DESIGNING A SENSE OF COMMUNITY: USE OF NEO-TRADITIONAL DESIGN ELEMENTS IN PUBLIC HOUSING

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Designing A Sense of Community: The Use of Neo-Traditional Design Elements in Public Housing

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(ABSTRACT)

This paper will address the question of whether neo-traditional design elements can promote a sense of community in low income or public housing neighborhoods. To answer this question, I will first provide a brief history of public housing and its design, describing the main architectural styles used over the years and their relation to sense of community (or lack thereof). I will then examine the current meanings associated with community and the possible implications for using design elements to aid in fostering a sense of community for public housing residents. I will next explore the basic tenants underlying the theory of neo-traditional design elements and how these design elements can assist in the community building process. I will then apply these neo-traditional design elements to a prototype neighborhood for public and low-income housing residents in order to understand how these design elements could be implemented in order to encourage the creation of a sense of community. Finally, I will examine Diggs Town, a public housing project in Norfolk, Virginia that recently underwent renovations using neo-traditional design elements. I then draw some conclusions concerning the strengths and weaknesses of this public housing renovation effort and the possible successes associated with the use of neo-traditional design elements in low income and public housing.

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Introduction

As we approach a new millenium, many people are taking a fresh look at our cultural and social values, and are searching for the sense of community and identity that they believe their parents had. Many are searching for ways "to make our physical environments more community-friendly, our homes, places of work, streets, and public places – [believing] that whole developments, suburbs, and even whole cities need to be [re]designed" in order to gain a sense of community (Etzioni, 1993).

This harkening to past communities has led to the emergence of architectural and planning practices such as neo-traditional design. Neo-traditional design incorporates the best of pre-WWII planning and focuses on providing a mixed commercial and residential area, a wide range of dwelling types, parks and open spaces, and a focus on pedestrianism. More importantly, these planning practices set the tone for the neighborhood and provide an opportunity for increased social interactions and community-building among residents. For the past two decades, neo-traditional design has been used to assist in creating a sense of community for some middle and upper-middle class neighborhoods. If these design elements can be used in middle and upper-middle class neighborhoods, can these same techniques be adapted to assist in creating a sense of community for lower income or public housing neighborhoods as well?

This paper will address the question of whether neo-traditional design elements can promote a sense of community in low income or public housing neighborhoods. To answer this question, I will first provide a brief history of public housing and its design, describing the main architectural styles used over the years and their relation to sense of community (or lack thereof). I will then examine the current meanings associated with community and the possible implications for using design elements to aid in fostering a sense of community for public housing residents. I will next explore the basic tenants underlying the theory of neo-traditional design elements and how these design elements can assist in the community building process. I will then apply these neo-traditional design elements to a prototype neighborhood for public and low-income housing residents in order to understand how these design elements could be implemented in order to encourage the creation of a sense of community. Finally, I will examine Diggs

Town, a public housing project in Norfolk, Virginia that recently underwent renovations using neo-traditional design elements. I then draw some conclusions concerning the strengths and weaknesses of this public housing renovation effort and the possible successes associated with the use of neo-traditional design elements in low income and public housing.

Public Housing

History

The government's role in public housing began in the 1930's as a response to the Great Depression. President Roosevelt saw great potential in a national public housing program as a way to provide employment, shelter, and slum clearance. In the early 1930's, the Public Works Administration's (PWA) was created in order to construct and manage temporary low income housing. "Initially, public housing was intended as a stepping stone for those families unable to own their own home. It was not intended for the poorest of the poor since the majority of those displaced by slum clearance could not afford PWA rents" (Schach, 1997).

PWA housing had several characteristics that differed from government subsidized housing, as we know it. First, its projects were designed to be self-supporting, in that the rents collected more than covered operating expenses. Any surplus was sent on to the federal government. Second, in general, the majority of PWA housing was of good quality construction using brick, copper, and other durable materials. Many architects used PWA housing as a forum for creating "ideal housing environments" (Schach, 1997).

However, public housing was never the same after a 1935 court case and the Housing Act of 1937, which invalidated the direct provision of public housing and created federally subsidized public housing, constructed and operated through locally established Public Housing Authorities (PHA). While low-income housing constructed under the PWA was considered "model housing," government subsidized housing was designed to not compete with private sector housing. Congress required that projects built under the Housing Act of 1937 "not be of elaborate or expensive design or

materials, and that economy … be promoted in both construction and administration" (Schill, 1993). This mandate built upon the idea that government subsidized housing should be temporary in nature, but contributed to the current need for public housing renovations.

Construction of public housing lagged after World War I and was at a standstill during World War II. After World War II, Congress passed the Housing Act of 1949, promising a decent home and a suitable living environment for every American. This act allocated federal monies for slum clearance and urban renewal, "revived the public housing program," and provided for the construction of 810,000 additional public housing units (Schill, 1993).

Design

Early plans for public housing concentrated on providing good housing and creating a "wholesome way of living" in hopes that good housing would lead to good neighborhoods (Gray, 1946). In the 1930's and 1940's, public housing was intended as a form of temporary assistance for returning war veterans and those who had fallen on hard times after the Great Depression. Although model-housing designs were used, the buildings were also designed for temporary use, and high densities were justified by their temporary nature. Early goals for public housing design included the creation of unified neighborhoods with no through traffic or noise. Plans included ample space for air and sunlight, privacy, gardens, and recreation areas for children and adults. Each project was supposed to be convenient to stores, near social and civic activities, and near public transportation (Gray, 1946). The effects of these goals can be seen in the choices for public housing designs over the next forty years.

