complicate the problem and throw "monkey wrenches in the wheels of progress. . . . The departmental boobs—the project supervisors—wait and wait and wait for a signature and ask for information instead of looking for it." Exasperated, Ackerman sarcastically vowed

²Newport News Daily Press, 13 June 1918, 2.
that he would wait also, until "someone higher up" finally ordered him to get "the approval of the poor boobs who are to buy the houses at war prices--then the approval will be unanimous."³

Despite their national reputations, the architects were not given free rein over the projects. Nine different types of housing were required but within those restraints the architect could "use his talents to offer any combination of building types, floor plans, and exterior designs which would meet the needs of the project."⁴ All designs were to be submitted to the U. S. Housing Corporation for comparison with the government's housing standards. Those not approved were sent back for alterations.

Most of the changes pertained to construction materials rather than style. The Construction Branch of the Army, which oversaw the acquisition and disbursement of construction materials, took care to avoid the use of restricted goods whenever possible. Substitutions and alterations were made often. Joannes, for example, had specified stucco for the exterior of all Hilton Village structures. The order was partially filled when the Design Branch decided that the brand Joannes wanted was too
expensive. Rather than use Portland cement stucco, a poor substitute in his opinion, Joannes decided to ration the stucco he already had. Thus, some of the houses were entirely stuccoed, some were stuccoed on the first floor with weatherboards above, and some were clad completely in weatherboards. Similarly, the original plans to plaster all interior walls were adapted to use less-expensive and less-labor-intensive wallboard.5 Many materials were purchased from distant sites, and shipping costs and transportation delays only added to the final price. Despite efforts to keep construction costs low, the government's acquisition system actually raised expenses instead.

By 1919, critics of progressive legislation claimed that the housing projects were a wanton waste of federal monies. Rather than see these experiments as the basis of new social policies to be continued in the future, critics perceived them only as failed emergency measures, and demanded an explanation.6 Congress responded by launching a full-scale investigation into the financial state of the housing projects. The results, issued in a Senate committee report in December, charged the architects with misappropriating public funds for their own gain.7 At

5Miscellaneous correspondence, RG 32, USSB, Entry 281, Records of the Design Branch, subseries Alphabetical, Hilton Village, Boxes 4-5.

6Candee, 113.

7"Architects and War Housing: Extracts from the report of the Committee on Public Buildings and Grounds of the United States Senate Relative to the War Housing Work of the U. S. Housing Corporation," Journal of the American Institute of Architects 8, (January 1920, supplement), 1.
least twenty other faults were cited, including failure to keep within the budget, failure to build the houses in a timely manner, and failure to use local architects.

In testifying why the Housing Corporation looked outside the federal agencies for architects, Burt L. Fenner, manager of the Architectural Division, explained that the Corporation wanted to hire "local architects who had an intimate knowledge of local housing conditions." Yet it was obvious to the committee that few of the designers satisfied this criteria. Of the fifty-one men Fenner hired, fifteen were from New York City, his home town. A Massachusetts architect designed the community at Vallejo, California, while a New Orleans man planned the development at Charleston, South Carolina.8 In the case of Hilton Village, neither Hubbard nor Joannes seems to have spent much time in Virginia. Instead, they oversaw construction through correspondence and the occasional visit. Their traveling expenses, which the government paid, coupled with the designers' remoteness from the site and unfamiliarity with local building practices increased the delays and expense of each project.

The committee especially took offense at the construction of permanent houses. Of 6,148 families housed, 4,884 were in permanent dwellings, 989 in permanent apartments, 627 in "ready cut" houses, and 197 in

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8 Ibid., 5.
dormitories. The ready cut houses were deemed "fully sufficient for the purpose contemplated by the appropriation," and cost only $1,919 each. Satisfactory houses such as these were built only at Penniman and Craddock, Virginia, and in Nashville, Tennessee, forcing the committee to conclude that

If some such good judgment had been shown by the Housing Corporation and some recognition given to the purpose of the act and the desires of the legislative branch of the Government, the expenditure would have been infinitely less and the tangible result greater.9

