Image and identity in historic districts: Their establishment and enhancement case study: Ames, Iowa

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Image and identity in historic districts: Their establishment and enhancement  
Case study: Ames, Iowa

by

Medhat Elkattan

A Thesis Submitted to the  
Graduate Faculty in Partial Fulfillment of the  
Requirements for the Degree of  

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Signatures have been redacted for privacy

Iowa State University  
Ames, Iowa  
1992
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Savannah, Georgia, Director of Planning Department, Robert Haywood; President of the Downtown Neighborhood Association, Larry Lee; President of the Historic Improvement Team of Savannah, Esther Shaver; Activist for the Historic Foundation, Stephanie Churchill; Preservation Officer of the Metropolitan Commission, Beth Reiter; and Director of the Parks and Trees Department, Dr. Don Gardener, were quite helpful. In Charleston, South Carolina, Preservation Technician Debbi Rhoad, Land Resource Planner William Turner, Senior Planner Sonya Gentry, Preservation Officer Charles Chase, and landscape architects Jennifer Carr and Amenda Barton also gave of their expertise and time.

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There are more than 125 museum villages and extensive city walking tours in the United States today, in forty-two of fifty states. They re-create some particular period with the buildings and equipment of the time, often with simulated inhabitants who dress and act--even think--their part. These reconstructions are tremendously popular.

Kevin Lynch, in What Time Is This Place?

CHAPTER 1. INTRODUCTION

Intention

"Old Town" residents in Ames, Iowa, are partly reviving the past. This rebirth began in the late 1980s, with two buildings. In the neighborhood today, approximately 24 out of 147 buildings are being restored or preserved. In 1990, the Old Town Neighborhood was awarded the "Home Pride Award" by Midwestern Living magazine, an award created to encourage neighborhood regeneration.

Comprising 30 acres, right of way excluded, Old Town is somewhat similar to the area surrounding it, despite the fact that it comprises larger sections of the first two plats of 1865 and 1868, a fact making it difficult for observers to recognize the district. Moreover, there are no signs announcing it.

Historic Old Town District boundaries are set by property owners, under community home rules. But the Ames City Council has modified the southern boundary to exclude property commercially zoned in a current residential neighborhood.
The question is raised of how to enhance the image and strengthen identity of such a diverse district, having neither the rich architecture of Charleston, South Carolina, nor the striking landscape of Savannah, Georgia. The researcher suggests that unifying the public right of way would help make the streetscape distinguishable from surrounding areas, and in this way boundaries could announce a unified cultural organism.

Use of public realm elements in planning can create ambiance: landscaping, lighting, signs, surface treatment, and color schemes all can strengthen the identity of a neighborhood. The researcher also proposes solutions to traffic and parking problems. The solution involves use of signs instead of a physical treatment that may terminate the problem but affect the downtown traffic flow as well.

A theoretical approach is used to analyze deficiencies in image and identity and to identify practical approaches developed in other cities but which may meet with Ames' needs.

Overview

Historic districts should be maintained, because in such areas a nation's memories resonate. When historic buildings are preserved, "three-dimensional living memories" are actually preserved. In the United States today, many communities are bringing historic districts to life. Even
though not all districts are as rich architecturally as Charleston, South Carolina, is, they are still evidence of the not quite forgotten past.

Yet, historic districts are not merely places--they are places to be and places to be seen in, places where one can take the family and proudly tell stories about the past. In the United States, historic districts are living museums in which one sees, feels, and touches the visible reminders of the early developed areas of the nation (Kostof 1987, National Historic Preservation Act 1966, in the United States Statues at Large 1967). Generally speaking, these areas have maintained their integrity in the face of new development.

Historic districts provide comprehensive evidence of past generations and thus a sense of identity to residents and observers (Silver 1991, Lynch 1972). In the United States, the search for heritage and roots had led to the establishment of many historic districts by the mid 1960s (Hosmer 1965). Today, at least 1200 historical districts exist (Gale 1991).

Historic districts safeguard American identities in a mobile, melting-pot society (Satterthwaite 1973). From the founding of the first colonies in Williamsburg, Virginia, along the Atlantic Coast, to the present day, America has acted as a sponge absorbing an ocean of immigrants. Americans of all ethnic origins tend to strive for homogeneity, so that enough of the past has been lost to leave many feeling

In addition to addressing the need for roots, historic districts can be used in elementary, secondary, and college education as tools in the study of culture, history, and architecture (Hosmer 1965). In 1989, the National Center for Public Interests, Washington, DC, published the results of a survey of 180 school children aged 8-12 years. In the survey, children were asked to name all of the presidents and all of the alcoholic beverages that they could. The average child could name 5.2 alcoholic beverages and 4.8 presidents. "One seven-year-old boy knew 10 brands of beer and wine," but could list only "Aprilham Linchon" and "Ragon" as presidents, stated Walsh at a luncheon for the Certified Local Government Conference in Waterloo, Iowa, on July 27, 1991. He prescribed historic preservation as an "antidote to the epidemic of cultural and historical amnesia" gripping the nation.

This study will show that, especially in the melting pot, historic preservation depends not only upon zoning or design but also upon culture and identity. An example of this truism can be seen in Charleston, South Carolina, and Savannah, Georgia, where the researcher traveled in the summer of 1991.

**Historic Preservation in the United States**

Historic preservation in the United States underwent an extended labor and a slow birth. Initially a response to the
unique American experience, preservation was motivated by the desire to Americanize immigrants by showing them historic landmarks and to rescue important monuments from destruction in the wave of new construction that characterized the 1930s (Birch and Roby 1984, Hosmer 1965).

The movement began with the passage of the Antiquities Act of 1906 and gained currency in 1916, with the creation of the National Park Service.

The first major projects were the restoration of Williamsburg, Virginia, in 1924 and the establishment of Old City in Charleston, South Carolina, in 1931 (Hosmer 1981a, Sliver 1991). Other cities such as New Orleans, Louisiana, and Monterey, California, followed suit, using Charleston as their model (Gale 1991).

The Philosophy of Historic Preservation

The National Historic Preservation Act of 1966 states that "the spirit and direction of this nation are found and reflected in its historic past." The act also points out that "historical and cultural foundations of the nation should be preserved as a living part of our community and developed in order to give a sense of orientation to American people."

National examples of historic preservation are Mount Vernon, the stately home of George Washington, and Monticello, that of Thomas Jefferson. Mount Vernon's preservation can be
attributed to the Mount Vernon Ladies' Association, which provides a fine example of a patriotic group's paving the way to preservation (Hosmer 1981a).

As the United States celebrated the first quarter of a century of the preservation movement in 1991, the need to integrate preservation into mainstream American life was evident (Hosmer 1981b). For preservation is more than preserving architecture: it is a presentation of culture that enhances continuity, memories, and meaning (Kostof 1987, Lynch 1972).

The Significance of Historic Preservation

Million of dollars were spent to preserve the Statue of Liberty and Ellis Island, not because they are architecturally significant, but because they are symbols of freedom and of opportunity (Walsh 1991). According to Long (1991), the present cannot return to the past but must rise from it. Historic preservation, then, does not freeze the community in time or "pickle the town," but rather "enhances the sense of place" to establish identity (Williams 1990). Thus, the motivation for historic preservation in America is not to preserve architecture, but to transform the values by which we live. Lemair (1976) believed that "our momentum [from]...past work of architecture and town planning...continues to provide a setting for our everyday life." Adding the time dimension
to the three dimensions of architecture gives meaning to history: "Time, memories, and continuity...are vital concepts which prevent man from being lost in the present" (Lemair 1976).

Memory and Preservation

Ruskin (1907) stated that we can live and worship without architecture, but we cannot "remember without her [architecture]." Architecture is not like a painting, which can be stored and reproduced. Stipe (1980) stated that, by historic preservation, "we are preserving memories...not high style culture." For mental maps of a familiar environment "make [one] comfortable and secure," regardless of whether that environment is "aesthetically pleasing or historically significant."

Continuity and Preservation

The architect and his/her architecture are the shape of civilization (Scully 1969). Scully viewed architecture as a symbol of continuity and the architect as "physical-historian." Giedion (1957) cited the "demand of continuity," and called continuity the "backbone" of a relatively short life span. Bridging the "spiritual past to the present and future," continuity is the part of one's identity that influences one's sense of belonging and one's feelings about
home, family traditions, and memories (Steinbeck 1976). Continuity lends meaning to existence. According to Steinbeck, without knowledge of the past, knowledge of oneself is difficult.

**Time and Preservation**

Toffler (1971), in his first book, *Future Shock*, argued that societies build time spanners to enable their citizens to draw the line between past and present. "Our sense of the past (is a result of) contact with the older generation (and) our knowledge of history,...art, music, etc,...our accumulated heritage." Toffler believed that every environment has a "point or connection to the past." This connection enables one to recognize the past identity and to enhance it.

**Historic Districts**

A historic district is in some sense the soul of a city. City administrators focus on the city's image and identity, but communities realize that enhancement of historical districts create not only liveable and friendly places for residents and potential residents, but also encourages tourism. This latter benefit is especially true when the quality of the historic district is nationally recognized, as in Savannah, Georgia; Charleston, South Carolina; and Colonial Williamsburg, Virginia. Where else can one see magnificent
mansions like those on East Battery Street, Charleston, or walk down streets and green squares like those in Savannah? Community leaders should realize that creating a positive image in the heart of the downtown area will attract future residents and tourists, as well as industry. Businesses on Main Streets can benefit indirectly from an improved image of downtown residential neighborhoods, which may contribute to revival of the downtown area. Historic areas should be targets for community efforts to create attractive areas that residents like to live in and sightseers to visit.

**Historic Old Town District, Ames, Iowa**

The Historic Old Town District is a local district in downtown Ames, Iowa. No similar concentration of domestic architecture exists in the city (Ralph Christian, personal communication, July 1991). Moreover, "structures constitute the largest and best preserved late 19th and 20th century residential architecture in Ames" (Wirth 1988). Most structures are one-and-one-half to two-and-one-half stories high, have wooden frames with some brick work, and are irregularly massed (Wirth 1988). In 1989, the Ames City Council adopted Ordinance No. 3061, which amended the official map of the city to overlay the first historic district called, "Old Town," as required by Iowa Code (Section 303.32).

The researcher reviewed the early history of the Old Town
District to learn what it and its streetscapes looked like in the late 19th and early 20th centuries and to find evidence of streetscape elements. This study does not present a preservation plan, but rather historic and traditional details that the Historic Preservation District might profit from considering.

Statement of the Problem

The brief history of historic preservation in Ames, Iowa, a movement dating from enactment of the 1988 historical preservation ordinance, will also be examined. Based upon this examination, a series of deficiencies in the Ames approach to historic preservation will be considered.

First, the Historic Old Town District has no clearly defined boundaries, nodes, or landmarks, although Duff Avenue is a major path in Ames (Nasar 1990, Lynch 1960).

Second, the streetscape of the Historic Old Town District has no distinguishing characteristics from the surrounding areas, which makes it difficult for the public to recognize the district (Barton-Aschman 1978).

Third, the Historic Preservation era was officially initiated in Ames with the passage of the historic preservation ordinance in 1988 and with the adoption of design guidelines in 1989. Both the ordinance and the guidelines ignore the use of exterior color and landscaping, except in
the instances of fencing and retaining walls (Ames Historic Preservation Ordinance 1988, Design Guidelines 1989). This limited control compromises the Historic Old Town District's image and identity (The Old and Historic Charleston Districts and the Old City District Ordinance 1991).

Fourth, the Historic Old Town District has a mix of stylistic and vernacular architectures and is not dominated stylistically in terms of material, roof, massing, height, or color (Winter 1991).

Fifth, no landmark building dominates the district: no single building lends the neighborhood its identity as a landmark for public use (Nasar 1988, Lynch 1960). But the fact that it was the first developed area in the city of Ames lend it its identity (Stipe 1980, Lemair 1976, Steinbeck 1976, Toffler 1971, Huskell 1961, Giedion 1957, Ruskin 1907)

Sixth, the neighborhood association is interested in enhancing the visual quality of the district. In 1991, the neighborhood association developed a tree project to encourage replanting (Baker 1991). The Association felt that the neighborhood should look like a forest, as it did in earlier times (Brown 1991 and Historic Improvement Team of Savannah, Primary Working Vision 1991). But the project failed because residents did not support it (The Daily Tribune, July 26, 1991, p. 1-2).
Study Objectives

The researcher will define the Historic Old Town District by using urban design and historic preservation concepts to integrate historic value and urban design principles. The researcher proposes

1. to examine the district's visual quality/appearance and image in terms of the accumulated effects of streetscape design elements such as landscaping, lighting, signs, and surface treatments;
2. to enhance the district's historical character and street unity;
3. to project a strong sense of neighborhood, place, and continuity;
4. to enable the Old Town to become a more memorable, liveable place; and
5. to assist in the achievement of goals established by the historical ordinance, namely, to promote education, culture, and economic welfare in Ames.

Study Scope

This research proposal considers creating an identity and an image for the Historic Old Town District by working on the public right of way, because the district has neither a dominant style nor a significant landmark identifying it.

Streetscape improvement can often help restore community
character. Thus, the current study will illustrate how to establish streetscape unity using landscaping, lights, signs, and surface treatment. A neighborhood can also be enhanced by limiting through traffic and on-street parking by nonresidents or visitors, and by encouraging pedestrians. This study will consider the five elements of city image, viz., paths, edges, districts, nodes, and landmarks. To address contemporary living requirements, a theoretical-practical approach is taken to the historic preservation issue.

The study will neither test nor evaluate the effectiveness of the proposed design scheme. The researcher will not conduct a public opinion poll but will rely upon his own professional opinions.

To examine streetscape uniformity and district unity, the study will adapt the existing conditions of landscaping, lighting, signs, and surface treatments, as well as traffic, parking, and pedestrian movement. It will also examine some of the public buildings located close to the district, such as the City Hall, the United States Post Office, the Ames Public Library, and the Bandshell Park, to connect the district with these public landmarks (Passini 1984, Appleyard 1979, Lynch 1960).

