Attachment to the Physical Age of Urban Residential Neighborhoods: A Comparative Case Study of Historic Charleston and I'On

Jeremy Wells
Clemson University, jeremyw@clemson.edu

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ATTACHMENT TO THE PHYSICAL AGE OF URBAN RESIDENTIAL NEIGHBORHOODS: A COMPARATIVE CASE STUDY OF HISTORIC CHARLESTON AND I’ON

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Environmental Design and Planning

by
Jeremy C. Wells
May 2009

Accepted by:
Dina Battisto, Committee Chair
Elizabeth Baldwin
Cliff Ellis
Cari Goetcheus
ABSTRACT

Purpose: To counter the over-reliance of historic preservation research and practice on objective, expert values by understanding how people subjectively value and are attached to the age and design of traditionally-designed urban residential neighborhoods.

Research question: How does the age of traditionally designed, urban residential environments affect the degree and character of place attachment for residents?

Cases: 1) historic Charleston, south of Broad Street, 2) I’On new urbanist development in Mt. Pleasant, South Carolina.

Unit of analysis: Residents of 1) historic Charleston and 2) I’On.

Methodology (methods): Sequential mixed-method: phenomenology (interviews) followed by a survey methodology (on-line survey instrument); both employ photo elicitation techniques.

Dependent variables: Measures of general attachment, dependence, identity, and rootedness.
(Place attachment is dependent on an individual’s aesthetic attitudes about the environment.)

Independent variables: Perceptions and valuation of place; behaviors elicited by environmental factors.
Findings: Historic Charleston and I’On residents perceive their neighborhoods as being layered and having a sense of discovery and mystery. Age value is only associated with patina and spontaneous fantasy in historic Charleston; both of these variables correlate with increased levels of general attachment or dependence. Residents of both neighborhoods exhibit very high levels of general attachment, dependence, and identity. Rootedness is higher in Charleston. Place attachment is correlated with many more environmental variables in historic Charleston than it is in I’On.

Limitations: A low response rate may indicate there is self-selection bias in the sample; the survey demographics, however, are mostly congruent with census data and lend support to the claim of generalizability of the results.

Practical implications: The results of this study can be broadly applied to any discipline in which the holistic valuation of the built and natural environments is important. The mixed-methodological framework provides a way to explain quantitative findings through previously gathered qualitative meanings to increase overall validity and reliability. For historic preservation, it is important to protect masonry patina because of its association with place attachment. Both historic preservation and urban design can benefit from increasing the amount of “unseen effort” in interventions made to the built environment. The assessment of what makes certain places significant should focus on sociocultural and phenomenological values as well as objective/expert values.
DEDICATION

This dissertation is dedicated to my wife, Jeanne Wells, to whom I am eternally grateful for helping to support my academic aspirations over the past decade. Her love, patience, and understanding have made this work possible.
ACKNOWLEDGMENTS

I would like to thank my committee members for their expert guidance and support over the years. In particular my committee chair, Dr. Dina Battisto, helped keep my work on track and infused with methodological rigor; Dr. Elizabeth Baldwin introduced me to interdisciplinary research in the conservation and management of natural areas that became an important part of this work; Dr. Cliff Ellis provided needed insight into urban design so that I could more fully grasp the ramifications of my case study; and Prof. Cari Goetcheus open my eyes and encouraged my research to address some of the tough issues of landscape preservation.

I would also like to acknowledge the support and encouragement of the former and current chairs of the Department of Planning and Landscape Architecture: Prof. Daniel Nadenicek, and Dr. Elaine Worzala. Without their financial support, my work would have been far more difficult. During my studies, I have appreciated the enormous support of all the faculty and students of the Environmental Design and Planning program (now Planning, Design, and the Built Environment) with special credit due to Dr. Roger Liska, the current director of the program.

Lastly, I am grateful for the kindness bestowed upon me by the community leaders and members of the South of Broad Street neighborhood in Charleston and the I’On development in Mt. Pleasant while conducting this study.
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CHAPTER ONE

INTRODUCTION

Heritage preservation in the United States, and in most other states, is long on practice and process and short on philosophy. In the United States, this is principally because heritage preservation is mandated by a plethora of laws and regulations based on the declaration (“Congress finds and declares...”) that preserving the places and things of the past is a public good, is “in the public interest.” But the “why” assumptions underlying the declaration are usually taken-for-granted truisms, not philosophically examined argument.