Time was another problem. All of the witnesses for the Housing Corporation testified to their efforts to provide housing quickly, but the Committee noted that "months were spent in investigation, obtaining reports, selecting sites, and in deciding the proportion of group houses to double houses to single houses."10 Many more months were spent on construction, and not one of the contractors finished his work on time. In addition, the Committee faulted the "unnecessary excellence" of the houses, and charged the Housing Corporation with "making a demonstration of model housing rather than solving the emergency war problem."11 In the Senator's minds, emergency housing did not include "electric door openers, recreation parks, hot-water heating systems . . . kitchen ranges, kitchen cabinets, patent slate

9 Ibid., 2.
10 Ibid., 3.
11 Ibid.
wash tubs, and patent clothes dryers ready equipped with ropes.""12 Yet in keeping with the philosophy that skilled labor required superior accommodations, these features and many more like them were incorporated into every house. But in the process, house costs rose above the reach of its intended occupants.

According to the design staff, the official product of the government's housing activities was "the contented, efficient worker."13 Since the prospective residents of the federal projects were skilled, white, American-born workers, the architects argued that only housing of "the type demanded and ready to be paid for" by these workers would suffice, and further, that any effort necessary to produce the desired effect was a legitimate expense. Second, they said, "cheap hovels" of the sort suggested by the government would have simply deteriorated into slums over time, while permanent, well-designed houses would stand as one of the nation's most important assets, for only good housing and individual homeownership could create "loyal and useful" citizens.14 The committee did not share this view. "Congress certainly did not intend, whatever may have been the intention of the Housing Corporation, to enter into

12 Ibid., 1.
competition in architectural poetry with any other nation or private organization. We were neither competing nor demonstrating. We were just plainly housing." And in fulfilling this task, the government-sponsored industrial communities had failed miserably.

Despite access to detailed information regarding local wages and the cost of living in Newport News, the designers of Hilton Village miscalculated the amount of rent shipbuilders could pay. In the committee's opinion,

The "model idea" so permeated the whole organization of the U. S. Housing Corporation, from cost engineers and their new and perfect system of penny catching, to the pioneers of plumbing, which caused untold delay, that everything in the way of planning, constructing, and supervising was done on the scale of the field of Cloth of Gold. These things may have added value, but if so it was value that could not be cashed on the open market. It was value beyond the accustomed purchase power of the persons for whom the houses were intended.15

Caught up in the push to provide skilled industrial workers with middle-class surroundings, architects and reformers overlooked the crucial link between housing and wages. While skilled workers had middle-class aspirations, they simply lacked the financial wherewithal to pursue them.

As one contemporary source noted, the physical appearance of industrial communities depended upon two intangible forces: one social, the other economic. While architects, reformers, and industrialists wanted to provide the working classes with decent housing, the character of

that housing was limited by the amount of money families could afford in rent each month. This amount was determined by how much the employee earned, which in turn was influenced by his ethnic and occupational status. According to Leifur Magnusson's 1917 report for the Bureau of Labor Statistics, average rents equalled 20 percent of the employee's monthly wages. But wages, unlike rents, were not fixed.

To calculate the amount of rent shipbuilders could afford to pay each month and thereby assess the government's housing investment at Hilton Village, Hubbard and Joannes followed precedent and turned to the shipyard's payroll records. They took copious notes regarding hourly, weekly, monthly, and yearly wages during normal times and in wartime. They also took down information about rents. The data were compiled into a detailed chart and organized by occupation. Only anglesmiths, boilermakers, coppersmiths, fitters, moulders, machinists, patternmakers, riveters, and shipcarpenters were listed, for a total representation of 997 men. The normal work week entailed 48 hours of labor, but wartime demands had increased that number to 57. Fitters were the lowest paid employees, earning 46 cents an hour and 69 cents an hour for overtime, or $123.13 per month. At the other end of the scale, patternmakers made 68

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cents per hour and $1.02 for overtime for a total of $167.28 per month. Yearly salaries at the shipyard for 1918 therefore fell between $1,477 and $2,005, a significant increase over their normal, pre-war wage scale of $1,153-1,704.17 But these figures were misleading, for inflation also raised the cost of living.