The investigation will consider district boundaries and circulation routes within the district and their ability to facilitate orientation of public perception. To enhance area
definition, the researcher will also make recommendations about color usage.

Study Area

The study area is located in downtown Ames, Iowa (see Figure 1.1). The city of Ames is located some 30 miles north of Des Moines, Iowa (see Figure 1.2). The total acreage of the Historic Old Town District is 30 acres, public right of way excluded (Brian O'Connell, personal communication, June 1991, Wirth 1988). Old Town of Ames is located between the forks of Squaw Creek and Skunk River. Squaw Creek is slated for conservation efforts. Ames houses Iowa State University, which provides the city with a special ambiance.

Research Approach

A theoretical and practical approach to community image and identity requires application of many of those concepts in a "blending" method. This method developed for this study involves

1. context—the background of the Historic Old Town District and its characteristics;
2. definition of existing problems—lack of image and identity of the Historic Old Town District;
3. analysis and suggestions—how the history of the Historic Old Town District can be used to identify
Figure 1.1: Historic Old Town District, Ames, Iowa (Historic Old Town Association, Home Tour 1990).
Figure 1.2: Location of Ames, Iowa
which elements of the past to "bring back."

The researcher will also develop a design method focusing on

a. improving district image;
b. establishing district identity; and
c. enhancing district character.

Research Questions

The main issue of this study is the Historic Old Town District's image and identity. This thesis suggests implementation of a strategy to enhance the identity of Old Town and to create a positive image. The study will attempt to answer at least eleven basic questions:

1. What is meant by "enhance district identity"?
2. What is the theoretical basis for the image elements?
3. What is the practical basis on which to create an image?
4. What attracts the public to visit historic districts?
5. What enhancements are necessary to restore the historic-residential character of the district?
6. Can the historic district be a "live" museum in which the Ames community educates the public and its students, especially children, about the history and the culture of the community?
7. What are the streetscape elements creating image?
9. What are the street functions affecting the character of historic-residential neighborhoods?

10. What will enhance the historic district's character?

11. Do all streetscape elements contribute to the district's unity and character?
Buildings in combination with one another create a sum that is greater than their parts. A structure can echo its neighbor's color or contrast its massiveness with delicacy, absorbing its partner's best characteristics or lending some of its own. Building groups in combination with other constructed elements, landscaping and street furniture—paving...lampposts...street signs—create a streetscape....In evaluating a streetscape these questions can be asked: Does it invite human interaction? Are buildings set too far back from the street to be readily experienced? Are they set at a distance that permits comfortable walking? Are there surprising and interesting vistas that appear as the pedestrian passes? Are there gaps caused by poor design or by demolition? Do the things that help tie buildings together into a total environmental unit—landscaping (trees, lights, signs, street surface) and street furniture—add or detract? Do they, in other words, pull everything together or apart?

National Trust for Historic Preservation, America's Forgotten Architecture

CHAPTER 2. LITERATURE SEARCH

The literature of establishment and enhancement of historic district image and identity will be reviewed from both theoretical and practical perspectives. First, the theoretical literature regarding city's image, literature developed by scholars such as Appleyard, Duany, Lang, Lynch, Nasar, Passini, and Rapoport, will be studied, as will image and identity in terms of cityscape and/or neighborhood scale. Such a review will improve understanding of how the public perceives cities, or creates "mental maps."

The second method is practical. In 1991, the researcher
visited Savannah, Georgia, and Charleston, South Carolina, to familiarize himself with two of the most historic cities in the United States. The visit also gave the researcher a chance to learn firsthand what these cities have done to establish and enhance image and identity by means such as zoning, design guidelines, urban design plans, or vision plans for the year 2000 and beyond. The researcher realizes the importance of blending theory and practice. Even though the cities are quite different from Ames, Iowa, there are still many similarities in terms of neighborhood associations and governments.

**Design Theory**

People's cognitive "mental maps," or perceptual images, suggest to urban designers means of creating unique neighborhoods, cities, and public buildings, places such as hospitals and parks (Lang 1987).

To enhance a city's image, scholars study how cities operate and how people perceive and behave in them. This review will illustrate Appleyard's, Duany's, Lang's, Lynch's, Nasar's, Passini's, Rapoport's, and others' ideas of image and legibility.

Rapoport's (1977) book, *Human Aspects of Urban Form*, deals with the interaction of people and environment. People acquire, code, store, recall, and decode information about the
physical environment. The process involves three stages. These are

1. cognitive—the process of perceiving one's environment;
2. affective—the process of emotionally attaching to the environment, also stored images; and
3. conactive—the process of acting in response to (1+2).

Rapoport believed that the relation between man and environment is two-way. Each affects the other. But Rapoport, although clarifying mental images as compositions of place, space, and time, clarified neither the term image nor the term legibility.

Lynch, considered by many scholars a key researcher in the study of urban settlement image, wrote *Image of the City* over 32 years ago. He considered image to have three components:

1. identity—the ability of one to recognize a place or space by its significant characteristics;
2. structure—the mental relations between place and space that enable one to locate a place or space physically; and
3. meaning—the significance of place and space that simplifies function, physical appearance, or social character.
Lynch emphasized that a good city image, or "imageability", depends upon landmarks organized coherently in people's minds. Lynch's work did not take up legibility as a concern of people finding their way in the city, nor did it define the minimum requirements to achieve orientation. Lynch mentioned five image cues:

1. paths--cities' circulatory routes;
2. edges--linear elements, neither utilized nor considered paths by observers;
3. districts--medium to large sections of a city that are distinguishable from other parts due to a set of common characteristics;
4. Nodes--central points of reference, focal or strategic points or paths, and intersecting points; and
5. Landmarks--external points of reference that are single objects such as buildings, signs, stores, or natural areas such as mountains or rivers.

Seventeen years after Lynch's book was published, environmental researchers such as Lang (1987), Passini (1984), Appleyard (1979), Rapoport (1977), and others, by focusing on physical and spatial meaning, have brought new vigor to research on city image.

Nasar (1989a) and Wohlwill (1976) reported that environmental evaluation should be more quantitative and less
"idiosyncratic" than described by Lynch. In 1990, Nasar published an article entitled "The Valuative Image of the City". He used public evaluations of the cityscapes of Knoxville and Chattanooga, Tennessee, as a basis for a visual plan aimed at improving city images. The incentive was the possibility of attracting approximately 600,000 visitors per week during the International Exposition held in Knoxville in 1991.

Nasar's image elements consist of "naturalness, well kept areas, openness, order, and historic preservation". These elements were derived from a survey of 120 residents and 60 visitors. The verbal descriptions given by respondents concerning the areas that they liked or disliked led to the development of evaluative maps--one for each respondent. From these maps, a composite map revealed three important aspects of the evaluative image: "identity, location, and likability (or quality of the sites)". Respondents were found generally to like or dislike certain elements. Among the elements favored by respondents were

a. Naturalness--landscaping, rivers and mountains
b. Good up-keep--good maintenance, newer homes
c. Open views--scenery
d. Order
e. Historical significance

Respondents seemed to dislike
a. Obtrusive manmade nuisances—commercial strips, poles, wires, and signs  
b. Dilapidation—dirty areas, litter, and weeds  
c. Restriction—crowding, congestion, narrow roads  
d. Disorder—chaos, lack of uniform style (p. 48).

Many respondents' evaluations reflected perceived social status. For example, respondents associated naturalness, good maintenance, open views, historical significance, and order with high income. But commercial, industrial, and dilapidated areas were associated with low income.

The valuative maps of Knoxville, Tennessee, revealed public agreement on the likability of areas. The maps also suggested that city appearance be enhanced by increasing the visibility of vegetation and landscaping and by establishing panoramic views of the Smokey Mountains and of the Tennessee River. Finally, the maps revealed that decreasing the visibility of outdoor advertising poles, wires, parking areas, unsightly industrial areas, and dilapidated zones were favored by a majority of respondents.

According to Nasar, resident images were more extensive, detailed, and less "amorphous" than were visitor images. For portions of the survey in which respondents gave no perceptions of boundaries, research administrators attempted to establish boundaries. This reflects the importance of setting visual boundaries in historical areas. Nasar discovered that people evaluate their surroundings in terms of
several dimensions, such as "pleasantness, excitement, and relaxation...", and took the position that city designs could effectively use valuative maps to make cityscapes likeable, meaningful, and liveable.

Image

*Image* can be defined as an individual's memories (Lynch 1960, Carre and Schissler 1969), as an individual's conception of his or her role in society (Rapoport 1977), as a psychological dimension or as an individual's environmental interactions (Segal 1971, Antrobus 1970), and as an individual's attitude towards the external environment (Harrison and Sarre 1971). It is also a term that can be used to describe memorable places, such as a landmark or a living organism such as an airport tower or cloverleaf intersection of a freeway (Cox 1966); or it can be used to describe architecture or urban form (Taun 1974, Wheately 1971).

Very desirable areas demand high land prices. For example, consider the Manhattan section of New York City (Rapoport 1977). Its character, or image, derives from the many prestigious addresses, such as Rockefeller Center and Wall Street, within it as well as from restaurants, shops, parks, and the river front.

Yet according to Nasar (1990), a city's image is only part of the picture: people are emotional creatures and often
possess ambivalent feelings towards surroundings. "Evaluation is central to our perceptions and reactions to our environment." People generally recall places about which they have strong feelings (Rapoport 1977, Lynch 1960). And they will have feelings about the imageable parts of the city. Appleyard (1976) discovered that the two most imageable buildings in Ciudad, Guyana, elicited the strongest reactions, one positive and one negative. Passini (1984) argued "people to be less likely to recall physical features of a building if it's associated with function or label."

Lynch (1960) expounded on the importance of meaning and evaluation. He cited that observers favored "distant panoramas" such as city lights at night. Evans, Smith, and Pezdak (1982) found that upkeep, naturalness, and historical significance all affect a building's image.

**Legibility**

How legible, or navigable, should the environment be? The answer is value laden (Lang 1987). When does a legible environment become "boring?" Both image and legibility are influenced by aesthetics, culture, and values. When a designer plans to heighten image, he/she should create legibility simultaneously, implying meaning to the place to stimulate action (Passini 1984). Legibility means recognition and understanding of a place by the public. Image, on the
other hand, means that a place is memorable and easy to locate mentally and physically (Passini 1984). Obviously, a place may have legibility but not image.

Do Lynch's five elements suffice to establish image? And to what extent should we emphasize each (Passini 1984)? To answer the first question, Evans, Marrero, and Butler (1981) found that people generally pick out a landmark first and then establish paths to link landmarks to a network. Regarding the second question, De-Jonge (1962) found that in residential neighborhoods, people seem to choose "small, (distinctive) details such as the color of curtains" or "trees" as distinctive landmarks reflecting their own tastes.

Old Les Halles, Paris; Covent Gardens, London; Market Street, Charleston, South Carolina; Times Square, New York City; and Market Street, Savannah, Georgia, are each well-known imageable places functioning as nodes of two path's meeting points and defined by edges and landmarks.

Orientation

Image is part of the system or network linking places in the environment (Lee 1969). Both physical and mental maps, however, involve and aid orientation (Rapoport 1977). Thus, one should understand the significance of orientation to human experience and survival (Hall 1966, Lynch 1960). Orientation can be achieved by smell or sound, by natural elements such as
wind or rain, or by manmade structures such as landmarks. According to Passini (1984), spatial orientation can be defined as "a person's ability to determine his/her position within representation of the environment made possible by cognitive maps." Lang (1987) argued that mental maps of a place become more accurate with use.

Certain places or buildings have image. This is not always a result of architectural significance, but of function, as with the United States Post Office, or of social meaning, as with Harlem, New York (Passini 1984). Passini (1984) argued that "historical heritage" and "political, religious, lifestyle values" also can influence orientation. Buildings are well-known due to distinctiveness of form, visibility, and intense use (Appleyard 1969). Three qualities affecting orientation are

1. form: Contour (clear-sharp boundaries) is more striking than a complexity of facades, coloring, or illuminated signs;
2. visibility: Buildings located at intersections are relatively likely to be seen and remembered;
3. high intensity use: Buildings such as the United States Post Office similar to nodes cited by Lynch (Lang 1987).
Mental Maps

Images or mental maps reflect gender group, age group, socioeconomic status, culture, and transportation mode (Lang 1987).

1. Gender: Women develop quite different maps from those of men (Appleyard 1970). For instance, because married women are less mobile than men (study did not specify men's status), women's maps are smaller in size. They are also richer in detail (Everitt and Cadwallader 1972).

2. Age: Age quantifies image. In a British study (Porteous 1977), researchers found that elderly people tend to remember demolished buildings, whereas younger people tend to notice new projects.

3. Socio-economic status: In the United States, researchers found that wealthy people develop richer and larger maps than do poorer people, a fact indicating that the former have more mobility and access (Stea 1974). The study also revealed that people who owned cars developed a more accurate map than did people who used the public transit system. Furthermore, middle class people tended to develop more environmentally conscious maps than did working class people (Michelson 1970).

4. Culture: People perceive their environments to a
large extent according to cultural background (Proteous 1977, Taun 1974, Lynch 1960). What is "elegant" to some is "tacky" to others. What is "blight" to some is "comfortable" to others.

5. Modes of transportation: These are generally associated with area activities. The speed of the vehicle and the proportion of the buildings all contribute to a motorist's image of the place. Pedestrians and motorists retain different images. Paths are considered by motorists, whereas residents view paths as the edge of the city (Rapoport 1977). The complexity of the environment depends upon slopes, curvatures, colors, enclaves, sounds, lights, and smells. The speed of the vehicle determines the motorist's ability to process information about the environment. One important element of an environment is road signs. Highway signs should therefore be simple and colored so that motorists can read them easily (Rapoport 1977). Signs should also be specially lighted by day and night. In residential areas in which pedestrian traffic is intense and vehicle speed low, complexity is possible because there is added time for reading signs.
Identity

Every major city has an identity street, that is, a street recognizable to residents and visitors alike, e.g., New York City, Broadway; New Orleans, Canal Street; Washington, D.C., Pennsylvania Avenue; Chicago, North Michigan Avenue; and Market Street, San Francisco. Such streets symbolize the cities and districts in which they are located. The "mention of these streets usually recalls to mind a certain quality, flavor or characteristic of the cities they serve" (Barton-Aschman 1978). The streets possess unique features giving them and the areas through which they pass a strong, memorable identity. These identity streets carry "meaning and message as well as traffic".