Don Fowler in King, Places that Count (2003, p. ix)

[The] benefits [of heritage conservation] often have weak underpinnings in terms of theoretical and empirical evidence. Much of what passes for conservation research seeks uncritically to affirm predetermined outcomes.

Pendlebury, Conservation in the Age of Consensus (2009, p. 222)

[T]here is little research to support why cultural heritage is important to human and social development and why conservation is seemingly a vital function in civil society. The benefits of cultural heritage have been taken as a matter of faith.

Avrami, Mason, and Torre, Values and Heritage Conservation (2000, p. 10)

1.1 Introduction

Why engage in historic preservation1? What values or benefits does it offer us? Richard Moe, President of the National Trust for Historic Preservation, asserts that historic preservation is “good for the pocketbook as well as the soul.”2 Moe’s first claim is easy to endorse because it relies on objective evidence. Along with economic benefits,3 one can make an empirically-substantiated argument

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1. This manuscript uses a variety of nouns and verbs associated with historic places that are synonymous with “historic preservation” and “historic place.” Refer to Appendix A for details including definitions of these terms.
3. The link between preservation and economics is due in large part to the work of Donavan Rypkema. His most well known work is The Economics of Historic Preservation (1994, 2005), published by National Trust for Historic Preservation.
that preservation is “good” because it retains information about past design and construction practices and increasingly because it is an inherently sustainable endeavor. Moe’s latter claim, however, is anecdotal and therefore without evidence, but it is a popular theme in preservation practice. Do we have a substantiated body of evidence that historic preservation provides important cultural, social, and experiential benefits based on subjective values? The short and simple answer is no; these are assertions that existing research cannot support.

This chapter will reveal the problems inherent in contemporary preservation practice that fail to understand, much less use, subjective values—especially those related to personal experience—in assessing historical significance as well as the lack of research that explores these issues. From this platform, a series of research questions will be posited to help provide empirical evidence to substantiate the experiential or phenomenological benefits for engaging in historic preservation as well as neotraditional town design. This chapter will also explain essential terms and provide an overview of the assumptions and organization used in this study.

1.2 Research problem

1.2.1 Research problem description

Historic Charleston, South Carolina, is a well-known tourist destination for its eighteenth- and nineteenth-century homes and associated landscapes. It is especially prone to induce highly personal and emotional vignettes in tourist magazines for its “unique allure” of “tucked-away treasures” that are like “a secret waiting to be revealed” (Hunt, 2007, p. 87). The display of this emotional connection with Charleston’s past is far from a recent phenomenon. A number of late nineteenth and early twentieth century authors refer to the city’s “rare charm” as Mildred Cram (1917) does in describing Charleston as “a beautiful house that has been lived in for countless generations, taking on a

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4. In addition to research into the subjective valuation of place, the current wave of preservation research is focusing on sustainability. The National Trust for Historic Preservation, for instance, has just established a national research center on preservation and sustainability in Seattle, Washington.
rare and very personal quality, a patina, of inimitable luster” (p. 114). In an especially prescient passage, she recognizes that “Charleston's charm is two-thirds atmospheric and one-third physical” (p. 115), an ode to the importance of the subjective, affective experience of being in historic Charleston as compared to available objective evidence.

This emotive description of historic Charleston is colorful and stimulating and quite possibly harmonious with the experience of the average person. It is, however, incompatible with conventional historic preservation doctrine and practice because of the emphasis on the subjective experience of the person instead of the objective description of the object. This over-emphasis on the objective values associated with historic preservation has resulted in four important problems: 1) preservation doctrine and practice is locked into a positivistic stance that fails to adequately address subjective cultural and phenomenological values of place; 2) we know very little about sociocultural values in relationship to townscape preservation\(^5\) and even less about the phenomenologically-inspired values of historic urban places; 3) there is a dearth of studies that address urban cultural landscapes; and 4) there is little understanding on how people intimately experience and become attached to the physical age of historic townscapes.