Housing designs in the 1930's and early 1940's were generally in the form of enclosed or semi-enclosed courts of apartments and walk-up apartment buildings, known as "garden apartments" (Franck and Mostoller, 1995). Apartment buildings were next to neighborhood streets, but most apartment entries faced the interior court. During this time, superblocks were used in some places. Superblocks were created when PHA's assembled larger parcels of land upon which to build public housing. Streets were not cut

through these landmasses, in order to separate the housing project into its own entity distinct from the surrounding neighborhood, and in keeping with the early goals of public housing. (Franck and Mostoller, 1995)

From 1940 to 1945, public housing designers continued to use apartments with enclosed courts, but also transitioned from semi-enclosed courts to an open space approach. While most early public housing projects gave some consideration to the amount of sunlight and air that could be had through the design, the open space approach epitomized design elements that emphasized air and sunlight as their goals. Utilizing this open space approach, designs of this time period were three story walk-up buildings. These buildings formed U, L, and T configurations, and had entrances facing the inner courts (Franck and Mostoller, 1995).

Public housing design from the mid-1940's through the 1960's was characterized by larger projects with expanses of open spaces winding through strings of row houses, walk-up buildings, or elevator high-rises. During this time, architects employed a more extensive use of street closings and superblock formations. Buildings were angled to neighborhood streets, continuing with the idea that front entrances should face onto inner courtyards and not surrounding streets (Franck and Mostoller, 1995).

Elevator high rise buildings were first used in the 1950's. They are the most recognized forms of public housing architecture, inspiring memories of the infamous Pruitt-Igoe project in St. Louis, Missouri, or Cabrini-Green in Chicago, Illinois. High rise elevator buildings that were once heralded as the best of architectural innovations for housing the poor are now the archetype of crime, drugs, and the catastrophe of public housing.[1]

Many projects in the 1950's were designed with a combination of high rise and walk-up buildings. Buildings were placed to form geometric patterns on large superblocks with a limited number of through streets that were contrary to the surrounding urban mix. Winding around these buildings were large expanses of unclaimed open space that were not intended for a particular purpose, such as playgrounds or recreational areas, but were prized just for their accessible, undesignated

[1] It is beyond the scope of this paper to address all of the subsequent problems derived from public housing design, including racial issues, drugs, crime, and the marginalization of the underclass.

qualities. However, plans for undesignated open spaces were later omitted from housing project designs because of the criminal activity that took place (Franck and Mostoller, 1995).

Construction of public housing slowed to a trickle during the 1970's through the 1990's, and this era is more known for the renovation and redesign of housing projects. Building renovations included the creation of small front yards, private rear yards, semi-enclosed or fully enclosed courts for row houses, and the demolition of some high rise elevator buildings. Emphasis was placed on opening up previously closed streets to demolish superblocks, creating new streets to reunite the project area with surrounding neighborhoods, and moving front entrances from the interior courts to face the streets (Franck and Mostoller, 1995).

Architects often saw public housing design as a forum for experimentation in different architectural styles, "dreaming up novel designs for public housing" (Duany 1992). However, many architects did not consider the social and human sides of their designs, focusing on the "perfect prototype architecture" and not the needs of the residents (Campbell, 1994). Now, the architectural tide is turning towards the inclusion of community and the needs of the residents. The use of neo-traditional design elements can now be seen as a reflection of "a growing consensus that some housing projects have failed, at least in part, due to poor design" (Bothwell, et al.1998).

The Need for Renovation

The Housing Act of 1937 necessitated future renovations of public housing. Previously, the most prominent theory for public housing design "was to cram into the available space as many apartments as cheaply as possible, the more spartan the better. The voting public would see it as thrifty…and the residents would consider the uncomfortable dwellings as temporary and move out as soon as they could" (Stanfield, 1996).

Therefore, in an effort to show the frugality of government subsidized housing, local PHA's often "used non durable materials in the building's structures and internal systems. Now, many public housing developments lack sufficient insulation, and have

defective roofs and obsolete mechanical, electrical, and plumbing systems which are in need of a major overhaul" (Schill, 1993). In many units, rooms are typically too small for the families that they accommodate: there are not enough bedrooms and the dining room is too small for the whole family to comfortably eat together. Other decisions predicated on economy but resulting in degradation include closets that were built without doors, toilets that did not include seats, and bathrooms without showers (Schill, 1993).

Fiscal problems experienced by local PHA's were another contributing factor to the demise of good public housing and the need for renovation. As Mildred Schmertz explains:

> "Until the 1960's, rents in public housing were set by operating costs, while debt service was handled by the federal government. During the 1960's and 1970's, however, tenants became poorer and poorer at the same time that maintenance costs were rising. Because rents no longer covered operating costs, Congress amended the housing legislation to require that tenants pay 25 percent of their net income for rent (an amount subsequently adjusted to 30 percent of gross income). Of course, such measures merely created a shortfall, because base incomes were too low. A subsidy became necessary, but the funds made available were insufficient, and so much of the maintenance had to be deferred that buildings began to fall apart." (Schmertz, 1998).

To summarize, in general, public housing was built cheaply and was intended for temporary us. Its provisions for maintenance were continuously shrinking and its building designs showed little concern for residents' needs. Addressing these issues is at the focal point of current renovations. However, I argue that the renovations should go beyond bringing these buildings up to code. If public housing renovations included the use of neo-traditional design elements, the design elements might help to foster a sense of community by providing a place where social interactions can take place. In they very

least, they might improve the living environment of the housing project so that residents are satisfied by the completed renovation efforts.