Streets may acquire identity in several ways. Some, such as those housing prestigious offices, luxury restaurants, or night clubs, are settings for specialized activities. Others acquire identity by passing through distinct areas or districts. Finally, some, such as Pennsylvania Avenue, become associated with landmarks or monuments. Regardless of which criteria lend identity to streets, they emit a strong permanent identity (Barton-Aschman 1978).

In a sense, cities have body language: they silently tell you what they represent and "what they are becoming" (Clay 1973). Clay described each city as unique, each with its own values and traditions. He felt that each city
reflects ideas, traditions, and energies that are part of the past, present, and future. According to Clay, each landscape and townscape possesses degrees of both continuity and coherence. Cities can be viewed as artificial eco-systems, with aspects interacting to produce sequences, successions, and climaxes. Patterns are also revealed and relations formed and reformed.

Cullen (1961) asked, "What is a townscape?" "One building is architecture," but two buildings are a townscape. It is not a pattern of streets, but a sequences of spaces.

Appleyard (1981) is also committed to ecological concepts. He felt that trees soften the quality of life as they absorb the sounds of the city. "Plants, flowers, and trees in public spaces (help) increase the sensual experience of movement" because the natural phases such as the changing seasons, with "tight buds in spring, darker shades in summer," glorious "fall colors" and "bare" branches of winter were, in sum, symbolic of "life cycles, such as birth, death, and rebirth".

Appleyard (1979) also cited aspects that he considered favorable for the city environment. Among his concerns was a friendly environment, for a city with the ability to communicate hospitality conveys assurance and comfort. He also felt that the removal of traffic enhanced the historic character of streets.
Streetscapes

The street was one of the first institutions of cities. It is a social space by agreement, a community room, the wall belonging to donors who have dedicated it to the city, its ceiling the sky (Khan, in Lobell ed. 1977). Streets are one of the greatest of cultural legacies (Whyte 1980), the "river of city life". They give a city continuity and coherence and define its scale. A streetscape is a street view shaped by size and by a massing of structures and environmental settings (Rudofsky 1969).

Duany was concerned about the prototypical American streetscape. American streets are larger than their European counterparts. The size of the street depends to some extent on the spacing of trees planted in a steady row, "to obtain spatial definition" (Rangdon 1988). Using "street signs made of sandblasted wood instead of metal" and human-scale street lights similar to types used in American cities in the early years of 20th century" (Rangdon 1988), Duany designed the Bont-Point Village landscape to reflect the image of the community.

Robert Davis, developer of Sea-Side, Florida, replaced streets made of "dirt" and "oyster shell" borders with brick streets, as requested by property owners for safety and aesthetic reasons. Motorists must drive slowly on brick streets, and thus children can ride their bikes and move
relatively freely. Davis also narrowed streets upon residents' requests, to provide room only for two cars to pass "comfortably" (18 feet). Off-street parking was provided, and traffic movement slowed (Rangdon 1988).

Sea-Side streets were designed to permit landscaping and to serve as a "public room", said Duany. His streets ran "straight for a few blocks, then focus[ed] on a visual termination in the center of the traffic", such as a gazebo, to create a memorable place.

Duany asked a conference of Florida Apartment Developers, if mileu within the 19th century would sell in the 21st century, (and if not, why)? He argued that "interest in old houses has motivated developers to incorporate in new houses (some of the features that made old houses appealing)". Nineteenth century American city grid plans, narrow streets, and intimate scales are motivating today's designers (Rangdon 1988).

**Pedestrian Movement**

A pedestrian can choose to walk for a variety of reasons. Walking in big cities is done at a somewhat faster rate than in small towns (Whyte 1988). Most walking trips can be categorized as one of three types (Denham 1990):

1. recreational or exercise--the pedestrian is free to choose any route;
2. goal-oriented—the purpose of walking is to arrive at a destination. Time is often a critical factor;
3. task-oriented—something must be accomplished, such as collecting groceries or delivering mail.

Signs

Signs communicate messages about identification, directions, and reassurance to the public. They may also enhance the visual quality of historic districts. The legibility of a sign rests on design, lettering, contrast, size, and location (Passini 1984).

Signs may enhance the image of an area while informing observers. Signs are also an important means of orienting people (Lang 1987, Lynch 1960), of familiarizing them with issues (Carre 1967), and of motivating them to future action (Porteous 1977). Signs should be regulated by historic ordinance as well as by zoning and building codes. Signs in historic districts are often regulated in style, message, and lighting. The *Preservation Law Update* newsletter (1987) recommends that signs be simple and to-the-point, without passe' spellings such as "junke" or "olde".

Exterior Coloring

Andrew Downing, the first American architect, felt that buildings should be "colored soft, quiet shades such as fawn, grey, or brown". The browning of 19th century America was
connected with the following events (Moss 1982):

a. The population increased, and hundreds of trade companies were established.

b. The paint industry developed oil-based paints, and ready-mix products became available.

c. The rail system was used as a distribution method for transferring paints from manufacturing centers such as New York City to homeowners nationwide. Thus, homeowners could replace local paint distributors' products.

d. Paper development and improvement of the printing press contributed to the dispersal of advertisements, brochures, and architectural pattern books.

In the period from 1840-1870, the most popular paint colors were green, grey, and yellow. By the late 19th century, a return to simple classic lines occurred. There was a revival of soft hues and a move towards pastels although white became popular as a color for trim. By the 20th century, an all-white scheme came into vogue, because "most Americans believed that colonial homes had been painted white and the international style at that time was also white" (Moss 1982).

According to Long (1991), "late 19th and early 20th century housing was not uniformly white," but three to five
colors were used to decorate and accentuate structural features (Long 1991). For example, an 1880 Queen Anne house "might have a deep olive body with blue-green on the decorative shingles and gables." The trim might be "a dark red on the window sashes or dark green and grey for other details." Early 1900 Colonial Revival homes might have had "a pale yellow body with white trim."

Stephen (1973) argues that the choice of coloring for a house involves personal taste. It is an emotional issue of individual rights and neighborhood. But the problem is how to express individuality while not disturbing the harmony of the neighborhood.

Culture and climate influence one's idea of the appropriate look for a particular house. Region of the country plays an important role in color selection. For instance, what is appropriate in Palm Beach, Florida, will not necessarily be appropriate in Minneapolis, Minnesota. Notwithstanding, certain colors such as cream, dark green, brown, and other earth tones continue to be favored, as in the late 19th century. When one considers color, one should bear in mind these suggestions (Stephen 1973):

a. Do not try to mix too many colors.
b. Take care when selecting basic colors.
c. If in doubt, always paint the moving parts of a window white.
d. Reserve bright colors for use on focal points such as front doors, gables, and trims.
Case Studies

Internationally recognized for its landscaping, Savannah, Georgia, is regarded as a national model of historic preservation (Judith Ann McClure, personal communication, July 1991). The historic district of Charleston, South Carolina, is regarded as the U.S. holy city of preservation (Kerry McGrath, personal communication, July 1991). This peninsular city is composed of five districts (Debhi Rhoad, personal communication, August 1991) and is the country's oldest example of preservation, enabled by legislative action in 1931. During his visits to both cities, the researcher collected data and information from:

1. Interviews with officials and nonprofit organization members.
2. Personal experience and observation;
3. City department publications, plans, ordinances, design guidelines, maps, reports, and brochures;
4. State and city library and libraries of the historical archive department; and
5. Camera.
Savannah, Georgia

Savannah was laid out in 1733 by General James Oglethorpe. The first government seat of the 13 English New World colonies, Savannah was originally located ten miles from the sea. The grid pattern of the city was enhanced by a series of squares. The original city was designed for pedestrian traffic and had many green shaded squares along the streets. Savannah's architectural legacy contains Federal, Greek Revival, late Italianate Gothic Revival, and Romanesque constructions.

How has the city asserted its identity? In the next section, the tools used to enhance Savannah's National Historic District, which was established in 1966, will be reviewed. The Historic Ordinance was created in 1973 "to promote the educational, cultural, economic and general welfare of the city." This ordinance has greatly restricted the visibility of outbuildings from public streets. Numerous aspects of the district area are governed by the ordinance; for example, walls, fences, light fixtures, steps, paving, sidewalks, signs, and building exteriors, the intention of which was to provide a traditional placement of colors, signs, materials, etc., according to historical descriptions so as to insure cohesion and historical integrity.

The US Department of Housing and Urban Development funded the Savannah Preservation Plan (1973) to improve the image of
the Downtown Historic District by removing incompatible structures, enhancing the visual quality of squares by means of monuments and fountains, and thus unifying squares and streets. Savannah was also among the first American cities to plant great numbers of trees to create an "urban forest."

According to Bob Haywood, (personal communication, August 1991), Director of Planning and Community Development, City of Savannah, the "human scale" of squares and streets was originally created by General Oglethorpe to be "pedestrian" oriented. Architectural styles guide pedestrians from point to point, linking the squares. The majority of buildings in Savannah are of grey brick, and windows and porches resemble each other. Buildings are usually three stories in height. Savannah is a "living, breathing community", for the 2.2-mile-square district incorporates both residential and commercial properties. It houses approximately 5,500 people, with an average of 2.2 per household, or 2,500-3,000 units. Twelve thousand people work in the district. Haywood described the Savannah Downtown Neighborhood Association's Vision Plan for the year 2000 as an important indication that "citizens care about their squares [and] streets." The role of "ladies in tennis shoes" was also a major contributor to the preservation movement in Savannah's "laissez-faire government." He hoped that hosting the yachting events of the 1996 Olympiad would generate at least $80 million and stated that the city was
preparing for the event.

Larry Lee (personal communication, August 1991), President of the Savannah Downtown Neighborhood Association, said that "we are a living city; people come here to see the squares, and people who live in them...We are not Williamsburg." He cited the Vision Plan as essential: "we survey every square, and every block for what it needs to look better...and we put them together to let the city know what we need". The goal of the association is to generate "sense of community, sense of pride, and (the conviction that) together we can make a difference". Although the district was diverse, Lee stated that it was still able to agree on critical issues such as stopping a highway that could have divided the district into halves. The "old neighborhood, the blue blood, and the sympathy of the City Manager" helped the association, along with the City of Savannah, put the plan together.

Dr. Don Gardener, Director of the Department of Parks and Trees, argued that "we did a tree plan for Savannah,...but it was never adopted" (personal communication, August 1991). He hoped that hosting the Yachting event in 1996 would propell the city to improve its image, which was bound to be on display to the world.

The researcher attended a meeting of the Historic Improvement Team of Savannah (HITS). Questions arose during the meeting concerning whether this was a Foundation or a city
project; whether concrete sidewalks could be converted to brick; whether gas lights were practical and whether monuments needed a professional cleaning.

The researcher joined the HITS group in investigating the use of different light fixtures to light the monument on one square at night. Investigation was conducted by a technician of the Sternberg Lanterns Company. High pressure sodium was used with colonial lanterns and nightwash lights.

After the experiment, Stephanie Churchill of the Savannah Historic Foundation said that "trucks and buses are problems in the area... even though the city issues (two) parking permits to every household in the area" to control parking in the district and to allow residents, workers, and visitors to find parking easily. She added that, since the 1950s, the Savannah Historic Foundation has been responsible directly and/or indirectly for restoring about 1,000 buildings in the Downtown Historic District (Stephanie Churchill, personal communication, August 1991). Esther Shaver, President of HITS, was quite involved with coordinating the Association and different municipal departments to insure that the Vision Plan was implemented according to its goals and objectives. She was pessimistic about the future of the District and suggested that the plan needed 20 years to become operative.

The HITS reflects the spirit of cooperation and partnership between the Downtown Neighborhood Association and
the City of Savannah. In 1991, the HITS published a recommendation for an historic improvement plan, which began with an inventory and analysis of existing conditions. The analysis was completed by the Metropolitan Planning Commission staff. Monthly public meetings of the Neighborhood Association were held. In August 1990, the vision statement and goal plans were set out by an assistant from the University of Georgia. In September 1990, nine committees were established to develop goals and strategies regarding each issue. Technical assistance was enlisted from professionals and agencies, as well as from municipal offices. The vital issues addressed by the HITS Preliminary Working Vision of 1991 were as follows:

1. Sidewalks were to be made safe, uniform, and accessible to the handicapped. Concrete slabs were to be replaced with bricks, paving stones, or similar surfaces.

2. The urban forest was to be made visible. A block face by block face landscaping design was to be implemented and effort made to promote a landscaping theme.

3. To achieve an urban neighborhood with historically accurate pedestrian lighting, efforts were to made to eliminate all overhead utility wires, i.e., to install all wires underground.
4. A signage system was to be developed. Uniform multilingual street direction and information signs were to be used. Signs and poles were to be designed for the sidewalks, and both metal channel street signs and yellow curbing for street parking stalls were to be terminated.

5. A pedestrian oriented district with minimal through traffic was to be achieved by prohibition of commercial delivery vehicles throughout the district and the diversion around it. "Trucks Prohibited" signs were to be installed at major entrances.

6. Residents and visitors of the district were to be provided with convenient on-street and off-street parking areas. Residents, their visitors, and out of-town tourists were to have parking passes permitting on-street parking.

The City of Savannah has many occasions to apply Lynch's elements--pathways, edges, districts, nodes, and landmarks. Squares are considered nodes and landmarks in and of themselves because they each have a monument and a name. Streets or pathways have landmark buildings and signs, and the brick surface treatments of some street are memorable (see Figures 2.1 and 2.2). District boundaries are distinguished from surrounding areas as a result of unique streetscape
Figure 2.1: Use of brick in surface treatment lends the street an historic aura in Savannah, Georgia.