Compared with individual buildings, these problems affect the recognition and treatment of cultural landscapes to the greatest degree. Culture creates the meanings of landscape through a dynamic process in which “image, symbol, signifier, and the materialization of ideology” constantly change over time (Riesenweber, 2008, p. 28). This definition of landscape, however, has not been widely adopted within historic preservation; instead the field uses the long-entrenched explanation based on the early-twentieth century geographer Carl Sauer’s view that landscape is a concrete, fixed, and knowable entity that one deciphers through careful visual observation. In other words, the traditional concept of landscape is that it is a noun—a thing external of interpretation—rather than the

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\(^5\) Townscape preservation is a term that is synonymous with urban cultural landscape preservation. Although its usage is primarily European, it is used here for its succinctness.
contemporary definition of it existing as a verb: always changing through a variety of human and ecological systems (ibid).

Before the post-structuralist shift in the 1960s and ’70s, historians treated their studies in a manner similar to the Sauerian view of geography: all one needed to do was to collect “facts” from the world and then interpret them through the scientific method borrowed from the natural sciences to uncover the “truth.” Today we know this process to be “an outmoded, positivist concept of what history is” (Green, 1998, pp. 85, 88). Thomas King warns that “historical significance’ is not necessarily a function of historical accuracy as understood by historians” because truth and significance are not equivalent (p. 113). Facts, therefore, do not exist independently of interpretation; interpretation comes first and then the “facts” are created. Historic preservation borrows heavily from positivistic geography and history, but it has not adopted these disciplines’ contemporary, post-modernist construct of reality in which “historical significance resides in the present” (Green, 1998, p. 90). Instead historic preservation practice rigidly holds to the idea that historical facts can be gingerly plucked from the past and then simply presented to reveal significance.

The development of the discipline of historic preservation from the early nineteenth century to the fixation of its activities through international and national doctrines in the 1960s and 1970s is an exercise in the death of subjective meanings. Beginning in the late nineteenth century—and in parallel with the discipline of history—historic preservation sought to objectify historical significance through a positivistic approach that denied the existence of subjective, culturally-bound meanings (Wells, 2007). Thus, the history of historic preservation can be divided into a subjective and an objective trace. The subjective trace is represented by the attempt to preserve particular cultural meanings of historical objects. This trace is represented by the maligned nineteenth-century restorers of the Gothic cathedrals of Europe—pejoratively termed “scrapers” for their penchant to “scrape” the fabric of buildings away—and is largely the point of view held by the layperson to this day. The objective trace came into full flower in the 1930s at Colonial Williamsburg where a narrowly-defined concept
of historical significance dictated the “true” and proper state in which a building or landscape should exist.

Today, the objective trace is exemplified by the National Park Service’s doctrines, such as the Secretary of the Interior’s Standards and the National Register of Historic Places. This attitude extends into natural landscapes, where the National Park Service tends to devalue or ignore the subjective, affective quality of natural landscape scenery, much to the chagrin of the average person who “continues to indulge in an emotional communion with landscape scenery” (Carr, 2005, p. 173). The National Park Service also treats historic landscapes in a parallel fashion, even though the public often feels shortchanged in the process (p. 174). The result, according to Alanen and Melnick (2000), is that too many values are not considered which results in a superficial assessment of significance. Moreover, “the reliance on codification, as exemplified in The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, … negate the very idiosyncratic landscapes qualities that set one place apart from another” (p. 17). A potential solution may lie in less prescriptive and “dogmatic” approaches to historic preservation (Carr, 2005, p. 174) in which the creative potential of cultural landscapes are able to “strike a balance between the ‘blind’ application of regulations and a purely emotional response to historic and cultural landscapes” (Alanen & Melnick, 2000, p. 18).

It is now widely understood among researchers that landscape is as much about process and systems as it is visual qualities. Overall, there is a shift from preserving objects to preserving these “dynamic qualities” of the landscape that are derived from individual and group meanings and their associated values (Francaviglia, 2000, p. 68). Urban cultural landscapes are no different. For instance, Europe and Latin America have for some time advanced the concept of “integrated urban conservation” that takes an interdisciplinary, holistic attitude about urban cultural landscapes in which the city is viewed as a “dynamic process, a structure in continuous change [that] has both states and processes” (Zancheti & Jokilehto, 1997, p. 47). In this approach, the city is considered to contain “some of
the most important cultural values of a society … and is a resource capable of attributing values to new things through the creation of new processes based on established values” (ibid.). Unfortunately, education in historic landscape preservation often fails to address the holistic, dynamic, system-based qualities of landscape and as such leaves its practitioners inadequately prepared to address cultural landscapes (Goetcheus, 2008).