Community

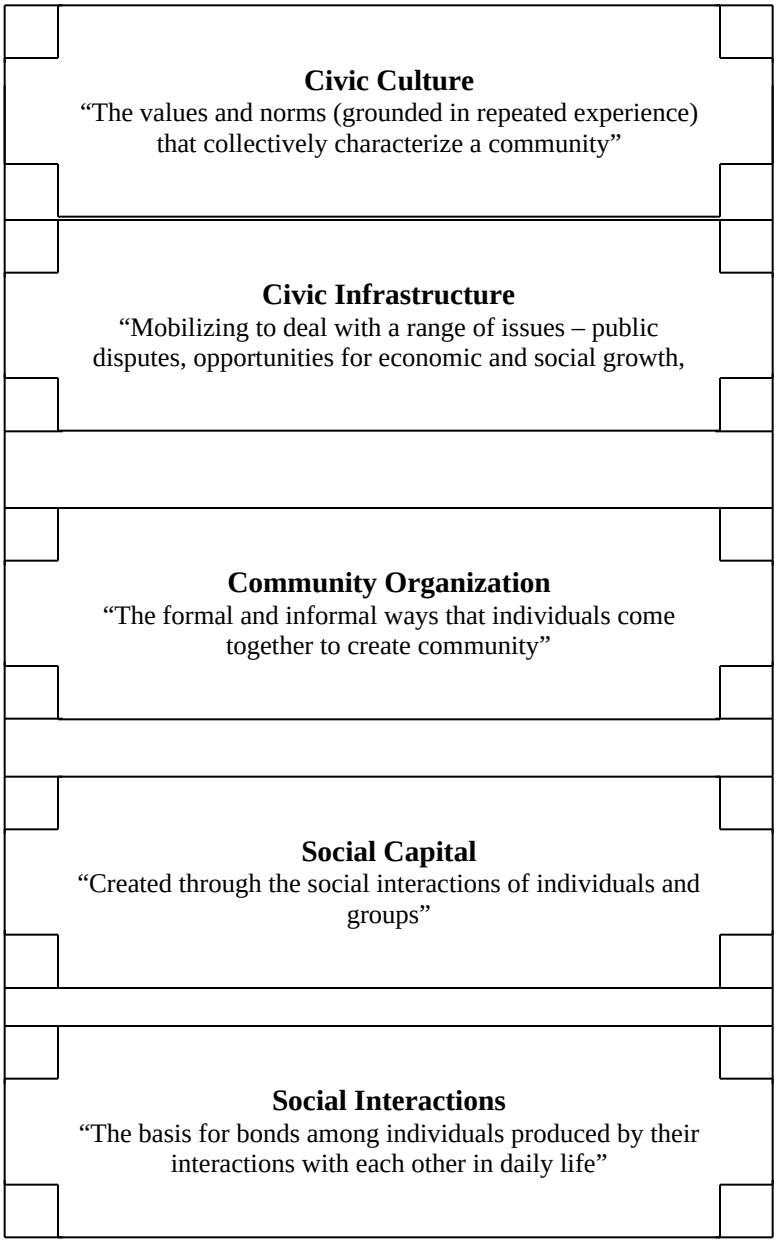
Community may be defined as a place; a way of life; a setting where people work together to achieve common goals; where social bonds are formed; and where a sense of belonging can be achieved (Schwartz 1991). However, in thinking about community, we must go beyond a simple definition of what community is, in order to understand what community may mean for a resident of a public housing project. Does "community" mean inherently different things to a public housing resident than for a resident of suburban America? I would argue that while both concepts start from the same basic ideals, the meaning is different for the housing project resident. This difference in meaning can be directly related to and incorporated into the necessary redevelopment efforts of public housing projects. Traditional community elements such as places to meet, retail establishments, civic buildings, recreational areas, and the feeling of pride in one's surroundings transcend suburban/public-housing distinctions. However, a sense of community, for public housing residents, could also include a reduction in feelings of stigmatization, increased access to employment, better educational opportunities and increased access to social services.

Discussions of community invariably turn into discussions of building social capital. The term social capital, "describes the reserves of mutual assistance created through norms and networks of civic engagement. It provides the foundation for mutual helping that connects neighbors with one another and provides bridges [links] to opportunities in the larger society" (Wallis, 1998). I would argue that implementing architectural design elements to create a space for social interactions to take place is one step in the process for building social capital and possibly creating a sense of community among residents.

According to William Potapchuk, Jarle Crocker, and William Schechter (1997) the creation of social capital can best be expressed in terms of rungs on a ladder, each rung building upon the previous. The flowchart below (Table 1) best represents each

rung on their "community building" ladder, working from the bottom of the ladder (bottom of the table) to the top of the ladder.

Table 1: The Ladder of Community Building (Potapchuk et al, 1997)



According to this illustration, creating a sense of community is a necessary building block that is intertwined and intermixed in each step in the process. Beginning with the first rung on the ladder, social interactions, I believe that certain design elements can work to create space where social interactions can take place. In essence, architectural design can be seen as a prerequisite for enabling the social interactions needed that contributes to community building and social capital. It is these design elements that assist in community building by providing places for networks to form, through the everyday use of community areas such as sidewalks, mailboxes, stores, streets, and parks.

However, architectural features are limited to spatial and other elements that assist in making community building possible. Neighborhood residents and families must take the initiative in forming the social bonds necessary for the creation of community. Though, I believe that these architectural design features can provide a place for social interactions and when used in conjunction with social, educational, and other community building programs, can contribute to the creation of social capital and community building in public housing and other low-income neighborhoods.