On the basis of these figures, the editor of The American Architect predicted:

*It will no doubt be found impossible to build houses within the rent paying possibilities of the occupant, and it is well understood, we believe, that in such cases the government shall bear the cost, or loss, represented by any shrinkage in post-war values.*18

During the war, fitters and patternmakers paid $24.62 and $36.40, respectively, for rent each month. Due to war-time supply and demand, these prices belied the quality of working-class accommodations.19 Despite wage increases, shipbuilders still had difficulty paying such high rents. Nevertheless, Hubbard and Joannes used these figures as the basis for all financial calculations.

In their eagerness to design model dwellings, the architects included more amenities than the occupants could afford. As Walter Kilham, the principal architect for the

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17 The Bureau of Labor Statistics conducted a survey of working-class household budgets in 1918-19 and found that two-thirds of all respondents fell below the minimum subsistence level--$1,386 per year. According to the figures quoted above, most shipbuilders' wages fell into subsistence range. Hubbard and Joannes, 340; and Daniel Horowitz, *The Morality of Spending: Attitudes toward the Consumer Society in America, 1875-1940* (Baltimore: The Johns Hopkins University Press, 1988), 120-121.

18 Hubbard and Joannes, 341.

19 According to Leifur Magnusson, the national average was about $8 per month for a four-room, frame house. Magnusson mostly surveyed isolated mining and textile-mill towns, which may account for the differences in real estate value. See "Employers' Housing in the United States," passim.
Atlantic Heights development, remarked "while the projects always start out to provide simple habitations for working people, the actual result is, that by the time they are built, they are seized by a class superior to that for whom they were intended." In Kilham's opinion, this happened because "architects make too many additions to the originally simple plans such as fireplaces, furnaces, and piazzas that the workingman cannot afford."20 The government concurred saying,

The theory of the Housing Corporation seems to have been based on the psychology that the better the laboring man or mechanic was housed, the better satisfied he would be to continue his efforts to win the war. We do not believe that this was necessary for the loyal mechanics who were to be housed. They would not have complained of the color of the houses, or the curve of the dormer windows, or the orientation of the blocks, just so long as the houses provided a reasonably comfortably shelter.21

When the final tally came in, housing costs ranged from a low of $3,619 per unit at Philadelphia, to a high of $8,542 at Baltimore. Hilton Village rang in at $6,250 per unit, a figure more than $1,000 above average and more than $3000 above the designers original estimate.22 These figures far exceeded appropriations, and as the government said emphatically at the outset, it was not building housing for charitable reasons. To recoup some of its investment,

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20 Candee, 70.


22 Hubbard and Joannes calculated $3,232.77 as the government's total investment per house including the land and all necessary improvements. See Hubbard and Joannes, 165.
the EFC's Housing Division set rents at 5.42 percent of the
cost per house, or between $25 and $35. While high,
these figures corresponded well with Hubbard and Joannes' rent calculations, and for several months after Hilton's opening, wartime prosperity enabled families to make regular payments. Cancelled contacts and falling wages after Armistice quickly changed the situation, however, and by December 1919, the arrearage in rents at Hilton exceeded $2,000. J. P. Keisecker, the local site manager, petitioned the EFC for a reduction, but officials in Washington were determined to keep rents up. Besides, while "a certain leniency is expected for some tenants" they could conceive of "no condition in Hilton to justify so many tenants falling behind." In the meantime, many families began abandoning their model homes for less attractive but more affordable surroundings in Newport News. By March 1920, seventy out of 473 houses stood vacant and Hilton's arrearage was over $3,000. This time, letters flew back and forth between Hilton and Washington until officials at the Housing Division tentatively authorized Keisecker to cut rents by 10 percent; but it also cautioned him about setting a precedent for rent reduction. Under no circumstances would further reductions be made.

23 Ibid., 341; Newport News Times-Herald, 21 July 1975, vertical file clipping, Newport News Public Library; Rental schedule, file 202-0, box 81.