Perhaps not surprisingly, given the penchant for scholars of cultural landscape studies to focus on rural areas, there are few studies of urban cultural landscapes (Groth, 1997, pp. 5, 6). As Larry Ford (2000) describes, we have a penchant to ignore the “nooks and crannies” between buildings and in the process divorce the objects of place from their necessary context. This situation is one explanation why values are still largely absent in discussions of urban planning—an endeavor in which values should play a fundamental role, but where such meanings are instead “conceived [at the] moment when the objectives of the planning process are being discussed” (Zancheti & Jokilehto, 1997, p. 48). In other words, the values should drive the objectives, not the other way around as is all too commonplace. Where urban cultural landscape studies exist, the buildings and not the spaces in-between tend to be dominant, relegating so-called inconsequential landscape features to the periphery of historical significance when, in fact, these landscape features may actually hold the largest amount of value to the local population (Longstreth, 2008, pp. 12, 13). We need to focus more on interpreting landscape and associated creative acts that invent new meanings rather than perpetuating the preservation of the status quo and the fixation of significance; to reflect this emphasis Catherine Howett (2000) has even suggested renaming landscape preservation to “cultural landscape interpretation” (pp. 206, 207).

The current state of historic preservation practice, therefore, is informed by a “scientific” theory of conservation, which was developed between 1930 and 1950 and has now come to dominate the profession (Muñoz Viñas, 2005, pp. 86, 87). Today, the professional practice of historic preservation has largely dropped the subjective trace and as a result, leaves preservation practitioners entirely unprepared to understand the ways in which people value and feel about places (King, 2003, p. 93).
There is too much emphasis on the “informational” and “material aspects” of historical objects with little attention paid to important social, cultural, and experiential values (Elliott, 2004, p. 112). As Yi-Fu Tuan (1990) warns, we must not forget that “humans are emotional as well as rational beings, that they have an imagination which soars from time to time into self-deluding fantasy, and that these traits direct human energies” (p. 444). These growing realizations have resulted in a call to put the focus back on the subjective trace by emphasizing the need for a “values-centered” theory versus the traditional and dominant “fabric-centered” theory in historic preservation. As Randall Mason (2008) explains, “Values theory acknowledges the full range of values ascribed to a place, whereas fabric-centered theory frames the objective of preservation as the study and protection of things more as specimens of cultural process itself” (p. 183). A related question is how to inform this values-centered theory as there is a paucity of empirical studies from which to build such a theoretical perspective. The problem is further complicated because the language of cultural landscape preservation is borrowed from architectural preservation resulting in inadequate and obtuse assessments of historical significance (Alanen & Melnick, 2000, p. 3).

Significance is ultimately related to how a culture comes to value a particular place, but most importantly, these values have phenomenological origins. According to Moore and Mathews (2001), “individual experiences form the basis for shared cultural beliefs and behaviors” (p. 4). The process begins through the phenomenological experience of being in a cultural landscape. We know very little about the experiential process of being in an historical place, however. In other words, while we can glimpse the reasons that people value place through a cultural and sociological lens, there is as of yet no answer as to the essence of how these values begin. Understanding this inchoate state of valuation is critical in helping elucidate which cultural values are more important than others.

In sum, the problem in historic preservation practice can be described as a disconnect between the objective values of experts and the subjective values of everyday people. Experts base their decisions on myopic doctrines bereft of empirical evidence for substantiating historical significance.
while the average individual relies on feelings or an attachment to place to determine value. The locus
to begin to address this gap is where the valuation process originates: the subjective, phenomenologi-
cal experience of being in historic places. Before delving into phenomenological values, however, is
it essential to understand how these values fit within the broader scope of sociocultural and objective
values.

1.2.2 Doctrine myopia: the values missed in accepted preservation practice and research

Historic preservation has two essential concerns: authenticity and significance. If an object—
moveable or immovable—has authenticity then, and only then, is it possible to consider whether or
not it has historical significance. Without authenticity, there can be no significance. This is the reason
why Independence Hall in Philadelphia has significance, but a contemporary reconstruction of the
building would fail to have historical significance; the former example has authenticity while the lat-
ter does not.