Community and Design

In 1963, Jane Jacobs, in her pivotal work, Death and Life of Great American Cities describes four main and interrelated ingredients for distinguishing an "area" from a "community." A community needs clear definitions between public spaces, such as sidewalks, parks, and stores, and private spaces such as houses, lawns, and gardens. Neighborhood streets must constantly be in use at different times during the day and night. Urban communities should support local businesses, retail shops, and restaurants, as well as civic institutions such as libraries, post offices, and parks. Homes and businesses should "front" streets and people should be on the sidewalks during different times of the day. These tactics will provide "eyes on the street" to watch over the common areas of the neighborhood. Those that provide this "eyes on the street" service must also have strong feelings of public responsibility (or sense of community) in order

to intervene in any situation, whether it is a crime or a lost child, when necessary (Jacobs, 1963).

These ingredients described by Jacobs, also known as design elements, are the building blocks of neighborhoods and communities, contributing to the creation of a sense of community through architectural design. These design elements provide a framework for area residents to interact with one another as much or as little as they like. While the use of these design elements have fallen out of favor over the years, they have resurfaced anew, establishing a foundation for many current planning and design theories, such as neo-traditional design.

Architects and planners have begun to incorporate these and other community-building design elements into their plans for middle and upper middle class neighborhoods. However, there have only been a few attempts to adapt these design elements for use in low-income or inner city areas, or in the renovation of public housing projects.

Community in Public Housing

As discussed earlier, the first steps in the "community building ladder" are social interactions among residents. Design elements, like those championed by Jane Jacobs, can lay a foundation for enabling social interaction through architectural design elements by providing spaces and places that encourage natural meetings and other friendly interactions.

However, it is difficult to give structure to a community if spaces are not provided for these casual and chance interactions among residents. The opportunity to interact should be incorporated through neighborhood or project design and planning. Neighborhoods need places that attract people, such as sidewalks that are pleasurable to walk on, a retail core within walking distance from most neighborhood residences, civic buildings, and other public spaces such as parks and recreation areas. By creating public spaces "that provide a sense of place [author's emphasis] and act as landmarks [for]

community identity," planners and architects are providing a framework for building a community (Gabor, 1997).

Using design to establish a framework for building a sense of community provides many benefits for both low income and public housing residents and the surrounding area. A renovation of a public housing project to include the design elements discussed later in this paper could lead to positive social changes in residents, restoring a sense of humanity to the project, or reducing resident's feelings of stigmatization, associated with living in a housing project. As architect Andres Duany stated, "housing the poor in structures that look different from those of the middle class is a catastrophic mistake…people who are [constantly] reminded that they are different…will act differently" (Duany, 1992).

In the history of public housing, project residents have been separated from the rest of the community and treated differently. This separateness leads the residents to believe they are not wanted. Their housing is generally ugly, substandard, filled with crime, a dangerous place to live (Schill, 1993). Constant exposure to these conditions can lead residents to internalize this feeling of difference and make it a part of their personality. On the other hand, if housing projects are renovated in a manner that promotes community building, then perhaps we can undo some of the previous harms done.

Designing in order to contribute to a sense of community, with the inclusion of other supportive community building programs, might provide residents with a social foundation of pride, dignity, and knowledge of community functioning. These skills could then be transferred to employment situations or movements out of public housing. However, design can only accomplish so much. It can only be effective on the lower rungs of the community building ladder - it cannot make communities organize or build a civic culture. Design elements can only contribute to community building or help to foster a sense of community among residents, which constitutes the first rung on the ladder. Community can only be assisted by, but not be directly created through, architectural design elements.

Neo-Traditional Design

Neo-Traditional Design[2] (NTD) is an architecture, planning, and design theory that takes its inspiration from pre-WWII small towns. Neo-traditional design focuses on creating residential neighborhoods with civic, pedestrian, parks, and commercial areas that "emphasize physical design concepts intended to enhance a strong sense of community among residents" (Christofordisis, 1994). Neighborhood design often "emulates historic urban design compositions that have proven to be successful…and respond to the demands of contemporary life" (Nelessen, 1994).

In order to enhance a sense of community, NTD practitioners depend on design elements that, when used in conjunction with one another and with the local and regional architecture, will give an area a sense of place and community. The design elements most associated with NTD focus on all aspects of community life, including housing, employment, retail and commercial centers, parks and open spaces, and a focus on pedestrianism and the use of mass transit.

The overall goal of neo-traditional design is to foster a sense of place, contribute to a sense of community, and ensure that developments are designed for the human scale. Sense of place can be defined as one or more "distinguishing qualities that differentiate one place from another, made from a collective representation of community identity, where residents have a sense of belonging, and can identify" with the area (Smith, Nelischer, Perkins, 1997). Sense of place and sense of community may be created by using all of the design elements discussed below to provide opportunities for casual interaction among residents, public and private places to meet and socialize, and landmarks or other points of reference in the community such as parks and civic buildings.

Designing for the human scale contributes to an area's sense of place and focuses on designs that are pleasing to the human eye. "Human [design] elements range from benches and low walls which invite spontaneous gatherings to civic spaces and parks

[2] Although New Urbanist and Neo-Traditional Design theories have their differences, for the purposes of this paper, these theories will be combined and treated as the same theory under the heading of neo-traditional design.

which encourage community wide interaction" (Nelessen, 1994). Neo-traditional developments do not strive for a new form of architectural excellence that are off-putting to the average person, but utilize a distinct architectural character that builds upon the local architecture of the region. The next section outlines the specific neo-traditional design elements that can be used to contribute to feelings of community. Although these design elements are interrelated and work best when implemented together, they are easier to discuss when broken into smaller categories.