Figure 2.2: Integration of brick and asphalt in surface treatment, Savannah, Georgia.
Charleston, South Carolina

Charleston was founded and settled by English colonists in 1670. By the mid-eighteenth century, the city had developed from a frontier seaport into a cosmopolitan city. Charleston was a political, economic, and social center for the southern Atlantic colonies. It was also the capital of the Carolinas until 1790. In 1986, Charleston was the recipient of the United States Conference of Mayors' City Liveability Award.

The Old and Historic Charleston Districts and the Old City District Ordinance were created to promote the economic and the general welfare of the City of Charleston, to attract tourists, and to encourage residents "to become aware of preservation and to develop a protective attitude toward such districts."

The exterior appearance of historic buildings, as affected by types, colors, and textures of building materials, as well as by types and characters of windows, doors, light fixtures, signs, etc., which are visible from a street view or public thoroughfare, is controlled by zoning ordinances. Vision clearance standards are also in place for objects such as fences, walls, shrubs, and signs obstructing vision between three and fifteen feet. The sign ordinance was created to
enhance the visual environment of the city and to inform both tourists and residents of the area's history and culture.

Goals of the city are to enhance the image of the historic Charleston peninsula; to provide motorists with a sense of direction, or orientation; to create memorable places or focal points for the public to enjoy (see Figures 2.3 and 2.4); and to create liveable and functional streets using landscaping, light, signs, and surface treatments.

The city also attempts to create an identity for downtown area streets, for example, for King Street, a commercial road on which all historic shops are located. On Broad Street, community leaders and lawyers have their offices. Market Street is a tourist target because it offers traditional southern food, handicrafts, antiques, and sightseeing tours. East Battery Street (see Figures 2.5-2.10) boasts the richest architecture in Charleston. Tourists can spend hours walking down that street and enjoying the natural beauty of the harbor and the man-made beauty of mansions standing dignified and harmonious, their fences celebrating the rich architecture with thin "Palmetto" trees.

The city planners believe that each major street should be extensively planted with trees to reinforce linearity. Trees throughout Charleston are high branched, high crowned, and of a size not interfering with the adjacent movement system of traffic control devices. The landscaping of streets
Figure 2.3: Market Street and Meeting Street intersection, Charleston, South Carolina.

Figure 2.4: Camouflage House on Mary Street, Charleston, South Carolina.
Figure 2.5: Charleston Rainbow, East Battery Street, Charleston, South Carolina.

Figure 2.6: Battery Streetscape, Charleston, South Carolina.
Figure 2.7: Wrought-iron fences on East Battery Street, Charleston, South Carolina.

Figure 2.8: Stone fences, balustrade, and gates on East Battery Street, Charleston, South Carolina.
Figure 2.9: Rich architectural styles on East Battery Street, Charleston, South Carolina.

Figure 2.10: Parking on Battery Street for visitors, Charleston, South Carolina.
helps characterize areas. For example, on East Battery Street there are palmettos and on Broad Street, live oaks. Thus public orientation in the city is facilitated and memorable paths are created.

Despite consistent growth, the peninsular city retains much of the architectural and cultural flavor of the past. Charleston is quite proud of its heritage and equally determined to protect historically irreplaceable structures. In 1931, it enacted a zoning ordinance and established the first Old Historic District in the country.

According to Charles Chase (personal communication, August 1991), Preservation Officer, Department of Planning and Urban Development, even though the city has undergone a variety of natural disasters, including fires, earthquakes, hurricanes, and floods, it has recreated what has been destroyed and remains the "holy" city for preservation in the United States.

Lighting in most areas of Charleston is achieved by mercury vapor lights of a cool blue color. The South Carolina Electric Company, however, is adopting a high-pressure sodium (orange/pink) light system, which is energy efficient. Most streets in the peninsula have historic lighting of different types (see Figures 2.6). Sonya Gentry (personal communication August 1991), Senior Planner of the Department of Planning and Urban Development, stated that the city would like to place
utility wires underground or to improve the appearance of overhead wires, as well as to provide additional parking areas. The city has undertaken over a dozen urban studies to guide its street improvement program and to demonstrate how streetscaping can be imageable and functional (see Figure 2.10).

According to Debbi Rhoad (personal communication, August 1991), Preservation Technician, Charlestonians have a "sense of continuity and resistance to change...the mayor, Joseph Reilly who was born here, is behind everything,". She also stated that revolving funds help restore large parts of the peninsula.

According to Chase, Charlestonian Preservationists "look at the need, not at an isolated building" to restore traditions within the rapidly growing city, which has both tree protection and zoning ordinances, as well as an architecture board to insure that every alteration, addition, or new construction is compatible with tradition. Twenty-eight hundred out of thirty-six hundred buildings have been restored. Chase hoped that the future would make Charleston a "green city" and enhance the streetscape and roadway.

According to Jennifer Carr (personal communication, August 1991), Landscape Architect of the Department of Parks, City of Charleston, the Parks Department guides downtown landscaping according to the Design Guidelines Manual prepared
by Barton-Barton Associates of Washington, D.C., in 1978. This manual defines the four elements of street design, namely landscaping, lights, signs, and street surfaces. Although landscaping should be unified as a whole, sidewalks can be diverse to develop minor themes. In Charleston, streetscape language is understandable (Amanda Barton, personal communication, August 1991)--for instance, rough rocks paving narrow streets indicate that vehicles are prohibited.
Any historical environment has a network of pivotal or focal buildings as its foundation....Upon this framework hangs a series of anonymous structures--anonymous in their average aesthetic quality and limited associative values. Together, whether contiguous or separated by alley or garden, these linkages of anonymous structures provide the walls of continuity that create the definitive quality of the area....Thus, the buildings, the spaces between them--whether parks, streets, walkways or gardens--and such street furnitures and directional signs together create the total identity of place that can be visually observed. Such sense of place is created not only by the integral parts of the units and their interrelationships but by the interplay of time, tradition and continued mutual existence. William Murtagh, Historic Districts: Identification, Social Aspects and Preservation.

CHAPTER 3. A PROFILE OF THE AMES OLD TOWN DISTRICT

Historic Background

If one compares the settlement period of Ames (1864) with that of other U.S. cities such as Savannah, Georgia (1733), or Charleston, South Carolina (1670), one will conclude that Ames is a city in its infancy. It is a typical midsized midwestern city, and the farm culture has influenced its appearance. The Historic Old Town District area represents a friendly, modest, family oriented area.

Ames was established because the railroad relocated between Nevada and Boone (Ames Intelligencer, 1871, p. 15). In 1864, John Blair, President of the Cedar Rapids and Missouri Railroad, chose Ames as a site for a new depot. The
original town of Ames was laid out by Blair in 1865 and consisted of a 15-block subdivision north of the railroad. The original Ames population was 300 (Meads 1955). In 1869, Ames was incorporated. In 1871, it became an important point on the Chicago and Northwestern Railroad after the Milwaukee and Nashua Rail Company consolidated with the Des Moines and Minnesota Company (Ames Intelligencer, 1871, p. 25). At that time, approximately 14 trains stopped in Ames daily (Allen 1887, p. 233). By 1900, the population had grown to 2,423, exclusive of Iowa State College students (Goudy 1988, p. 2)

Boundaries, Codes and Regulations

This year, the city of Ames celebrates the 128th anniversary of its founding and the fourth anniversary of the establishment of the Historic Preservation Ordinance. The city also celebrates the third anniversary of the creation of the Historic Preservation Commission and design guidelines for the city's first historic district, known as "Old Town" (Ordinance 3061, October 10, 1989).

The Historic Old Town District overlays existing zones and land use divisions, thus, in addition to existing regulations, regulations enforced by the historic preservation ordinance, the design guidelines, and the Historic Preservation Commission are applied.

The district is located in the heart of the downtown
area. The northern boundary is one block from the hospital-medical district, and the southern boundary separates the commercial-business district from the residential district. The neighborhood has a park located on the corner of Douglas Avenue and 9th Street, a church, and three homes belonging to the Youth and Shelter Services. A Fareway Store serves the area as the closest grocery store within walking distance. The City Hall, the United States Post Office, the Ames Public Library, and the Bandshell Park are all located on 6th Street, within walking distance of the district. The district is also served by a transit services: the Red Cy-Ride-bus route passes through Duff Avenue, and the Green bus route passes through Clark Avenue and 9th Street. Duff Avenue is a north-south arterial, which passes through the district and provides access to Highways 30, 69 (see Figure 1.1).

**Boundaries**

The boundaries, proposed by property owners, include as the northern boundary lots on the north side of 9th Street between the Clark-Wilson alley and the Duff-Carroll alley. The southern boundary includes lots on both sides of 7th Street between the Clark-Wilson alley and the Carroll-Duff alley, except for the southern part between the Clark-Wilson to the back of the lot on the west side of the Douglas-Kellogg alley. The eastern boundary includes the east side of Duff
between 7th and 9th Streets (see Figure 3.2). The western boundary includes lots on the Clark-Wilson alley (City Council Action Form, Item #25, dated 9-12-1989, pp. 1-10 and Ordinance No. 3061, 1989, Book 308, p. 91). The irregularity of the boundary line was established, except to follow the alley, street, or rear lot lines of properties, on the edge of the district.

The City Council eliminated the southern part of the 7th Street boundary, except for the building on the east of Duff Avenue, after being requested to do so by property owners (see Figure 3.1). These lots were zoned for commercial use, even though they are currently used for residential purposes (Audiotaped City Council of meeting on October 10, 1989).

A letter from Poague and Wirth, citizens of Ames, to the Mayor and City Council dated October 21, 1986, (p. 3) (City Clerk Office, Historic Preservation Files, 1988-89) stated that

The architectur(al) fabric found within (the Old Town area) reflects the city's rich and unique history....The structures are important cultural resources for Ames....These buildings enrich our lives with beauty and meaning and are an important part of the townscape. They provide variety and contrast in design, material and ornament, achieving the neighborhood's architectural continuity.
Figure 3.1: Historic Old Town District, Ames, Iowa as Proposed by Property Owners (Ames Files, Bureau of Historic Preservation, Des Moines, 1988-89)
Zoning

According to current zoning regulations, approximately two-thirds of the district is zoned R-3. R-3 zoning (medium density) is located in northern, eastern, and southern parts of the district (see Figure A.1). The rest of the district is zoned R-4 (high density) (Ames Files, Bureau of Historic Preservation, Des Moines 1988-89). The district has no commercial zoning.

Land Use

The current Land Use Policy Plan shows that approximately two-thirds of the district is planned for medium density housing or for 10-22 units per acre. This zoning is located in the northern, southern, and western parts of the district (Ames Files, Bureau of Historic Preservation Bureau 1988-89). The rest of the district, located in the northern, western, and eastern parts of the district, is planned for low density housing, or for 1-9 units per acre (see Figure A.2).

According to the current land use map, the district contains three types of residences: single--, two-, and multifamily dwellings. There are also a church and a park (Ames Files, Bureau of Historic Preservation, Des Moines 1988-89). The land-use pattern is irregular, however; single-family housing units outline most of the northern boundaries (see Figure A.3). Blocks between Duff and Douglas Avenues
were originally intended as single-family dwellings, whereas the southern part of the district was intended as two- or multifamily dwellings. Because of development scale and market values, multifamily dwellings are located primarily in the middle of the block on north-south avenues or on the corner of the block associated with east-west streets. Two-family dwellings were intended to cluster with multifamily dwellings.

**Historic Preservation Ordinance**

The purpose of creating the Ames Historic Preservation Ordinance was to promote educational, cultural, and economic welfare of the public by preserving and protecting the city's historic structures, sites, and neighborhoods, which would serve as visible reminders of the historic and cultural heritage of the city. Goals were made to foster pride in the neighborhood and to enhance its attractiveness to residents, visitors, and potential residents (Historic Preservation Ordinance, 1988, p.1).

**Design Guidelines**

Design guidelines protect the visual quality of the district. The City Council has adopted certain guidelines as part of its approval of each historic district designation (Design Guidelines 1988, pp. 1-2). Both the historic
preservation ordinance and the design guidelines are applied only to exteriors of contributing and compatible structures and to relocation of noncontributing structures.

Both historic ordinances and design guidelines regulate the building elements for alteration or new construction, which requires a certificate of appropriateness issued by the Historic Preservation Commission. The elements regulated are chimneys, decks, dormers, exits, fences and retaining walls, foundations, garages and outbuildings, gutters and downspouts, massing, moving buildings, porches, roofs siding exterior/materials, site relations, and windows and doors. Decisions are based on what already exists in the district in terms of size, design, composition, and texture, and on compatibility with the prevailing architectural style.

Both the ordinance and the design guidelines ignore color and landscaping of outbuildings, which means that individual buildings' appearance and the integration of outbuildings with streetscapes is left for property owners to plan. The fact is, however, that such units do not stand alone: they help make the district, and both color and landscaping are among the most important visual aids attracting visitors to the area. It has been argued that landscaping of housing exteriors can increase property values by 10% (Robert Harvey, personal communication, November 1991).
Historic Preservation Commission

The degree of control is determined by the Historic Preservation Commission. As required by the Historic Ordinance (Section no. 31.3), the Ames Historic Preservation Commission was established by City Council Resolution (No. 88-1163 of May 24, 1988). The commission periodically reviews proposals and makes recommendations to designate specific areas historic districts. The commission also reviews applications and issues, sometimes denying "Certificates of Appropriateness" for alterations or new structures within the historic district (Historic Preservation Brochures, City of Ames, 1989).

Preservation and Restoration Progress

According to Sharon Wirth, (personal communication, September 1991), two houses were under restoration in 1987; in 1988, sixteen (Wirth 1988); in 1992, twenty-four. In September 1991, Sharon Wirth, City Council member, reviewed the progress of preservation and restoration in the Historic Old Town District, as requested by this researcher. She suggested five categories based on exterior appearance and available information about structures (see Figure 3.2). These categories are as follows.