Authenticity, however, does not have a simple, singular definition. Since the early part of the
nineteenth century, authenticity in a western context has largely been associated with building (or
landscape) fabric that has born witness to the passage of time, as explained by John Ruskin
(1989/1849) over 150 years ago:

For, indeed, the greatest glory of a building is not in its stones nor in its gold. Its glory is in its Age,
and in the deep sense of voicefulness, of stern watching, of mysterious sympathy, nay, even of ap-
proval or condemnation, which we feel in walls that have long been washed by the passing waves of
humanity. It is in their lasting witness against men, in their quiet contrast with the transitional character
of all things, in the strength which, through the lapse of seasons and times, and the decline and birth of
dynasties, and the changing of the face of the earth, and the limits of the sea, maintains its sculptured
shapeliness for a time insuperable, connects forgotten and following ages with each other, and half
constitutes the identity, as it concentrates the sympathy, of nations: it is in that golden stain of time,
that we are to look for the real light, and colour, and preciousness of architecture; and it is not until a
building has assumed this character, till it has been entrusted with the fame, and hallowed by the deeds
of men, till its walls have been witnesses of suffering, and its pillars rise out of the shadows of death,
that its existence, more lasting as it is than that of the natural. (pp. 186, 187)

The plethora of contemporary international and national conservation doctrines such as the Venice
Charter and the Secretary of the Interior’s Standards preserve Ruskin’s ideas on fabric-based au-
thenticity and have prevented the evolution of more nuanced definitions of authenticity. It is only quite recently that non-fabric centered ideas of authenticity have been considered in western countries. For all practical purposes, however, historic preservation today is still synonymous with fabric-centered authenticity; the Ruskinian tradition survives essentially unmodified to this day.

Authenticity has additional connotations beyond a direct connection with building and landscape fabric. One need go no further than to look at how the word is used in everyday language: an “authentic” Italian cannoli is not required to be the original and only cannoli ever created, but must simply employ authentic ideas and correct items in its construction. Thus, in this sense authenticity is not fabric-centered, it is idea-centered or constructed from meanings. Authenticity is also used in connection with an occurrence as in an authentic experience, such as a trip to Venice, Italy compared “The Venetian” in Las Vegas, replete with phenomenological overtones. In this last instance, authenticity is therefore experience-centered. Jamal and Hill (2002) describe and name these types of authenticity as “objective” authenticity, “constructed” authenticity, and “personal” authenticity. For the purposes of this study, the first two terms will be used, unmodified, while the last term will be referred to as “phenomenological” authenticity instead of “personal” authenticity even though the meaning remains unchanged.

Since Riegl’s seminal essay of 1903 which addressed objective and experiential values, a variety of authors have attempted to parse the various types of values associated with authenticity that, when assembled, help to define significance. Many of these values overlap, and are synonyms for each other as when the Burra Charter defines a kind of informational value as a “scientific” value (Australia ICOMOS, 1999). Refer to Figure 8.1 for a list of these values and their relationship to authenticity in helping to define significance. The objective, constructed, and phenomenological values associated with authenticity will now be explored.

6. In eastern countries such as China and Japan, for instance, the idea of “constructed authenticity” guides interventions. Refer to Chung (2005) for details. This concept will be explained in detail later in this chapter.
1.2.3 Objective/expert values

An objective value is one that by definition, attempts to achieve a high degree of detachment in its assessment and application. Often these values can be easily quantified as with economic value or rarity value. This method has positivistic overtones and is often referred to as a “scientific” approach as is described in the Venice Charter (ICOMOS, 1964). Objective values are associated with fabric-based authenticity, wherein “original” fabric or fabric that has witnessed the passage of events from an important period of significance, remains extant. These objective values are the domain of
educated experts—either academics or professionals—who use their skills to define value based on their own discipline’s standards; as a result the public may have difficulty in understanding the rationale behind these kinds of expert-value definitions. (Sometimes even experts from disparate disciplines will not even agree on these values.) An example is an architectural historian who may place a very high value on a building because it is designed by William Strickland. Most members of the public, however, will likely value the building for a number of sociocultural and phenomenological reasons that fail to have congruency with this expert opinion.