Housing Units, Yards, Blocks, and Streets

Neo-traditional design emphasizes a mix of dwelling types in an effort to provide housing for all income levels, usually through a mix of single family residences, apartments, row houses, and duplexes. Proponents of NTD also include apartments above private home garages, businesses, or stores, also known as "granny flats," further encouraging a mix of residents and businesses.

Each housing unit on the block should face the street and border a sidewalk or walking path. It is at this intersection between the yard and the street that provides the clear demarcations of public and private space that Jacobs discussed. Clearly marked street addresses, and well-maintained fences, shrubs, trees, or lawns let the passerby know where the divisions of space and are the epitome of good neo-traditional neighborhoods.

Walkways should be sociable and pleasant places to be, welcoming casual interactions. The most enjoyable pathways run alongside narrow streets, rows of trees, picket fences, views of parks, and the front porches of houses. Other enjoyable streets run along business areas with shade trees and outdoor cafes that encourage window-shopping, people watching, and afternoon strolls.

Good streets encourage a lively and active street life. Neo-traditional design employs the use of grid-like streets and other street patterns that allow drivers and pedestrians a variety of path options. Narrow streets are also encouraged and should be designed for slow car passage and parallel parking which will act as a "buffer" between

cars and people. However, narrow streets often require the use of alleyways to provide access for service vehicles such as garbage collectors, mail delivery, and entrance to garages located behind homes.

Mixed Uses, Open Spaces, and the Surrounding Neighborhood

What makes neo-traditional design different from a planned unit development (PUD) is a mixed-use core area of residences, offices, and retail establishments (Christofordisis, 1994). For example, in the mainstreet or downtown area, there would be a mix of single family homes, duplexes, and apartments. Downtown businesses could include banks, law offices, day care centers, or real estate agencies, as well as basic retail establishments, including grocery stores and pharmacies. Neighborhood businesses such as restaurants, bookstores, beauty salons, clothing stores, or stationary stores may line the streets for window-shopping and ease in pedestrian usage. Important community civic centers include a library, post office, courthouse, or other such institutions should be included in this area as well.

Provisions of common open space constitute another important element of neo-traditional design. In the center of the neighborhood, there should be a public open space area similar to a town park or square that you would find in an older town. This area can provide open recreational space, meeting space, a festival area, and the like. Town parks could also be a forum for civic art such as fountains and statutes, encouraging neighborhood beauty and possibly supporting local artisans as well.

Neo-traditional design promotes the use of vernacular architectural design that can contribute to the development's overall sense of community, pride, identity, and place. The combination of local architectural and planning styles and the design elements discussed above, work together to seamlessly blend-in NTD neighborhoods with their surrounding communities.

Neo-Traditional Design and Redevelopment

The goal of the neo-traditional design movement is to "integrate those elements which have historically proven to be important to the community" into new developments

(Nelessen, 1994). Neo-traditional design has not been widely adapted for use on redevelopment projects, and has rarely been used in building or renovating public housing projects. Critics of the NTD movement suggest that the benefits of these design elements can only be realized when used in new developments. Those who criticize the use of neo-traditional design theories in public housing projects suggest that if we assume that public housing residents can foster a sense of community simply because of housing design, then we assume that the physical design will produce a common culture. However, in assuming this, the critics believe that we are not taking into account that a group of poor people living together will produce a culture of poverty. In order to define a sense of community in public housing projects, they believe that we must "assume that people can be affected by the space that they occupy" as well as facilitate neighborliness among public housing residents (Smith, 1997).

In response, I assert that when used creatively, NTD design elements can be adapted for use in both new and renovated public housing, as well as low-income housing and inner city neighborhoods. The test for the success of incorporating these neo-traditional design elements into public housing renovations should not be the creation of community, but resident's satisfaction in their new living environments.

To illustrate the creative use of NTD in public and low-income neighborhoods, I will next describe a prototype for a potential inner-city infill development. This discussion will focus on how NTD elements can be utilized to promote social interactions in order to facilitate community building among prototype residents. I will then discuss Diggs Town, a Virginia public housing project that illustrates the use of neo-traditional design elements, having completed these renovations in 1995.

A Prototype Neo-Traditional Neighborhood

Neo-traditional design theories supposedly are at their best when used in new developments. However, the application of these design elements cannot be tested and used universally without stretching them past their supposed limitations and challenging designers to make the seemingly impossible a reality. The following discussion will focus on the implementation of NTD design elements in an inner city redevelopment

project. The discussion emphasizes the use of these design elements when addressing the issues of public, low-income, and lower middle income housing. Although there are many problems and concerns associated with a renovation of this nature, this discussion will not give consideration to monetary, maintenance, planning, implementation, and gentrification issues.

In general, this prototype development will have a lower density than typical public housing projects, but still a relatively higher density than associated with the suburbs. A higher density is necessary for the promotion of pedestrian activities by placing housing, parks, and commercial services within walking distance from one another.

In the past, public housing design focused on providing housing surrounded by open, undefined space, bringing in air and sunlight to residents. However, these open spaces degenerated into "no man's land" used not by the residents but by criminals. In this prototype development, there will be a purpose and use "assigned to every square foot" of project space (Vale, 1995).

The prototype will seek to include the redesigned neighborhood within the surrounding community. Previous public housing site designs developed superblocks that, because there were not many streets through the project, created physical barriers that visually separated the project from the surrounding community. The current focus now seeks to end "the isolation of public housing by stylistically incorporating it into the rest of the community… making typical public housing look like a typical neighborhood" (Eckert, 1996).