24 Letter from W. F. Wilmoth, Manager Public Housing and Transportation Division to J. P. Keisecker, Hilton Project Manager, 21 April 1920, file 237-2, box 83.
The situation in Hilton failed to improve, and in early June 1921, the remaining residents met to discuss further action. After several hours of heated debate, the villagers voted to send a petition to the EFC requesting another reduction. At the time, rents stood as follows: $36.45 for an eight-room house; $28.35 for a five-room house; $23.40 for a four-room detached house; $21.15 for a four-room row house; and $22.50 for four rooms in a semi-detached house.25 Pastor Charles Sheetz of the Hilton Baptist Church wrote an impassioned plea to Keisecker, saying "The USSB can never fully get returns from this war-time project commensurate with the amount of money expended here," but that they could at least get something if they brought rents within "reach of the average pocketbook."26 He noted that many men were laid off, while those fortunate to have a job worked only a few days a week and brought home less than $30. Keisecker sent the petition, along with Sheetz's letter to his superiors. After some more debating, rents were reduced by another 20 percent on July 1, 1921.27

By 1920, Congress decided to cut its losses and issued a stop-work order on all projects less than 75 percent finished. Officials at the EFC blocked this move, arguing

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25 Letter from J. P. Keisecker, Hilton Project Manager to W. H. Ball, Manager of Housing Division, EFC, April 1920, file 237-2, Box 83.

26 Letter from Charles Sheetz, Pastor of Hilton Baptist Church to J. P. Keisecker, Hilton Project Manager, 15 July 1921, file 237-2, Box 83.

that the nation's impressive new fleet still needed workers to keep it afloat, and these workers still needed houses. Congress compromised. The EFC received permission to complete the unfinished communities, but had to sell them immediately thereafter. Architects, planners, and reformers were horrified, for their experiment in social control was only half realized.\textsuperscript{28} The government, however, had had its fill of reform work.

In 1921, the Shipping Board sold all of its housing projects at public auction. As a result, reformers and architects lost their bid to see housing reforms implemented on a nation-wide scale. In fact, despite the tremendous attention paid them by architectural journals, the architects' designs had little impact on working-class housing. As the federal experiment proved, model houses were still too expensive and too inflexible to satisfy the average workers' needs. Convinced that progressive reforms would never be profitable or satisfactory, many speculators turned away from model housing for good. And when it became clear that housing betterment could not answer the labor problem, industrialists cut back on welfare work, too.

When Hilton Village came up for sale, Henry E. Huntingdon, the shipyard's Chairman of the Board, formed the Newport News Land Corporation and bought the entire village. Although the land corporation intended to sell the houses

\textsuperscript{28}Candee, 113.
immediately, the prices were too high. As a result, sales remained slow throughout the 1920s.29

With this shift to individual ownership, many changes befell the community. Although designed to solidify the appearance of the Village to passersby, most of the row houses along Warwick Boulevard were converted to commercial use by World War II. Various signs and facade alterations destroyed the careful continuity of Joannes' design. Behind the original stores, five vacant houses in the horseshoe were converted into the Colony Inn, a restaurant, hotel, and meetingplace. The most dramatic changes, however, were to the houses. Residents of English-style dwellings frequently added front porches. Others excavated cellars, enclosed existing porches, put on aluminum siding, and installed gas or electric heating systems. Indicating a complete disdain for shared space, owners used landscaping to define front and back yards. By 1966, Ruth Hanners Chambers' community study found that

Many residents have artfully contrived to minimize the repetitiousness of house designs and focus attention instead on attractive house settings. Variation and individuality have been accomplished most successfully in recent years through the use of color and the discovery that the simple uncluttered lines of the stucco houses in particular, lend themselves handsomely to unusual and striking paint shades of green, grey, brown, gold, and other colors.30

29 A single six-room house cost $2,800 in 1921. The terms of purchase were 10 percent up front in cash plus a ten-year mortgage with monthly payments equal to 10 percent of the initial cost. Ruth Hanners Chambers, Hilton Village: The Nation's First Government-Built Planned Community (Hilton Village: privately printed, 1966), 29.