1. Structure in good repair (architecture unaltered) or with only slight changes, total: 41
Figure 3.2: Historic Old Town District Structures, Ames, Iowa. (Sharon Wirth, 1991)
2. Structure in good repair, but with some inappropriate alterations, total: 44
4. Structures needing repair or attention, total: 8.
5. Structures noncontributing or intrusive to the neighborhood's architectural fabric; could be insensitive new construction with significant alterations, total: 30.

Wirth argued that "all contributing structures in good repair were placed in group 1 since it was determined earlier that they have few alterations. All noncontributing structures were placed in group 5 with the following exceptions: four structures which are not 50 years old but which still complete the streetscape in a harmonious way were moved out of the noncontributing category for this inventory."
These dwellings are located at 205 7th Street, 412 8th Street, 226 9th Street, and 509 9th Street.

**Exterior Coloring**

According to the Historic Old Town Association's application for Hometown Pride Award (1990) submitted to *Midwest Living Magazine*, (Sharon Wirth, personal communication, August 1991) "in 1987, when two restorers began to apply a Victorian paint scheme, many thought this was very radical...Soon others were asking how to do it and each year we've seen an increase in this type of painting..."

In 1992, the Historic Old Town District includes a number
of homes that have had their historical appearance, and specifically their color schemes, restored:

1. Queen Anne: 803 Burnett Avenue (three-color-scheme); 712, 714, and 722 Douglas Avenue (four-color-scheme); 823 Douglas Avenue (three-color-scheme); and 712 Duff Avenue (four-color-scheme);

2. Vernacular Gabled Cottage: 318 9th Street;

3. Vernacular Hipped Cottage: 709 Douglas Avenue; and 811 and 816 (gray scheme-trim color) Duff Avenue.

According to Baker, editor of *Historic Old Town News* (July 1990), "It's exciting to see all the old homes that are being transformed with a fresh coat of paint."

Choosing colors that are historically correct and incorporating one's personal taste can be difficult. Most of the owners of the aforementioned houses have historic photographs of their houses (Wirth 1988). By researching historical books and by visiting field work in progress, owners and/or contractors are able to find clues to what the color scheme of houses originally were. In Victorian houses from the 1870s-1890s, color schemes were usually "dark brown, green, reds, oranges, and olives" (Baker 1990). Owners can also scrape down to the original paint layers (Rober Harvey, personal communication, February 1991). The overall look of the neighborhood, of course, is important, too. The transformation of houses to "historical" ones indicates a
regeneration of identity. The original appearance of the house, once covered by layers of peeling paint, is coming to light again (Baker 1990).

As a result of the preservation efforts and activism in the Historic Old Town Neighborhood, Midwest Living magazine in October 1990 selected Ames as the only city with a population between 5,000-49,999 to receive the "Hometown Pride Award", an award reflecting and celebrating the hometown volunteer spirit that makes a community a pleasant place in which to live.

Certificate of Appropriateness

The first Certificate of Appropriateness for demolition of a structure (an apartment building) was denied by the Ames Historic Preservation Commission. Owners wanted to build a new apartment complex at 711 Kellogg Avenue. The denial was issued because the owner could not prove economic hardship (Historic Preservation Commission Minutes of Meeting, April 9, 1991). This case raises an important issues. Dick Haws, President of the Historic Old Town District Association, stated that demolition was only one of many ways "to kill the district". But the Vice President of the Commission opposed the demolition in that "it would set a precedent in the area...if we allow this application, we will allow every property owner in the area to allow a home to deteriorate and then demolish it". One member of the Commission felt that
"the home had not been adequately maintained".

The first "Certificate of Appropriateness" was issued for the construction of a 4-foot-tall wooden picket fence "to enclose the back yard and part of the side yard" at 904 Clark Avenue. The fence was to be consistent with the building's architectural style, size, design, and texture (Historic Preservation Commission Action Form, Item IV, Dated 7-8-1991).

The first "Certificate of Appropriateness" for a major addition was issued for a 3,000-square-foot construction at Rosedale Shelter, 703 Burnett Avenue (Ames Daily Tribune, January 10, 1991). The Rosedale Shelter is for runaway and troubled children. This addition will add two beds as well as a kitchen, dining room, study room, and courtyard. It will also allow all beds to be located on the first floor and will leave two beds for emergencies.

Visual Quality


The Ames Historic Preservation Commission claimed that the Historic Old Town District "contained property that is truly of significance and has a distinct difference from the surrounding area." A City of Ames staff report stated the
following (City Council Action Form, Item # 25, Dated on 9-12-1989):

Properties possess integrity of location, design, setting, materials, feeling and association which is required by the Iowa Code. The district included a concentration of the early residential structures from the first plats of the city (see Figure 3.6). The district also has 29% of contributing structures while only 10% is required by the Municipal Code. All contributing and compatible structures were more than 50 years old.

The district has 43 contributing structures (29%) (see Figure A.4), 69 compatible structures (47%), and 36 noncontributing structures (24%) (City Council Action Form, Item # 25, Dated 9-12-1989, pp. 2-5, and Ames File, Bureau of Historic Preservation, 1988-1989, and Wirth 1988).

According to Wirth (1988), sources of architectural styles in small towns are obscure and difficult to trace. But in Ames, contributing and compatible structures evidence a rich early residential development in term of both stylistic and vernacular architecture (see Figure A.5). There are 55 stylistic structures (37%) in the district: 5 are Italianate (1840-1855); 17 Queen Anne (1880-1910); 10 Colonial Revival (1880-1955); 22 Prairie School-Craftsman-Bungalow (1905-1930); and 1 Tudor (1890-1940) (see Figure A.6 and A.7). There are 57 vernacular structures (39%): 17 are Hipped Cottage; 19 Gabled Cottage; 14 Gabled-ell Cottage; and 6 Colonial Cottage (see Figure A.8).
The district consists of 148 lots and includes a park. Four houses were moved into the district (Wirth 1988). These houses are 705 Douglas Avenue, 114 and 217 8th Street, and 216-218 9th Street. Of the 148 structures in the Historic Old Town District, 18% were built before 1900, 63% before 1911, 87% before 1926, 90% before 1938, and 10% after 1938 (see Table 3.1 and Figure A.9).

Table 3.1 Construction Date for House, Historic Old town District, Ames, Iowa

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Before 1900</th>
<th>1900-1911</th>
<th>1911-1926</th>
<th>1926-1938</th>
<th>After 1938</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duff</td>
<td>7</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Douglas</td>
<td>7</td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Kellogg</td>
<td>4</td>
<td>11</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Burnett</td>
<td>3</td>
<td>14</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Clark</td>
<td>3</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>7th</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>8th</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>9th</td>
<td>0</td>
<td>4</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>64</td>
<td>34</td>
<td>5</td>
<td>15</td>
<td>143</td>
</tr>
<tr>
<td>Percentage</td>
<td>18</td>
<td>45</td>
<td>24</td>
<td>3</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Wirth 1988, p. 15

Generally speaking, structures in the Historic Old Town District range from one-and-one-half to two-and-one-half stories. Construction material was wood frame or wall-bearing brick. Wood frame was popular until 1920, when brick began to predominate. Foundations were constructed of stone. Porches were made of wood and brick (Wirth 1988).
The Historic Old Town District was built by local builders and contractors using a pattern book and/or trade catalogs such as Palliser. Only two houses in the district were built by architects: that located at 723 Duff Avenue was designed by Kimball, Bailie, and Cowgill, Inc. of Ames in 1921, who were on staff at the architecture department of Iowa State; 213 8th Street, designed by John Dodds, professor of civil engineering at Iowa State, was built by Hans Hansen. One house in the district is discussed in Long's book Hometown Architecture, Changes in Central Iowa Towns and Farms (1982, p. 64) as a prefabricated or precut model available from many manufactured companies in the early 1900s: for 4000-5000 dollars, "Mail order houses came in many sizes, but one of the larger designs in a 1915 Wards Catalog closely resembled the hipped roof house in Ames".

The district consists primarily of vernacular architecture, which is typical of original "farm" communities such as Ames. In fact, one can argue that the vernacular "farm houses" are the most friendly in architectural style (Nasar 1988). Cooper (1976) and Rapoport (1982) argued that the public perceives house style as an indication of personal identity and friendliness. Theoretically, the district is friendly, meaningful, coherent, clean, and pleasant; but in reality, the district does not consistently communicate these advantages to the public.
It will take time for a large number of houses to be restored or preserved; the researcher therefore sees the need to increase design unity for the district's streetscapes which, integrated with its diversity of architectural styles, will inform the public of the district's existence and identity.

**Streetscape in the 19th and 20th Centuries**

In 1871, sidewalks were made of wood on both Kellogg and Douglas. In 1886, sidewalk materials were bricks, stones, and Portland concrete cement. In 1905, sidewalks on Duff Avenue were made of brick, and in 1907, 7th street sidewalks were made of bricks (Shrader 1965). According to the Public Works Department (Street Files 1991), City of Ames, the district's surfaces were paved in 1916, except for 7th Street, which was paved in 1923. Pavement was made of Portland concrete cement of the same width as used today.

In the early 1900s, the neighborhood was densely forested. Figure (3.3) shows the streetscape of Douglas Avenue in 1915, as seen from 7th Street (Brown 1991).

According to city officials, quality lighting was not established before the late 1960s, although some lighting fixtures had been placed at major roads before then. On the other hand, Main Street had five-globe lighting fixtures in the 1905-1927 era (see Figure 3.4), after which they were
Figure 3.3: Douglas Avenue in 1915, looking north from 7th Street, Ames, Iowa. (Brown, 34.173.1, 1991)
Figure 3.4: Streetlight located on Main Street in 1915, looking west from Duff Avenue, Ames, Iowa. (Brown 17.82.5, 1991)

Figure 3.5: Streetlight located on Main Street in 1927, looking west from Duff Avenue, Ames, Iowa. (Brown, 13.60.1, 1991)
replaced by ornamental globes (see Figure 3.5) (Brown 1991, Shrader 1965). Both types of lighting fixtures were pedestrian oriented even though the automobile was already in use in Ames. But the Old Town streets had been planned for horse and buggy, not for the automobile. Lighting fixtures at Court Avenue, Des Moines, are similar to design proposed types (see Figure 3.6).

Deficiencies of Identity

The basis of analysis for this study is discussed in three sections. First, issues affecting image of the district; second, constraints and obstacles affecting the historical-residential character; and third, its history and streetscape are considered.

District's Image

Both Lynch (1960) and Nasar (1990) agree that the image of a place depends upon identity, structure, location, meaning, and likability. They disagree, however, on how to establish a positive image. Lynch's formula is paths, edges, districts, nodes, and landmarks; Nasar's, naturalness, upkeep, openness, order, and historic significance.

This study applied Lynch's and Nasar's formulas to the Historic Old Town District to determine which issues most contribute to the district's image related deficiencies.
Figure 3.6: Light fixtures, at Court Avenue, Des Moines, Iowa
(Photo by C. O'Brien, Arch Studio 503, Spring 92)
Lynch's Formula

Paths

Duff Avenue is a major path in Ames and in the district as well. It has the potential to be an identity street carrying traffic, message, and meaning. Duff intersects Highway 30, or Lincolnway, and 13th Street—which accesses Interstate 35 and Highway 69. Mary Greeley Hospital, a regional center, and Bandshell Park, which has an annual summer band, are both located on Duff Avenue. The Avenue also passes along the Historic Old Town District and the Main Street shopping area.

Edges

The boundaries of Historic Old Town District are unidentified because of the way in which the City Council adopted them. Edges can be either land use or natural boundaries. In Ames, boundaries have been set on a physical and historical basis. But the Historic Old Town District is too small an area to apply Lynch's notion of edges (see Figure 1.1).

Districts

The Historic Old Town District is located between the medical district on the north, the business commercial district on the south, and the residential area to the east...
and west. It is a typical downtown residential neighborhood of a midwestern city.

Nodes

The intersections of important paths in the Historic Old Town District are Duff Avenue's intersections with 7th and 9th Streets.

In the 1990 tour of homes, the neighborhood association used the legibility approach to orient visitors. The association used an old path (Duff Avenue) and a new path (Grand Avenue) as major access points to the district, as well as Highways 30 and 69 and Interstate 35 (Porteous 1977). Nodes were intersections between Duff Avenue, and 6th and 13th Streets. In Figure (1.1), the district is shaded to clarify its boundaries between 9th and 19th Streets north; 6th and 7th Street south; Duff and Carroll Avenues east; and Clark and Wilson Avenue west. Landmarks used were Mary Greeley Hospital, Bandshell Park, and City Hall, which are located outside of the historic district. The hospital is a regional center (Appleyard 1969), the Bandshell Park has an annual summer band (Rapoport 1977, Lynch 1960), and the City Hall, of course, houses Ames' political machinery (Passini 1984).
Landmarks

Because the Historic Old Town District is primarily a residential neighborhood, there is no single landmark. De-Jonge (1962) suggested that in residential neighborhoods one picks out a small detail of color, door design, or curtain, or a special tree. Within the Historic Old Town District, these elements are not uniform.

Nasar's Formula

Naturalness

Landscaping and vegetation of the Historic Old Town District are quite similar to that of the surrounding area, for the same tree types are used. In addition, many trees need replacement.

Although residents wish to have more trees, as evidenced by the 1991 tree project, they were unwilling or unable to pay for them.

Upkeep

As illustrated early in Chapter 3, maintenance of houses in the area is becoming widespread. Many property owners still prefer, however, to maintain air-conditioning, heating, sewage, and water systems rather than to paint or to landscape (Danny Bolt of Neighborhood Housing Services of Des Moines, Inc., personal communication, July 1991).
View/scenery

The current panoramic view of the Historic Old Town District does not reflect its character as a historic-residential neighborhood. Relatively little has been done to houses that is reflected in their exteriors.

Order

The Historic Old Town District lacks a uniform style, which makes it difficult for observers to differentiate the area from its surroundings. The significance of the area lies in its uniqueness as the best collection of late 19th and early 20th century architecture in Ames: no other area in the city has similar characteristics (Ralph Christian, personal communication, August 1991).