There are several neo-traditional design elements that may lay the foundation for the creation of a sense of community, including a mix of housing and commercial activities, a focus on pedestrian needs, open spaces, common areas, and civic buildings. Although these elements, when used in combination with one another, will meld together forming a foundation that may lead to community building, I will divide them into two categories for easier discussion.

Housing Units, Yards, Blocks, and Streets

In keeping with the surrounding urban fabric, housing units in this development will consist of a mix of duplexes, row houses, and apartments. Small cottages or bungalows could be used where appropriate space is available and suitable to the overall neighborhood design. These housing units will either be mixed in with commercial uses or located in smaller clusters of row houses, duplexes, and apartments of 20-30 units and clusters of small cottages consisting of 10-15 units. For example, apartments could be located above commercial uses, or row houses could be across the street or around the corner from a park or a grocery store. Small cottages would be located along the peripheral of the community, beginning the transition to more market rate housing units.

The row houses, duplexes, and small cottages will be designed with front entrances facing neighborhood streets instead of interior courts. Each unit will have a clearly defined front and back, with living rooms located in the front of the house and kitchens in the back of the house. There will also be private front and back entrances for each resident, with front porches and back patios (Vale, 1995).

It is very important for every housing unit to face the streets, in order for every resident or family to have a street address instead of just a building number. This is an important feature in the creation of community. As architect Raymond Grindoz explains, "we have found that by creating a series of addresses, with images based on the best, most stable neighborhoods of a city, it is possible to attract a diverse new market to an inner city" (Grindoz, 1997). Housing units with street addresses are a significant, positive distinction between a public housing project and a real neighborhood, which will lend credibility, pride, and dignity to the residents in this project.

Building façade will be another important feature of housing units in this development, especially for the public and low-income housing units. Use of façade elements that are typical of private sector housing, such as front porches, pitched roofs, and colorful trim will help to make the public and low-income housing less identifiable and more in tune with the development's other housing options. All buildings in the

development will reflect the area's vernacular architecture and blend in with the surrounding urban community.

This prototype development is designed for an inner city area with infrastructure such as streets and sidewalks already in place. Nevertheless, it might be necessary to make some changes in order for the area to conform to neo-traditional design goals. For example, NTD calls for neighborhood streets to be set in a grid-like manner, integrating the development within the surrounding community. If this is not the current situation, then it may be necessary to create streets wherever possible. On the other hand, current streets might be too large to meet neo-traditional design standards. Adjustments might include the extension of sidewalks on both sides of the street, the addition of on-street parallel parking, or the creation of a planting strip down the middle of a road to create a boulevard effect. The addition of parallel parking on one or both sides of a street will also narrow the streetscape, causing cars to travel at slower speeds and acting as a buffer between cars on the road and pedestrians on the sidewalk. Parking for the apartments will be located on the street in front of the units, or behind the apartment building in small parking lots. Duplexes, row houses, and cottages will all have street addresses and on-street parking.

Each row house, cottage, and duplex will have private outdoor space attached to their unit, enabling residents to maintain lawns and gardens. In addition, there will be other areas of the development devoted to community gardens for those needing larger garden plots and additional garden space for those residing in apartments. Through these parks and gardens, the neighborhood will emphasize its connection to nature, bringing into a central urban area a green respite in its abundance of trees, small lawns, and personal and public gardens.

Aside from parks and playgrounds, community spaces in this prototype will also include centrally located mailboxes and garden areas for each neighborhood cluster. Simple, everyday activities, such as picking up the mail, often "creates some social interactions such as greeting and talking. These … activities significantly influence the sense of community" (Li, 1998).

Mixed Uses, Open Spaces, and the Surrounding Neighborhood

Mixed-use commercial areas in this prototype might include a grocery store, pharmacy, laundromat, day care center, post office and space for other commercial activities, intermixed with housing and public spaces. Within the commercial area, it will be important to "foster the growth of inner-city businesses by bringing them into the project" (Eckert, 1996). In this prototype, success will depend upon having a strong commercial establishment such as a grocery or convenience store built near the beginning of the redevelopment efforts and at the same time housing units are being constructed or refurbished. Commercial, public, and religious institutions will have stately architecture and characteristics that identify their role in the community.

Finally, this prototype development will feature parks, community gardens, civic buildings and other spaces. These areas are the places most associated with feelings of community. "If designers can create space, not only for necessary activities, but also for other social interactions such as chatting and playing on common land, the sense of community will be stimulated" (Li, 1998). Open spaces should be designed to "anchor the community and make it a focal point for interaction" (Nelessen, 1994). In this prototype development, community space will include park and playground areas and basketball courts in each housing cluster. There will also be recreational fields in the center of the development, reminiscent of a town square or green. Town parks would provide an opportunity for civic art, such as fountains, statues, and murals, hopefully spawning creativity among local residents. Civic buildings would serve as landmarks and as focal points in a community and would include a community recreation center with indoor basketball courts, and meeting spaces for children and adults.

This prototype development currently exists only on paper. Its success in forming the development the way I have described requires an incredible amount of planning, and the balancing of public, private, and community interests. The variables I have not given direct consideration to in this discussion, including the funding streams, the planning and implementation concerns, the possibility of area gentrification, and the maintenance concerns for the public housing units, among others, might preclude this development

from taking shape. Alas, in our imperfect world, I realize we must use visions such as mine as a guide for operating within the confines of the existing norms, working for small changes in the redevelopment techniques that could bring larger impacts upon both low-income and public housing populations.