30 Chambers, 33.
Individual expression was clearly important to the residents of Hilton Village.

Despite these alterations, residents are anxious to preserve other elements of Hilton's homogeneous character. In the 1960s, for example, Chambers' study resulted in Hilton's nomination to the National Register of Historic Places. The marker proclaiming the community's historical significance holds a place of honor on the corner of Warwick Boulevard and Main Street. A few years later, the residents formed an architectural review board and established standards for exterior alterations and maintenance. They are still in effect today.

The example of Hilton Village suggests that model industrial communities were unable to succeed on the basis of environmental melioration alone. Believing that architecture could influence behavior, Progressive-era architects, reformers, and industrialists deliberately set out to impose their values and lifestyle on members of the working-class. The designers claimed to have altruistic motives, yet they overlooked the actual needs of working-class families in favor of a utopian ideal. The Progressive housing reform movement and the model industrial communities which resulted were thus motivated less from a desire to uplift the masses and more by a need to impose order on the urban community. As such, efforts to imbue working-class families with middle-class values may be seen as an
experiment in social control.

It is clear that the provision of industrial housing gave employers control over employees. Previous research on Pennsylvania coal towns, for example, indicates that many coal companies willfully used their landlord status to control operatives.

From the long waiting list, company officials were able to pick only the most skilled and most loyal employees for housing privileges. Similarly, on the basis of reserving the best houses for the best qualified, employers practiced extreme racism and favoritism. Furthermore, eviction and blacklisting enabled most companies to deliberately exclude all known union sympathizers and organizers from their company towns. In fact, some companies went so far as to insert exclusion clauses in leases that banned all persons the company considered objectionable from trespassing on company property. Company property included not only the mine, tipple, and breaker, but the roads, store and houses, too.

Although they provided more company housing than any other industry, such practices were by no means exclusive to coal companies. In southern textile mill villages, houses were considered "essential to securing a labor force and carrying on the business of the mill, yet manufacturers also saw in them the means of exercising control over their employees." And when Leifur Magnusson conducted a

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nationwide survey of company housing for the Bureau of Labor
Statistics in 1916, he likewise concluded that "A housed
labor supply is a controlled labor supply."34 The degree
of control secured by industrial housing policies varied
over time, between regions, and from industry to industry,
but its presence remained implicit. While Progressive
architects, housing reformers and welfare capitalists
adopted a more subtle approach, their deliberate use of
housing betterment to elicit a specific type of behavior
from laborers reflects the same impulse to control.

Sources like Model Factories and Villages (1906) by
Budget Meakin; Industrial Housing (1920) by Morris Knowles;
Homes for Workers (1918) by Frederick Ackerman; Industrial
Housing Problems (1917) by Leslie Allen confirm that by
World War I American industrialists depended upon
sociological and architectural expertise to develop more
refined techniques for controlling their work force.
Housing betterment was clearly a major part of this
campaign, as suggested by articles like "Cambria Steel
Company Finds That Good Housing Increases Output" and "Good
Homes make Good Workmen." Sylvester Baxter likewise noted
that "One of our government's great war problems has been
how to assure the most efficient activity in manufactur-
ing."35 Thus, while many working-class families benefitted

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34 Leifur Magnusson, "Employers' Housing in the United States," Monthly Review of the Bureau of
Labor Statistics no. 5 (Nov. 1917), 45.

from improved living conditions, the chief purpose of housing betterment programs was to direct employee behavior along more productive lines.

During the construction of Hilton Village, Hubbard and Joannes admitted that "the end product of this housing activity is the contented, efficient worker," but none of the sources consulted for this project contained an explicit statement of control. As a result, the present argument is made by analogy. Nevertheless, stronger evidence may yet be found amid the records of the U. S. Shipping Board at the National Archives, in congressional hearings, or among the records of the Newport News Shipbuilding and Drydock Company. Although many documents pertaining specifically to Hilton Village were examined, time constraints did not permit a thorough examination of all available material.