Although the National Trust for Historic Preservation is concerned only with building exteriors and site landscaping, each community comes to its own decision about exterior colors and landscaping (James Jacobson, personal communication, August 1991). Some communities set the ordinance and design guidelines to control visual quality of exterior appearance and landscaping, because no building stands by itself, but rather, all standing together make up a neighborhood (Cullen 1961). Savannah and Charleston, as national historic districts, do control color and landscaping, along with other visual factors such as signs, in their historic districts, to
insure that the city's historic character is protected by both historic ordinance and design guidelines (Charles Chase, personal communication, August 1991, Larry Lee, personal communication, August 1991). On the other hand, many communities set up an ordinance meeting the need to stabilize social and economic bases while not necessarily preserving historic integrity (Hosmer 1981b).

The problems that the Savannah district have are quite similar to those of the Ames Old Town. For instance, many trees need replacement (see Figure 3.7). Lights are vehicular oriented (see Figure 3.8); with some exceptions, wooden light poles and overhead utility wires disturb the rich architecture of the buildings. Signs are of all types, sizes, and colors (see Figure 3.9. and 3.10). Surface treatments are different: some streets are asphalt, others brick. Although sidewalks are made of concrete, the HITS Vision Plan 2000 specifies that every year some concrete should be replaced with brick. Members of HITS expressed concerns about congestion and truck noise, buses, through traffic (see Figure 3.11), and on-street parking. They hoped that these problems would be solved with the Vision Plan.

As in Savannah, the Historic Old Town District's wooden lighting poles have been used for installing street and traffic signs. Overhead utility wires disturb the skyline of the area. Thus, there is significant visual clutter. On the
Figure 3.7: Wooden light poles used, for installing signs, in Savannah, Georgia.

Figure 3.8: Historic lighting fixtures, Savannah, Georgia.
Figure 3.9: Concrete street signs, traffic channel signs, and unsafe brick sidewalks, Savannah, Georgia.

Figure 3.10: Signs enhancing the historic character of the Savannah District, Savannah, Georgia.
Figure 3.11: Buses still passing through Downtown Historic District, Savannah, Georgia.
other hand, congestion, noise, and danger is generated by through traffic, and on-street parking by nonresidents.

Historic significance

The Historic Old Town District does not formally communicate its existence: no signs announce it, even though preservation and restoration efforts are underway. One problem is that historic street elements such as lights or bricks were not used in the area, nor were different types of street signs.

Nasar stressed that developing clearly defined boundaries will help the public recognize an area as unique. Lack of image of the Historic Old Town District contributes to disorientation when observers—pedestrians or motorists—try to locate it (Passini 1984). The task of the visitor, however, will be more difficult than that of the resident (Lang 1987). Orientation can be established easily if the district has a distinctive historic architectural style differentiable from that of its surroundings. In terms of socio-economic stratum, the Historic Old Town District is similar to surrounding residential areas in the east, the west, and the north. Moreover, the Historic Old Town District is similar to surrounding areas in terms of physical characteristics such as contours, curvatures, edges, and street patterns (Rapoport 1977).
Constraints and Obstacles

Controlling traffic in the Historic Old Town District will bring order to streetscapes and enhance its character (Savannah 1991, Nasar 1990, Barton-Aschman 1978). Appleyard (1979) argued that removing traffic from streets tends to restore historic character.

Traffic

Through traffic in the Historic Old Town District causes congestion and noise (Keith Rollenhagen, personal communication, March 1991), and speeds greater than 25 mph contribute to an unsafe environment. For example, Fareway trucks pass through Burnett Avenue, and Mary Greeley Hospital vehicles pass through Clark, Kellogg, Burnett, and Douglas Avenues. A city of Ames traffic study of the Old Town Area (1990) classified five types of traffic:

1. traffic generated by residents of the neighborhood;
2. traffic produced by neighborhood visitors or by domestic employees;
3. traffic generated by nonresidential land users;
4. regular traffic by local and school buses, postal services, and garbage (services); and
5. occasional traffic generated by utility repair, construction projects, and emergencies.

The City's report presented dramatic figures regarding traffic in the Historic Old Town District (see Table 3.2). Because through traffic was quite heavy, the Ames Traffic
Department replaced yield signs with stop signs at selected intersections. The city subsequently evaluated these changes. Table 3.3 shows a 29.09% decrease in through traffic (see Figure 3.12). Traffic decreased on Douglas, Kellogg and Clark Avenues and increased slightly on Burnett Avenue. Nonetheless, through traffic problems persist, especially in the day time.

Table 3.2 North-South Street traffic types, Historic Old Town District, Ames, Iowa

<table>
<thead>
<tr>
<th>Street</th>
<th>Through Traffic %</th>
<th>Residential Traffic %</th>
<th>Mixed Traffic %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas</td>
<td>28.6</td>
<td>34.5</td>
<td>32.1</td>
</tr>
<tr>
<td>Kellogg</td>
<td>39.3</td>
<td>17.9</td>
<td>25.0</td>
</tr>
<tr>
<td>Burnett</td>
<td>30.5</td>
<td>16.5</td>
<td>46.0</td>
</tr>
<tr>
<td>Clark</td>
<td>36.1</td>
<td>21.0</td>
<td>32.7</td>
</tr>
<tr>
<td>8th</td>
<td>0.0</td>
<td>58.3</td>
<td>25.0</td>
</tr>
<tr>
<td>7th</td>
<td>0.0</td>
<td>72.6</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Source: Old Town Area Traffic Study, City of Ames, Traffic Department, July 1990

Table 3.3 Traffic counts, Historic Old Town District, Ames, Iowa

<table>
<thead>
<tr>
<th>Street</th>
<th>Before Traffic</th>
<th>After Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas</td>
<td>1200</td>
<td>501</td>
</tr>
<tr>
<td>Kellogg</td>
<td>2120</td>
<td>1317</td>
</tr>
<tr>
<td>Burnett</td>
<td>1070</td>
<td>1109</td>
</tr>
<tr>
<td>Clark</td>
<td>2620</td>
<td>2047</td>
</tr>
<tr>
<td>Total</td>
<td>7010</td>
<td>4974</td>
</tr>
</tbody>
</table>

Source: Letter from the City Traffic Engineer to the City Manager, September 26, 1991
Figure 3.12: Traffic Counts, Historic Old Town District, Ames, Iowa before and after sign changes (1990-1991). (Letter from Traffic Engineer, to the City Manager, Dated Sept. 26, 1991)
The speed limit is 25 in the Old Town area, but drivers do speed. After seven yield signs were replaced with stop signs in the neighborhood, speed decreased by 15%, as shown in Table 3.4.

Table 3.4 Speed in Historic Old Town District, after Sign Changes

<table>
<thead>
<tr>
<th>Street</th>
<th>1990 Speed</th>
<th>1991 Speed</th>
</tr>
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<tr>
<td>Douglas N 8th</td>
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</tr>
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<td>Kellogg N 8th</td>
<td>29.5</td>
<td>25.4</td>
</tr>
<tr>
<td>Kellogg S 8th</td>
<td>25.3</td>
<td>26.0</td>
</tr>
<tr>
<td>Burnett N 7th</td>
<td>31.5</td>
<td>24.5</td>
</tr>
<tr>
<td>Clark N 7th</td>
<td>33.0</td>
<td>29.9</td>
</tr>
</tbody>
</table>

Note: These figures were in the southbound direction, except for those for Kellogg Avenue.

Source: Letter from Traffic Engineer to the City Manager, September 26, 1991

Parking

In response to complaints about on-street parking in the neighborhood, a survey was conducted by the Traffic Department of the City of Ames. According to the cover letter for the survey of March 1991, the following complaints were listed:

1. Residents or visitors cannot find a place on the street if needed.
2. It is difficult to get in and out of private driveways.
3. Visibility around drives and intersections is poor, causing safety concerns.
The city decided to restrict parking close to corners of intersections, to institute one-side-only parking on 7th, 8th, and 9th Streets and to permit alternate parking throughout the remainder of the neighborhood, except on Duff Avenue. Yet parking problems continue, especially during working hours.

**Pedestrian Movement**

The Old Town Neighborhood is not a pedestrian oriented area, because streets allow through traffic and on-street parking by users from other areas. Such movement is considered an obstacle to children's playing, elderly and handicapped people's crossing the streets, and residents' walking and jogging. In short, overall traffic prevents residents from enjoying to the full the atmosphere of their historic neighborhood.
When we build, let us think we build for ever. Let it not be for present delight, nor for present use alone; let it be such work as our descendants will thank us for...

John Ruskin, in *The Seven Lamps of Architecture*

CHAPTER 4. DESIGN PROPOSAL FOR THE HISTORIC OLD TOWN DISTRICT, Ames, Iowa

Design Analysis

A design concept is developed to describe the existing situation and to provide solutions, and alternatives. The purpose of the study design is to enhance the image and the identity of the Ames Historic Old Town District. The study proposes an overall scheme for public-realm activities. Thus, it considers street treatments.

Private activities led by the Historic Old Town Neighborhood Association include planting trees and encouraging historic color scheme usage. As private and public groups cooperate, the Savannah experience can be drawn on by the Ames Neighborhood Association. Ames, too, can allow citizens to invest emotionally in public realms, such as by planting memorial trees or memorial flowers, or by sandblasting their names or those of their parents or grandparents on bricks installed at intersections. The city can sell such items and allow citizens of Ames to be major
contributors and participants in changing the image of Old Town. In this way, the citizens of Ames can learn from those of Charleston, South Carolina. Members of all communities should have the chance to share, to learn, and to educate each other.

The City of Ames should capitalize on this opportunity to establish and to enhance the identity of its streets by balancing architectural styles reflecting medical, commercial, and historic functions.

Design Concepts

The design concept components of this study are three, namely, improving image, establishing street identity, and enhancing character of the Historic Old Town District's streetscape. Improving image refers to solving problems related to paths, boundaries, nodes, and landmarks (see Figure 4.1 and 4.2). Establishing identity refers to creating streetscape unity of landscaping, lighting, signs, and surface treatments to balance diverse architectural styles (see Figure 4.3 and 4.4). Enhancing character refers to eliminating constraints and obstacles, in other words, improving the visibility of landscaping, historic street elements, and panorama while decreasing visibility of overhead utility wires, parking areas, and through traffic.
Figure 4.1: Visual analysis of Historic Old Town District, Ames, Iowa
Figure 4.3: Douglas Avenue, looking southwest from 8th Street, Ames, Iowa

Figure 4.4: Douglas Avenue, looking southeast from 8th Street, Ames, Iowa
Improving Image

The district lacks landmarks and clear boundaries and therefore needs to be visually connected with landmark buildings located outside of the district, buildings such as the City Hall (see Figure 4.5), the United States Post Office (see Figure 4.6), and the Ames Public Library (see Figure 4.7), all high-use buildings, and the Bandshell Park. The connection of the district with Ames landmarks will help the public find their way to the district.

Unity/Identity of Streetscape

The literature reviewed agrees that, like landscaping and lights, signs are integral to street unity/identity. Streetscape elements such as landscaping, lights, and signs can be unified by means of type, size, space, and design. Rhythmic landscaping, lights, and signs will create identity for the streetscape of the Historic Old Town District. But, in keeping with the district's architectural diversity, some streetscape elements should be diversified. For example, brick will distinguish the sidewalks of the district from those of the surrounding area but, at street crossings, can be integrated with asphalt surface treatments (see Figures 4.8-12).

This study considers Historic Old Town District's current street elements:
Figure 4.5: Ames City Hall, 515 Clark Avenue, Ames, Iowa. A red brick building of 1940, Ames, Iowa.

Figure 4.6: United States Post Office, Kellogg Avenue, Ames, Iowa. A Greek style building of 1935.
Figure 4.7: Ames Public Library, Douglas Avenue, Ames, Iowa. A colored stone building of 1938.

Figure 4.8: Duff Avenue, looking north from 7th Street, Ames, Iowa.
Figure 4.9: Existing conditions of Historic Old Town District, plan and section A-A.
Figure 4.10: Proposed street treatment of Historic Old Town District, plan and section B-B.
Figure 4.11: Proposed street intersection of Historic Old Town District, plan.
Figure 4.12: Proposed street intersection of Historic Old Town District, section C-C.
a. **Large deciduous trees** such as green ash, oak, and maple should be added where they have been felled or are ailing. Their general size, however, should be similar to that of existing trees, and spacing should be planned to create the illusion of an "urban forest".

b. **Light fixtures.** The researcher proposes to reproduce the historic street lights existing in Main Street from 1905 to 1927 (Brown 1991 and Shrader 1965). This was known as the golden era of Ames, which was at its peak from the 1870s to the 1920s. One can argue that these lights did not exist within the district boundaries and are therefore falsifications of the past, but if one recalls the period from the 1870s to the 1920s, the district--according to city officials--was in darkness. So to be historically accurate is truly impossible. Moreover, the current "historical" light fixtures on Main Street are not based on any fixtures ever used in Ames.

The researcher proposes distribution of 10-foot-high lighting fixtures at 90-foot intervals, in a zigzag pattern (see Figure 4.13). In other words, on both sides of the street the spacing between light fixtures should be 90 feet, but fixtures should be placed in a zigzag to ensure silhouette vision.

The researcher suggests use of either purple or bronze
Figure 4.13: Proposed street light of Historic Old Town District.
color for fixtures, and yellow and brown brick sidewalks to complement landscaping. He also proposes use of distinctive light fixtures.

c. **Signs.** Signs are crucial for district identity. Three different types of signs should be used (see figure 4.14-16):

1. street signs, which should be the same size as existing signs, but colored brown or black, with white text remaining. The signs can be installed on lighting fixtures at every intersection.