However, one housing project in Virginia has made the seemingly impossible (the redevelopment of a public housing project using NTD design elements) into a reality. The Diggs Town Public Housing Project in Norfolk, Virginia was renovated in 1995 using many neo-traditional design elements. In the next section of this paper, I will introduce the background of the housing project and discuss the design techniques utilized in the renovation. I will then describe and provide visual images of Diggs Town in its current form and discuss the results of the renovations.

Diggs Town

History

Diggs Town was built in 1952 as part of the federal Public Housing Program and was one of the first public housing projects constructed under the Housing Act of 1949 (Bothwell et al., 1998; Gindroz, 1998). It was a moderate-density low-rise project consisting of 428 units in long, two-story, "barracks style" townhomes (Gindroz, 1998).

Diggs Town was planned utilizing the open space approach, and had no defined common space, no play areas or private yards. There was no clear area specifically designed for the resident's use; no landscaping, no garden plots, just trampled down grass and dirt. Buildings were placed to form rectangles, with the front door of each unit facing the inner courtyards of the rectangle (Gindroz, 1997). The area resembled a "sea of brick boxes" (Bothwell et al., 1998)

Similar to many other housing projects across the nation, Diggs Town was soon plagued with unemployment and physical deterioration, eventually becoming a haven for drugs, crime, and gangs (Gindroz, 1997). In 1989, Diggs Town was "the third largest housing project in Norfolk, with 1400 residents [and] was arguably the city's most violent" housing project (Frank, 1995). For example, garbage bins located in the "no-man's land" areas of the complex "dominated the streetscape and were a danger for

residents. Drug dealers used [the garbage bins] as impromptu sales counters" in order to ensure that they did not have any drugs in their possession when the police inspected the area (Gindroz, 1997).

In 1990, the Norfolk Redevelopment and Housing Authority (NRHA) began a $17 million redevelopment of Diggstown using funds from the Comprehensive Improvement Assistance Program or CIAP. The goal of the redevelopment efforts was to use principles of neo-traditional design to "transform Diggstown from a 'project' to a neighborhood" (Bothwell et al., 1998).

This discussion of the parts of the renovations that utilized neo-traditional design elements will focus on two essential aspects: the housing units, yards, blocks, and streets and the mixed uses, open spaces and surrounding neighborhood. These two aspects are discussed separately below to provide a clearer picture of the renovation techniques.

Housing Units, Yards, Blocks, and Streets

Design elements used on the housing units, yards, blocks, and streets included front porches, front and back fences, changes in building formations, and the addition of new streets and street addresses.

Front porches were added to every housing unit. Each porch was classically detailed; featuring pitched roofs and wood columns with a southern-style flair. Color was used on front doors, porches, shutter panels, and window trims to add clear definition and style to each unit (Bothwell et al., 1998).

A combination of high and low fences was used to define the private outdoor space at the front and back of each unit. In the front yards, white picket fences 2'6" high were "placed at the intersection of streets or where pedestrian paths met sidewalks" in order to protect against those who cut across lawns (Bothwell et al., 1998). The front porches and white picket fences worked together to give clear definitions to public and private space.

The back of each housing unit received a patio, storage shed, and fences that defined personal and communal backyard areas. Renovations included the establishment of communal backyards, which are secured through the building's formation and tall fencing. By creating "villages" through building formation, each set of buildings that backed up onto a communal backyard gave residents a feeling of community, identity, and ownership (Bothwell et al., 1998).

The existing site plan for Diggs Town depicts the superblock formation of the housing project, with few streets providing direct access to housing units. Wherever possible, the "street system was redesigned to provide access to previously inaccessible courts" (Bothwell et al., 1998). Where streets could not fit through buildings, eight-foot wide paths were created, and were differentiated from the streets using materials such as brick or concrete. The inclusion of streets permitted on-street parallel parking, allowing for residents to park in front of their housing unit. The streets have also made the "edges of the project now seamlessly blend in to the larger [surrounding] community of which Diggs Town is a part" (Bothwell et al., 1998).

Streets played an important role in making the project feel like a community. For example, the addition of more streets through the project area enabled each housing unit to face upon a street and have a street address (Gindroz, 1997). Street addresses change the mentality of the housing project, exchanging the building numbers that were previously used for addresses in to a typical neighborhood where everyone has a street address.

Mixed Uses, Open Spaces, and the Surrounding Neighborhood

Diggs Town does not have a mix of residential and commercial uses that is an important component of neo-traditional design. While there is a convenience store and a fast food establishment within walking distance, they are not a part of the neighborhood boundaries nor were they included in the redevelopment efforts. Although NRHA has provided waivers for a few residents to establish home-based businesses, such as

childcare provision or a snack bar, the development lacks the commercial and retail activity necessary to meet the residents' needs.

Neighborhood open spaces have increased with the fencing in of communal backyards. In addition, the management office has been renovated to resemble a "town hall," providing the neighborhood with a pseudo-civic building. In front of the management building is a large grassy area intended to serve as a town green.

The addition of the streets and paths mentioned above has allowed for more landscaping opportunities. Indigenous and evergreen shade trees were planted that "provided shelter along the walks and front yards," lining the streets, creating increased feelings of pride and sense of community. Now there are "groupings of large trees in the center of blocks, where no trees previously existed" (Bothwell et al., 1998). These landscaping opportunities have helped to establish a visual link between the housing project and the surrounding neighborhood.