Why, then, is Hilton Village significant? First, the sheer quantity of these federal model communities ensured that they would have a profound affect on the design of American domestic architecture. Approximately 169,000 housing units were erected by the government in 1918 alone. While an exact figure is uncertain, conservative estimates suggest that the total number of units erected during the war exceeded the amount of houses built by industry since 1800. Moreover, most of the architects and planners

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continued to design residential developments after the war. Between 1904 and 1916, an average of 485,000 housing units were built each year. Construction necessarily slowed during the war years, but after Armistice, the average number climbed from 767,000 units in 1922 to 1,048,000 in 1925.\footnote{Leland M. Roth, \textit{A Concise History of American Architecture} (New York: Harper and Row, 1979), 230.} Built in America's expanding suburbs, these new dwellings incorporated many features of the federal projects. As the first of these projects, Hilton offers an opportunity to study the designers' initial intent.

Second, Hilton Village and the other developments established a precedent for federal housing aid. Having committed funds to housing projects during the war, the government was unable to completely withdraw its support after Armistice. Despite the number of new dwellings, the United States still had a tremendous housing problem. While it curtailed federal monies, the government nevertheless continued to promote various housing programs throughout the 1920s. Herbert Hoover took a particular interest in correcting the housing problem, and personally led a campaign to create cooperative, voluntary associations between government, business, and civic groups.\footnote{Wright, 196.} By 1930, federal agencies were supervising the financing and construction of a sizeable segment of American housing. The government also buttressed the construction industry,
underwrote home-financing institutions, and indirectly supported numerous related fields, ranging from the automobile industry to suburban shopping centers.\textsuperscript{39} When the New Deal subsistence housing programs were put into operation, the World War I projects provided "the practical experience for refined social theories and new proposals" that was required.\textsuperscript{40}

Third and last, the example of Hilton Village demonstrates that a wide discrepancy often exists between ideal prescriptions and actual descriptions of model industrial communities. This idea is not new; social historians have long recognized that "Neither the way buildings look nor the way people live in them can be reduced to a formula dictated by architects, social scientists, or advertising companies."\textsuperscript{41} Nevertheless, many scholars continue to study model industrial communities within the narrow context of architecture and planning. As a result of this view, model industrial communities are reduced to expressions of individual artistry or charity. One architectural historian, for example, concluded that what made the federal projects particularly important was "the caliber of design and planning."\textsuperscript{42} Yet the built

\textsuperscript{39}Ibid., 217.

\textsuperscript{40}Richard Candee, \textit{Atlantic Heights: A World War I Shipbuilders' Community} (Portsmouth: The Portsmouth Marine Society, 1985), 115.

\textsuperscript{41}Wright, xvii.

\textsuperscript{42}Roth, 230.
environment also resulted from the specific economic, political, technological, and social forces of the period. To fully understand the significance of communities like Hilton Village, then, it is necessary to set a broader historical context. Only then can a useful interpretation of industrial housing emerge.
APPENDIX A

Photographs showing various types of houses in Hilton Village. Taken by E. P. Griffith, 1918-1919. Courtesy of the Newport News Public Library, West Avenue Branch.
APPENDIX B

Excerpt from U. S. Shipping Board, *Types of Housing for Shipbuilders*, 1919, showing plans and architects' renderings for select houses in Hilton Village.
SEMI-DETACHED HOUSES

Scale

10

15 Feet

FIRST FLOOR PLAN

SECOND FLOOR PLAN

HILTON VILLAGE NEWPORT NEWS VA
UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION
FRANCIS Y JOANNES RETAINED ARCHITECT NEW YORK
SEMI-DETACHED HOUSES

FIRST FLOOR PLAN

SECOND FLOOR PLAN

Hilton Village Newport News VA
United States Shipping Board Emergency Fleet Corporation
Francis Y. Joannes Retained Architect New York
HILTON VILLAGE NEWPORT NEWS VA
UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION
FRANCIS Y JOANNES RETAINED ARCHITECT NEW YORK
EIGHT FAMILY ROW HOUSE

Scale 1" = 20 Feet

FIRST FLOOR PLAN
SECOND FLOOR PLAN

HILTON VILLAGE NEWPORT NEWS VA
UNITED STATES SHIPPING BOARD
EMERGENCY FLEET CORPORATION
FRANCIS Y JOANNE S RETAINED ARCHITECT NEW YORK
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