**Historical positivism value:** Historic preservation documents tend to use “historical value” in a broad and ill-defined sense that may include any value associated with the historic environment, especially in association with sociocultural values. The term introduced here, historical positivism, specifically refers to the systematic gathering of “facts” to support a given historical association in a methodological framework that assumes said facts can exist independently of relativistic interpretation. Riegl (1996/1903) was the first to use “historical value” in this sense, which he indicated “rests on a scientific basis and therefore can only be achieved through intellectual reflection” (p. 74). For instance, one creates a National Register nomination (National Park Service, 1997a) by assembling historical “facts” that must prove that a property is associated with an event or person from the past (i.e., criteria “A” and “B” and to some extent, criterion “C”) through explicating broad themes and patterns. The greater the number of these facts, such as a notable person lived in a house during a certain period of time, the more historically significant the property is. Even the National Park Service admits that its methodology “is not a new one; it has been fundamental to the study of history since the 18th century and, arguably, earlier than that” (p. 7). Green (1998) refers to this approach to historical research as an “outmoded, positivist concept of what history is and how it should be approached” (p. 85); the basic problem is that it assumes “facts come before the interpretation” (p. 88), a point of view long abandoned by contemporary historians, and particularly railed upon by post-structuralist philosophers such as Focault (1972).
**Informational value:** Lipe (1984) defines informational value as deriving from “the materials themselves, and the network of spatial associations among them” (p. 6). Thus, historical objects can be directly “read” to provide information. These techniques may consist of geographical investigations or the scientific analysis of materials using an array of instrumentation. National Register nominations use criterion “D” to accommodate this kind of value (National Park Service, 1997a).

**Artistic/design value:** A work that embodies artistic or design value “may be important because it is a unique example or it may be pivotal or representative” (Worthing & Bond, 2008, p. 66). This value is especially associated with the academic contexts of art and architectural history, and to a more limited extent, urban studies or urban history. The National Register allows properties to be significant for artistic and design values (criterion “C”) if such properties represent a particular method of construction, the “work of a master,” or “high artistic values” (National Park Service, 1997b, p. 51). When arguments for artistic/design value are used in connection with historical value, they tend to be contingent on rarity value. Some authors, such as Mason (2002), place artistic and design values within sociocultural typologies and conflate the value with aesthetic value, which is more properly placed in the realm of phenomenological values. As sociocultural values are by definition values shared across large populations, “expert” values do not really belong in this category.

**Rarity value:** As with any object, the fewer the number of examples of it there are, the more valuable it is as a unique embodiment of other values, such as informational or historical (Feilden & Jokilehto, 1993). Directions for preparing a National Register nomination, for instance, direct the preparer to focus on the “unique,” “distinctive,” or “rare” when making value judgments as to what is worthy of acceptance into the Register (National Park Service, 1997a, 1997b). Therefore, the average, the commonplace, and the abundant have less value and may in fact be nearly impossible to receive recognition in the National Register of Historic Places, regardless of the presence other
values. Frank Lloyd Wright houses, for instance, are valuable in part due to their relative rarity in comparison to other homes.

**Economic value:** This value relates to the “quantification of how much money is generated by heritage places, either directly through admissions and sales of services and goods at the site, or indirectly in the sense of visitors to a place purchasing goods and services in the wider area” (Worthing & Bond, 2008, p. 65). Not all economic value is so easy to quantify, however; David Throsby (2003) explains that there are some kinds of “cultural capital” in which “aspects of cultural worth may not be expressible in terms of market prices or willingness to pay” (p. 6). This is the only objective/expert value that is not traditionally included in the assessment of historical significance. The National Register nomination, for instance, does not consider economic value.

1.2.3.1 Sociocultural values

According to Avrami et al. (2000), “cultural heritage is a social construction; which is to say that it results from social processes specific to time and place [and is] not [just] a collection of things” (p. 6). This idea of sociocultural values needing to be constructed is important as it relates to constructed authenticity—in other words, an object or historic environment is significant because of socially- and culturally-constructed meanings. These meanings can, and do, exist independently from historic fabric. By definition, these values are subjective. Contemporary preservation practice in the western world, with the exception of Australia (primarily due to the influence of the Burra Charter), is not influenced to any great extent by sociocultural values and the government documents used to recognize significance do not accept cultural or social arguments based on current values, such at the National Register of Historic Places. This situation is reflected in John Pendlebury’s (2009) assessment