Diggs Town Today

Today, Diggs Town is a vibrantly designed public housing community. This site plan clearly details all of the changes that were made during the renovation. Notice the new streets, pathways, building formations, and fenced-in back yards.

Source: Russell Carlock, 1998

Figure 1: Diggs Town Today

The renovations have positively impacted both Diggs Town and the surrounding neighborhood. Diggs Town has experienced lower crime rates, drug sales, and gang related incidents since the renovations. As architect Ray Gindroz (1997), relates:

> "The statistics indicate a sharp drop in police calls and crime. Residents tell us that before the changes, they heard four or five gun shots a night; now they hear a gun shot once every four to five months. Norfolk's police chief has said that visible evidence of people taking care of their neighborhood discourages criminals from doing their business there. So these simple elements of fences, porches, and streets have had a major role in securing the neighborhood."

The visible evidence that residents are taking care of their neighborhood and showing a sense of pride in their community is insurmountable. I had the opportunity to visit the housing project in December, and was very impressed by the effects of the renovations. There was even a point in the neighborhood where I could not tell when Diggs Town ended and the surrounding neighborhood began. The following pictures provide a glimpse of Diggs Town, certainly not doing the effects of the renovation justice, but perhaps allowing us to better understand all that was completed, and the positive changes that were brought to the neighborhood.

From a neo-traditional design perspective, the front porches have been the most welcome addition to the project. Residents had specifically asked that these front porches be included in the renovations. As one resident told the design team, "we want to have porches, not because we need another place to sit, but so we can come out of our houses, see one another, be together to deal with our problems" (Bothwell et al., 1998).

Sod and grass were added to the front and back yards of each housing unit, which encouraged residents to take care of their lawn and plant gardens. Residents have taken the white-picket fences added during the renovation one step further by using low stakes and string to further define the areas directly in front of their housing units. By defining the perimeters of their lawn with rope and stakes, residents are defining their personal space, and making it beautiful. The majority of the residents have taken on this tactic,

clearly expressing pride in their surroundings by planting flowers and maintaining the lawns that NRHA has provided.

Residents of each "village" have a key to the gates surrounding their backyard areas. There is usually an agreed upon schedule for the times that the gates accessing the backyard would be open and closed (Carlock, 1998). Each back yard area boasts a children's playground and each unit's patios and sheds. This play area is visible from the back of each housing unit, from the walking paths surrounding each village, and from the streets. This visibility allows for many "eyes" to view the play areas in order to promote safety. In addition, individual garbage receptacles for each unit have replaced the communal garbage cans.

Finally, the streets and paths provide many pathway options through the project, linking the project with the surrounding neighborhood.

Diggs Town Success

Is Diggs Town a success? Residents and surrounding neighbors apparently think so. Preliminary qualitative interviews show that housing project residents have benefited from the improvements. As one resident states, "[The renovations] have made a difference in tenant's attitudes. Most tenants love the porches. They sit out there in the evening and early morning. You get to know your neighbors better. Now we sit out there and talk more" (Coscoe, 1995). In addition, residents who attend a nearby church state that they don't feel as self-conscious about where they live or for those in the church knowing that they are from the housing project. Church members have also stated that they feel more comfortable with the Diggs Town residents after the renovations (Bothwell, et.al, 1998).

Earlier in this paper, I set forth the test for determining the success of using these design elements in public housing renovations. The test stated that the use of neo-traditional design elements would be considered a success if the residents were satisfied with their living environments and the preliminary qualitative interviews mentioned above support this test. Therefore, the renovations can be considered a success.

However, it is important to realize when evaluating efforts of the renovation that Diggs Town is not a true neo-traditional neighborhood, lacking both the commercial core,

the mix of businesses and housing that are critical components to neo-traditional communities. In addition, Diggs Town does not incorporate a mix of housing types, consisting of one-story and two-story town homes. While this lack of mixed commercial uses and housing types might cripple the renovation's success as a neo-traditional development, it is still an outstanding example of the adaptation of these design elements in the renovation of public housing. Today, Diggs Town is recognized as "a good marker for how to expect more out of public housing" (Carlock, 1998).

Conclusion

The question posed in the introduction and addressed in this paper was "can neo-traditional design elements contribute to the creation of a sense of community in a public or low-income housing neighborhood." Throughout this paper, I have argued through theory, vision, and evidence that by using architectural design elements to provide a space for social interactions to take place, residents would have the opportunity make the next link in the social capital ladder from social interactions to building social capital.

One of our social values in the United States is to provide access to shelter for those who are in desperate need. We have even gone so far as to pledge a decent home and a suitable living environment for every American. After 62 years of degrading, crime filled public housing projects that are barely livable, we have a responsibility through our renovation efforts to go beyond bringing housing units up to code. Through the use of neo-traditional design elements, we can provide the building blocks for socially sustaining communities, providing the opportunity for residents to develop a sense of pride, dignity, and sense of place that they have lacked for so long.

In the end, neo-traditional design elements may not be the panacea for creating instant "communities" as some of their proponents might have hoped. It may still be too soon to search for results in the middle and upper income neighborhoods where these techniques have previously been used, or even in public housing renovation efforts – design can only assist in creating a community, but they still take time to build. However, neo-traditional design gives us hope that when used in public and low-income housing, we can improve the shelter and surroundings for each resident and possibly

improve residents satisfaction in their living environments. Through architectural design we can provide the opportunity to build for community, and then nudge the residents' sense of community along through the provision of social services and other community building programs. It is up to each resident to decide how much or how little of their surrounding community they wish to participate in. And it is that decision that ultimately determines the benefits they will derive from it.

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