3. traffic and parking signs should be modified according to city standards, however, and installed with light fixtures only at or close to intersections to eliminate visual clutter.

d. **Surface treatment.** Brick physically and mentally suggests an historic area. Brick can be an important element in historic streetscapes, making them distinguishable from surrounding areas (see Figure 4.11 and 4.12). Sidewalks and street crossings of brick are more important than the width of the sidewalk. Because brick sidewalks once existed within district boundaries, they should be reproduced to achieve the historic effect.
Figure 4.14: Proposed street name signs of Historic Old Town District.
Figure 4.15: Proposed traffic signs of Historic Old Town District.
Figure 4.16: Proposed traffic/banner signs of Historic Old Town District.
Enhancing Street Character

Improving district image and creating street identity are necessary. The researcher also considers how to enhance street character by solving the through-traffic and on-street parking problems plaguing residents of the area.

Signs should be used to prohibit trucks in the area. Parking without destination within the district should be prohibited and free parking permits should be given to residents and visitors of the area, as established by the Savannah vision plan of 2000. According to Appleyard (1976), removing traffic from streets will restore their historic character.

Streetscape Elements

Landscaping

Existing conditions

Green ash, oak, and maple are the predominant trees of the Old Town area. Tree size is between 30-50 feet, and height between 20-35 feet. Today, many trees are missing, and no distinctive tree types are used consistently throughout the district. According to Joan Baker (November 1990) of the Historic Old Town Association Tree Subcommittee, with the assistance of Matt Pepper of the city staff, volunteers "counted nearly 200 empty spaces (in the parkways) which could be filled with growing trees."
Historic Old Town District has no fences separating the public from the private realm.

**Solution and alternatives**

1. Restore Old Town to the "urban forest" of the 1910s, by using extensive landscaping incorporating large tree species unique to the area.

2. Create a hard edge by using double-tree planting on district boundaries, which will contribute to district unity.

3. Establish distinctive boundaries by planting a unique species in the median: when planting, use, for example, red bud or purple leaf plums 10-12 feet high, along with wild flowers.

**Selected solution**

In Solution 1, landscaping is the primary tool with which streetscape unity is created, and large trees, regardless of type, create identity. The species should be dense, well rounded, and uniformly spaced. Felled or ailing trees of the same spacing should be replaced throughout the district to bring back the look of the early 1900s. In Charleston, South Carolina, the city uses a distinctive tree for each major street, which helps the public identify the district.
Existing condition

Standard lighting fixtures have been mounted on wooden poles 30 feet high on Duff Avenue and 25 feet high in the rest of the district (see Figure 4.17). Lighting poles are in line, but spacing varies. High pressure sodium lights are used, and fixtures are vehicular oriented. Overhead utility wires and wooden poles produce visual clutter. No distinctive light types are used in the district, and pedestrian-scale lighting is absent, except on some private properties.

Solution and alternatives

1. Using a distinctive street lighting fixture characteristic of the period 1870-1920 will contribute to street identity.
2. Existing wooden poles can be modified and painted with a warm color as a visually distinguishing street element.
3. Existing lighting fixtures can be replaced with fixtures of a design unique to the Historic Old Town District.

Selected solution

According to solution 1, street lights should be integrated with streetscape, and pedestrian-scale lighting should be separated from vehicular lighting. Wooden pole lighting should be replaced with historical fixtures
Figure 4.17: Existing light fixtures in downtown Ames, Iowa.
incorporating five globes for pedestrians. Lighting fixtures should be of warm colors such as purple or red to be integrated with the streetscape. All overhead wires should be placed underground, thus clearing the district's skyline.

Historic street lighting fixtures for pedestrians should be 10 feet high, and distinctive lighting fixtures for vehicular lighting fixtures should be 30 feet high to contribute to streetscape character and pedestrian safety. Lighting fixtures should be uniformly distributed, set back at the lawn, and spaced at approximately 50-foot intervals.

Charleston has a unique type of street light, and this fact gives its streets identity and unity. Solution 3 is impractical because no historically standard lights are available in the city of Ames, except the colonial/historical light on Main street, for which there is no evidence of prior use in the city.

**Signs**

*Existing Conditions*

Stop, parking, and street signs are installed on channels, or wooden poles. No signs inform the public of the district's existence, despite the fact that signs are crucial to street unity.
Solution and alternatives

1. Place street signs with light fixtures.

2. Unify existing wooden poles by painting them with a warm color so that direction/street signs and traffic signs will be readable and repetition avoided.

3. Design signs prohibiting trucks and other through traffic, as well as on-street parking.

Selected Solution

Uniform, attractive signage should be provided throughout the district to inform and direct public movement. To eliminate visual clutter, no metal channel or wooden poles should be used for installing signs. Signage should provide warm colors integrated with streetscape. "Historic look" street name signs could be designed and placed with pedestrian lighting/traffic fixtures similar to those applied in King and Broad Streets in Charleston.

Neither Charleston nor Savannah has a sign proclaiming the city a national historic district; in Charleston, however, the peninsula is composed of five such districts, so there is no need for signs. In Savannah, the master plan includes a sign proclaiming the historic district.
Surface Treatment

Existing conditions

The district has concrete sidewalks 4 feet wide and an asphalt auto pavement 45 feet wide for Duff Avenue and 31 feet wide for the rest of the district. For safety reasons, yellow curbs mark intersections, and white marks street crossings. Streets in the district have the same surface treatment as surrounding areas do.

Solution and alternatives

1. Replace asphalt with bricks at intersections to enhance visibility and safety.
2. Replace concrete sidewalks with bricks.
3. Replace asphalt with bricks or add color to asphalt for street surfaces to distinguish the district from surrounding areas.

Selected solution

Solution 1 is suitable. The city should provide a safe, uniform sidewalk surface that is handicapped accessible. Design diversity could be enhanced at every intersection in the district by changing the street crossing surface. Bricks could replace asphalt for street crossings, and concrete sidewalks, as its historically documented for both Duff Avenue and 7th Street. Yellow markings on the curbs in street
intersections should not be used. In Charleston and Savannah, street treatments such as gravel composed a design language that, without requiring installation signs, discouraged through traffic.

Solution 2 is suitable for the future; width is not important, but texture is. Solution 3 is appropriate for all streets in the district. If Duff Avenue were widened, however, it could be of either brick or colored asphalt when it passed through the district.

Enhancing Neighborhood Character

Traffic

Existing condition

Through traffic in the Historic Old Town District causes congestion and noise, and speeds greater than 25 mph contribute to an unsafe environment.

Solution and alternatives

1. Install signs prohibiting trucks and through traffic.
2. Narrow the entry point to the district, create a gate.
3. Use bumps at entry points.
4. Modify the traffic pattern to one-way.
5. Close streets at the 9th Street intersection with all Avenues to create dead ends.
6. Create a pedestrian zone.
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7. Place a four-way stop sign at each intersection.

Selected solution

Solution 1 would be appropriate. Signs prohibiting through traffic at entry points should be used as planned for Savannah. Streets must continue to provide four lanes on Duff Avenue and two lanes on the remaining streets. Service access must be provided to the district, including access by school and public transportation. Solution 2 would reduce through traffic, while negatively affecting traffic flow in the downtown area. Solution 3 would limit the attractiveness of the district. Solution 4 would inconvenience residents and visitors, while negatively affecting traffic flow in the downtown area. Solution 5 would help develop neighborhood image but would also create negative changes in the downtown traffic patterns. Solution 6 would inconvenience residents and visitors. Solution 7 would result in a traffic pattern slower than 25 MPH and would thus affect traffic flow in the district and downtown areas.

Parking

Existing conditions

Parking problems continue, specially during working hours.
Solution and alternatives

1. Prohibit nonresidents or visitors to the area from using available parking spaces in the neighborhood. This would solve parking problems, especially during working hours.

2. Use the median lane for parking and landscaping and leave the right and left lanes for traffic.

3. Replace three noncontributing structures with parking lots for visitors to the area.

Selected solution

Solution 1 would ease the parking problems in the district by allowing residents and visitors to park on the street with a permit free of charge, as in Savannah. On-street parking would be prohibited by signs, and parking allowed on one side of the street only.

Solution 2 is impractical because it would require widening of streets and would thus displace many utilities. Solution number 3 would be suitable if future expansion of the district takes place.

Pedestrian Movement

Existing Conditions

Through-traffic and on-street parking problems contribute to an unsafe environment for pedestrians.
Solution and Alternatives

For safety reasons, pedestrians rather than vehicles should be given priority in the neighborhood. Signs should indicate this priority. A convenient and safe pedestrian and handicapped environment should be provided, and an intimate environment on the human scale developed.
It was on the street, with our feet shuffling on the courthouse square, that America discovered its identity and concentrated its drives. It seems impossible to think of any city or town in pioneering America that did not depend on at least one street as its living room. The squares of Savannah or of New England, the wrought-iron balconies of New Orleans, the recessed arcades of Santa Fe, the narrow lanes of Boston's Beacon Hill all bring to mind the function of streets as places where values, not just vehicles, intermingle. Even the western settlers curled their Conestoga wagons into a circle around the campfires for company as well as protection—thereby creating an instant public space as historically vivid and valid as the most resplendent, urban esplanade.

Requel Ramati, in How to save Your Own Street

CHAPTER 5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This thesis has identified the lack of image and identity in the Ames Historic Old Town District and the impediments to change. Using expertise gained from studying other cities such as Savannah, Georgia, and Charleston, South Carolina, the researcher investigated means of enhancing the neighborhood's image as a symbol of community culture and history.

The primary objectives of this study were to establish and to enhance image and identity of the Historic Old Town District by adding or subtracting from existing physical objects, thereby allowing both residents and visitors to fully enjoy the neighborhood.

The theoretical basis for the study was derived from
studies by Nasar, Lynch, Passini, Lang, Appleyard, Rapoport, and others. Practical expertise was also sought from preservationists in the two of nation's oldest and most historic cities, Savannah and Charleston.

The study developed a method for analyzing the process of enhancing image. The concept of image includes a district's paths, edges, nodes, and landmarks and focuses on public right-of-way streetscape design elements such as landscaping, lighting, signage, and surface treatment. Traffic, parking, and pedestrian issues were all relevant.

Conclusions

The method is an urban design process having four components. These are 1) issues affecting image of the district, 2) constraints and obstacles affecting its historic residential character, 3) its history and streetscapes, and 4) design concepts describing existing situations and suggesting alternatives and solutions.

The Design Concept

This study did not poll residents or visitors to create a composite evaluation map based on observers' mental maps. But a "mental map" published in the 1990 Home Tour Brochure by the Historic Old Town Association (Baker 1991) was used as a supplement. The "Tree Project" of 1991, also developed by the
association, and a formal complaint to the City of Ames about traffic congestion in the neighborhood, were considered as citizen input. In addition, the neighborhood association's future plan, which was submitted to the Hometown Pride Award sponsored by *Midwest Living Magazine* (1989), included planting more trees, installing historic lights, and encouraging historic colors.

The researcher reviewed the 1990 Ames Plan by Sasaki Associates of Dallas, Texas, which stressed the greening of Ames. The researcher interviewed city officials and professionals in charge of the Historic Old Town District. These individual included members of the Ames City Council, the vice president and two members of the Ames Historic Preservation Commission, two preservation contractors working on the district, an ex-president and five members of the Historic Old Town Association, and president of the Ames Heritage Association. The researcher also interviewed Brian O'Connell, Director of Planning, City of Ames; and Wesley Shank and John Rice, Professors of Architecture, Iowa State University. The researcher contacted the Bureau of Historic Preservation in Des Moines, Iowa, to learn the names of cities that had experience in landscaping historic districts. Next, the researcher visited Savannah and Charleston. As a result of applying these methods, the researcher feels strongly that the study's design was both theoretically and practically
sound and that the physical, political, cultural, economic, and social contexts of Ames were each considered.

If the image of Ames' historic district is to be improved, a balanced program of maintaining and removing aspects of the existing environment is needed. First, to establish identity, landscaping, lights, signs, and surface treatments can be coordinated. The literature of urban design agrees that trees are the primary tools with which to establish street unity, followed by street lights, signs, and surface treatments. Mail boxes, traffic signals, and fire hydrants do not contribute to street identity (Barton-Aschman 1978). Second, unifying each element of streetscape can strengthen area character. An urban designer's values, as well as culture and climate of the area, influence the image that a community desires, based on function, order, identity, and meaning.

Summary

The design concept is the urban designer's vision. The designer attempts to improve the quality of life by promoting the aesthetic dimension from a matter of convenience to one of inspiration (Kricken 1990). Rather than restoring a vanishing culture, the proposed design creates a contemporary culture from old roots (Satterthwaitte 1975, p.7).

Historic preservation is educational, economic, and
political. Any historic district represents a community's culture and history. Each community, however, chooses how many and what types of restrictions it will enact.

Ames has a district symbolic of the community's history, culture, and identity. The district therefore will create a positive image and make Ames attractive to prospective residents. And the downtown commercial area will benefit from enhancing the image of the residential neighborhood nearby. After all, the district can become a living museum for the public to enjoy and for students to learn from. Thus, the historic district lends a sense of identity to the city by keeping the past vibrant.

Historic preservation can play a role in revitalizing the national economy, because historic or old buildings in the United States comprise one-fourth of existing buildings (Chittenden and Gordon 1984). Visits to historic sites are the fourth most popular recreational activity in the United States. This, in turn, supports one-half million travel industry jobs. One tourist dollar generates seven additional dollars to the local economy, compared to four dollars in industrial activity (Long 1991).

When a building is preserved, decay and blight are prevented. To preserve buildings is to preserve material culture, which is defined as any and all artifacts made by humans. Therefore, inasmuch as culture is both shared and
transmitted, this researcher ventures to assert that humans in their ideal state are preservationists. People preserve artifacts to communicate to future generations, and realize that this, among other essential characteristics, separates them from the rest of the animal kingdom.

**Recommendations**

Historic districts in America are relatively young compared with Old World capitals such as Athens, Paris, or London. In the United States, the districts present history and culture as they were first developed by Europeans on this continent. Today, 1200 historic districts collect this nation's memories. The districts remain the nucleus of the community. America, a young nation independent barely more than 200 years from Britain, is able to preserve its national roots. Enhancing historic district image and identity should be a national theme.

This study identified issues for future research. Modifying and widening Duff Avenue as a boulevard and using the median to plant trees unique to this area will make driving a pleasure. Brick or colored asphalt could be used as a surface treatment on the stretch of Duff passing through the district so as to announce the Historic Old Town District.

Art and sculpture could also be displayed. For example, Ames City Hall or Bandshell Park could have a statue of John
Blair and Oaks Ames, the founder and his friend. A mural painted by a famous Iowan or national artist could contribute to the overall attractiveness of the district. One house can be used as an information center and/or museum to help administer recreational and educational activities.

The city's departments should include trees, lights, sidewalks, signs, surface treatment, utilities, etc. in the historic district master plan. City of Ames personnel should inventory all streetscape elements and to facilitate provision of data to researchers.

Citizens of Ames should be encouraged to invest emotionally in their district by purchasing memorial trees or bricks. Duff Avenue, for example, can have the names of buyers sandblasted on paving bricks.

This researcher recalls that the 4th of July parade once passed by the old United States Post Office and hence through Main Street. Even the Iowa State Veishea Parade passed through the downtown area in early times. If the Old Town were restored and the parades once more travelled down its streets, the public could celebrate the days that are gone by wearing customary garments, using traditional tools, singing folk songs, and living and walking for at least one day a year in the same streets in which their grandparents walked (Brown 1991, 105.572.3 and 110.602.2-3).
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City Council Action Form, Item #25, Dated 9-12-1989, Ames, Iowa: City Clerk, P. 1-12.


Historic Preservation Ordinance, Sec. 8-3029, of Savannah, Georgia. 1973, revised 4-5-90.

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Iowa Code, Department of Cultural Affairs, Chapter 303, Section 303.32.


Letter from the Traffic Engineer, Scott Logan, to the City Manager, Dated September 26, 1991. Ames, Iowa: Traffic


The Old and Historic Charleston Districts and the Old City District Ordinance. 1931 Update 1991. City of Charleston, Charleston, South Carolina.


APPENDIX 1. DEFINITION OF TERMS

**Historic District:** An area including or encompassing such historic sites, landmarks, buildings, structures, or objects as the Commission may determine appropriate for historic preservation and as approved by the City Council (Design Guidelines 1989).

**Cognitive Mapping:** The process of perceiving the to environment, and storing and recalling information about location of places and their relations to mental images (Rapoport 1977).

**Motorist:** Drivers and passengers inside of the vehicle.

**Image of environment:** The visual quality of a place in terms of its identity, location, and likability (Nasar 1988).

**Imageability:** The visual quality of a place in terms of naturalness, maintenance, open view, order, and historic preservation (Nasar 1988).

**Identity:** A historic district context means the architectural character of houses, which can also mean physical indicators of group character or social/cultural set. It can also mean streetscape uniformity or unity by means of landscaping, lighting, signs, or surface treatment.

**Legibility:** The visual quality and clarity of a cityscape or a district caused by its mental images developed by its citizens. Parts of mental maps can be recognized and organized into coherent patterns. One can observe district boundaries, landmarks, pathways, nodes, and easily read and grasp overall patterns or images (Lynch 1960). Places can be legible but not necessary imageable.

**Contributing Structure:** Structures establishing the architectural character of the area. They may represent one architectural style or a broad range of architectural styles. Structures must be at least 50 years old (Historic Ordinance sec. 31.2-9).

**Compatible Structure:** Structures too altered to be contributing, yet similar to the architectural styles of the district. These structures complete the streetscape and have the same size, scale, color, material, and architectural character of contributing structures (Historic Ordinance Sec. 31.2-7).
Noncontributing Structure: Structures of an architectural style or time period, unlike the preservation district (Historic Ordinance Sec. 31.2-2)


Vernacular Architecture: If a building cannot be identified form and ornamentation, then it is categorized as vernacular. These categories follow Gottfried's and Jenning's book, *American Vernacular Design, (1870-1940)* and are based upon architectural elements such as roof, overall plan shape, number of stories, cladding, entry location, and porch configuration. Such elements reflect the richness of regional domestic architecture (Wirth 1988, p.34).

Restoration: "To put back what was once there as accurately as possible" (Harvey and Buggey 1988).

Reconstruction: "To recreate what was there in the past but exists no longer" (Harvey and Buggey 1988).

Reconstitute: "To put in what would be appropriate to period, scale, use" (Harvey and Buggey 1988).
APPENDIX 2. VISUAL SUMMARY

Figure A.1: Zoning (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)

Figure A.2: Land Use Policy Plan (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)
Figure A.3: Existing Land Use Map (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)

Figure A.4: Contributing and Compatible Structures (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)
Figure A.5: Stylistic and Vernacular Architecture (Ames File, Bureau of Historic preservation, Des Moines, 1988-89)
Figure A.6: Italianate, Queen Anne, Colonial Revival, and Tudor (Ames file, Bureau of Historic Preservation, Des Moines, 1988-89)
**Figure A.7:** Prairie School/Craftsman/Bungalow (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)
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<td></td>
<td>Gabled Dormer</td>
<td>Peak of Rear Projection</td>
</tr>
<tr>
<td></td>
<td>Off-Center Entry</td>
<td></td>
</tr>
<tr>
<td><strong>TYPE IV</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colonial Cottage</td>
<td>Peak of Rear Projection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>May Have Dormer</td>
<td>Side Gabled Roof</td>
</tr>
<tr>
<td></td>
<td>Off-Center Entry</td>
<td></td>
</tr>
</tbody>
</table>

Figure A.8: Hipped Cottage, Gabled Cottage, Gabled-ell Cottage, and Colonial Cottage (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)
Figure A.9: Date of Construction (Ames File, Bureau of Historic Preservation, Des Moines, 1988-89)
APPENDIX 3. DESIGN SPECIFICATION

As stated in Chapter 4, period significant elements (1870s-1920) such as trees, lights, and bricks can be used in the Historic Old Town District of Ames. Contemporary signs can also be used to complement the historic atmosphere, announce the significance of the place and lend the area continuity and unity (Lynch 1972, Hosmer 1965, Kostof 1987).

Landscaping

According to Ames Intelligencer (1871 p. 7-8), "In 1848, the area that we know as Ames was a virgin prairie. . . . The surrounding land possessed fine timber, such as white oak, black oak, black walnut, butternut, basswood, hackberry, red and white elm."

As Dorothy Shrader (1965) mentions, Dutch elm disease in the late 1950s forced the city of Ames to remove all its elm. The City of Ames subsequently prohibited numerous trees from being planted in the parkways: Silver Maple, Birch, Catalpa, Russian Olive, Female Ginko, Cottonwood, Poplar, Willow, and Siberian Elm. The city also forbade the planting of evergreen, or deciduous shrubs, in the parkways. Table A.1 presents the types of trees recommended by the city.
Table A.1  Tree types recommended for planting in Ames' parkways

<table>
<thead>
<tr>
<th>Tree name</th>
<th>Mature spread (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suger Maple</td>
<td>40-50</td>
</tr>
<tr>
<td>Norway Maple</td>
<td>30-40</td>
</tr>
<tr>
<td>Seedless Green Ash</td>
<td>30-50</td>
</tr>
<tr>
<td>Little Leaf Linden</td>
<td>35</td>
</tr>
<tr>
<td>Hackberry</td>
<td>50</td>
</tr>
<tr>
<td>Columnar Norway Maple</td>
<td>25-30</td>
</tr>
<tr>
<td>Black Maple</td>
<td>50</td>
</tr>
<tr>
<td>Schwedler Maple</td>
<td>30-40</td>
</tr>
<tr>
<td>White Ash</td>
<td>50</td>
</tr>
<tr>
<td>American Linden</td>
<td>50</td>
</tr>
<tr>
<td>European Linden</td>
<td>50</td>
</tr>
<tr>
<td>Crimson King Maple</td>
<td>35</td>
</tr>
<tr>
<td>Amur Cork Tree</td>
<td>30-45</td>
</tr>
</tbody>
</table>


The City of Ames standards for parkway landscaping are as follows:

1. **Spacing between trees**  No trees shall be planted closer than the distance of their full spread from the next tree in the parkway. Minimum spacing will be measured from the center to the center of each tree.

2. **Area requirement per tree**  At least nine square feet of ground shall be maintained for each street tree and no impervious material shall be placed nearer than 30 inches to the trunk of the tree.

3. **Placement in parking strip**  No tree shall be planted nearer than 2.5 feet to the curb and sidewalk line. Plantings of 8 feet in width and larger in the parkways shall be planted 4 feet from the edge of the sidewalk.
4. Intersections (corner lots) No tree shall be planted closer than 30 feet from the corner at intersections and must be at least 20 feet back from the property corner.

5. Driveways No trees shall be planted closer than 10 feet from driveways.

6. Minimum spacing from light standard or transmission pole No tree shall be planted closer to a standard or pole than the width of its spread. The distance shall be measured from the center of the standard pole.

7. Underground utilities No tree shall be planted closer than 6 feet to water service.

Lights

According to Darrel Weber of the Ames Municipal Electric System (Lighting Report, 1980, p.5) a suburbanaire type fixture is used for residential area. Although he believed that "lighting on most streets was generally adequate", he stated that "a few of our major streets in some areas need a little improvement where...pedestrian usage has built up."

Table A.2: Recommendations for roadways' average maintained horizontal illumination (residential)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Footcandle</th>
<th>Lux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>1.0</td>
<td>11</td>
</tr>
<tr>
<td>Collector</td>
<td>0.6</td>
<td>6</td>
</tr>
<tr>
<td>Local</td>
<td>0.4</td>
<td>4</td>
</tr>
<tr>
<td>Alleys</td>
<td>0.4</td>
<td>4</td>
</tr>
<tr>
<td>Sidewalk</td>
<td>0.8</td>
<td>9</td>
</tr>
</tbody>
</table>

Darrel Weber, Personal Communication, October 1991
Table A.3: City of Ames standards of lighting

<table>
<thead>
<tr>
<th>Category</th>
<th>Footcandles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>.2</td>
</tr>
<tr>
<td>Collector</td>
<td>.6</td>
</tr>
<tr>
<td>Major</td>
<td>1.2</td>
</tr>
<tr>
<td>Business District</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Darrel Weber, Personal Communication, October 1991

According to Sternberg Ornamental Poles and Vintage Lighting (1991, p. 13, 43), which was published by Sternberg Lanterns of Chicago, Illinois, selected G18/508, 5 Globe of 18" white globe (acrylic) of 100 watt each have 47,500 lumens and .58 footcandle. Selected poles are as follows:

- Model number--4400-T
- Shaft type--Tapered
- Wall thickness--0.125
- Base diameter--18"
- Base height--25"
- Wall/floor thickness--0.250/0.875
- Overall post heights above grade--10'

Signs

According to City of Ames standards, street name signs must be 9" high, but length can change according to street. Text must be 6" high and consists of white letters on a green background (Scott Logan, Personal Communication, April 29, 1992). The 1988 Manual on Uniform Traffic Control Devices for Streets and Highways, published by the U.S. Department of
Transportation, Federal Highway Administration, clarifies that "the street name sign should be reflectorized or illuminated. The legend and background shall be contrasting colors and should have a white message and border on a green background." The street signs should be posted at least 7' high in the intersections to allow visual clarity and easy recognition.

On the other hand, the City of Ames complies with the Federal Highway Administration Standards (Manual on Uniform Traffic Control Devices for Streets and Highways, 1988, p. 1A-8) in its use of traffic signs:

- **Yellow**--for general warning
- **Red**--stop or prohibition
- **Blue**--motorist services guidance
- **Green**--movement permitted, directional guidance
- **Black**--regulation
- **White**--regulation

(p. 2A-8) Sign border for 30-inch signs with a light background is from 1/2 to 3/4 of an inch in width, 1/2 inch from the edge. Height of signs should be at least 7', however, if a secondary signs is mounted below another, the major signs shall be 8' and secondary sign at least 5' above the level of pavement edge. Signs should not be closer than 6 feet from the edge of the shoulder. Regulatory sign normal is placed where its mandate or prohibition applies or begins. Guide signs are placed, where needed, to keep drivers well informed as to the route to their destination.

**Stop signs** shall be are 30" x 30". "(A) sign should be erected 4' in advance of crosswalk lines nearest to approaching traffic" (Manual on Uniform Traffic Control Devices for Streets and Highways, 1988, P. 2B-2). It should
be located on the right-hand side of the traffic lane to which it applies.

**Speed limit signs**, shall indicate multiples of 5 miles per hour and be 24 x 30 inches in size (Manual on Uniform Traffic Control Devices for Streets and Highways, 1988, p. 2B-6).

**Parking signs**, shall be 30" x 30". "(signs) shall be placed facing traffic (Manual on Uniform Traffic Control Devices for Streets and Highways 1988, p 2B-26).

**Surface Treatment**

Brick sidewalks and street crossing shall be constructed to comply with these specifications. A working drawing (construction plan) for the brick works shall be submitted to the City of Ames for review before a building permit is obtained. These plans shall show the pattern of paving, manufacturer of brick, color of brick, size of brick, location of surface utility, proposed elevation, dimensions of sidewalk, and limit of works.

1. **Brick selection** Brick samples of bricks shall be submitted to the city of Ames for approval. Bricks shall be full size, with a thickness not less than 2 1/4".

2. **Sub-base preparation** The sub-base shall be graded for bricks and setting bed. The sub-base shall be thoroughly compacted by rolling or tamping to 95% density and tested to
comply with the "C" method of ASTM-1557.

3. Concrete base and setting bed  The concrete base shall be 4" thick so as to conform to Iowa code chapter 103A of the uniform building code and to chapter 413 of the housing code. The setting bed shall be not shallower than 1" and not deeper than 2". Concrete mix shall be one-part portland cement and two-parts sand by volume, with enough water to make a homogenous mix.

4. The layout of brick sidewalks  The standard pattern shall be running bond, with the continuous joint set at a 90 angle to the curb or building face. All bricks shall be set dry and shall be butted together without mortar joints. Brick pattern shall be approved by the City of Ames.

5. Brick jointing  Bricks shall be firmly set into the base with full contact. Bricks shall be cleaned by application of a fine spray of water.