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7. In reality, the decision as to whether or not the commonplace elements of the built environment get listed in the National Register is up to the valuation priorities of state historic preservation offices that play the front line role in refining what is and is not accepted into the National Register of Historic Places.
that the acceptance and use of sociocultural values “has been patchy across different academic heritage-related sub-disciplines and, thus far, has had limited impact on practice” (p. 13). Beyond academic circles, discussion of sociocultural significance of the historic environment is practically non-existent.\(^6\)

**Symbolic value:** This value represents objects or environments that are “a repository or conveyor of [cultural] meanings” (Throsby, 2000, p. 29). Often such symbols have political overtones (Mason, 2002, p. 11), with meanings that override other values, especially use value (Muñoz Viñas, 2005, p. 57). Riegl (1996/1903) discusses objects of “commemorative” value which are essentially objects with specific symbolic value. Examples include the White House and the numerous historical markers throughout the United States that commemorate events from the past. Where objects have little symbolic value, they instead tend to have high levels of informational or scientific values (Muñoz Viñas, 2005, p. 61).

**Technical value:** Great technical achievements of the past are often admired for their “innovation [and] development” as specific “pinnacles of achievement” (Worthing & Bond, 2008, p. 63). Examples include the Empire State Building, the Hoover Dam or extant equipment from the Apollo space program of the 1960s and early 1970s.

**Educational value:** This is perhaps one of the oldest arguments for historic preservation other than age value. Wendell Phillip’s 1876 speech used educational value as the primary argument for saving Boston’s Old South Meeting House from destruction. Connecting his argument with patriotism, Phillip’s believed that the mere presence of the building could instruct Americans in the greatness of their country (Committee on Federal Relations, 1878). Today historic places can offer much

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8. Other than Australia, another important exception may be the United Kingdom. As of early 2009, the legal guidelines for managing the historic environment in the U.K. are currently being revised, which has engendered an ongoing discussion of the valuation process used in defining historical significance. Over the past decade, the Department for Culture, Media and Sport released a series of white papers discussing the government’s role in protecting the historic environment, but these papers have mostly focused on refining the regulatory system instead of revising the valuation process. It is uncertain what, if any, changes will be made in the valuation process that differentiates a significant property from one that is not significant.
in the way of educational value, from learning how people lived in and designed buildings and places to learning how to respect different cultures’ contribution to World Heritage (Feilden & Jokilehto, 1993).

**Recreational value:** In an essay on thirty reasons for wilderness preservation, Michael Nelson (1998) describes the “arena argument” in which preservation is promoted “on the grounds that many designated wilderness areas provide us with superb and incomparable locales for athletic and recreational pursuits” (p. 162). The English Heritage (1997) makes a very similar argument in linking recreation in historic places with being “a vital part of people’s everyday life and experiences” (p. 4).

**Spiritual/religious value:** Certain places are connected with the religious beliefs of cultural groups (Mason, 2002, p. 12). For instance, there are a number of Native American sites in the Southwest that are of value to these populations for their spiritual associations. Churches are another example of a place imbued with religious meaning.

**Use value:** According to Riegl (1996/1903) “use value is basically indifferent to the kind of treatment a [historical] monument receives” and may be in conflict with age value (p. 79). Mason (2002) ties use value to market value in that buildings must have an economically sustainable purpose to justify their existence, except in extreme circumstances.

**Social capital/identity value:** This value relates to the social uses of the historic environment, such as group gatherings and ceremonial uses, which help to reinforce community identity and build “social capital” and foster “social cohesion” (Mason, 2002, p. 12; Worthing & Bond, 2008, p. 66).

**Cultural attachment value:** Environmental psychologists and geographers argue that phenomenon of place attachment fits best within a phenomenological framework and individual experience, but Setha Low (1992) claims that there is also a cultural dimension to place attachment. Attachment, therefore, can also form when individual experience aggregates at the group level to include “cultural beliefs and practices that link people to place” (p. 165). Cultural attachment can manifest in
any of six different ways, from a “genealogical linkage to the land through history or family lineage” to “narrative linkage through story telling and place naming” (p. 166).

1.2.3.2 Phenomenological values

With the exception of Jack Elliott (2002), an extensive literature search did not uncover other contemporary authors that advocate a phenomenological approach to understanding historical significance. Considering the fairly widespread and accepted application of phenomenology in architecture (e.g., Norberg-Schulz, 1980) and geography (e.g., Seamon, 1979; Relph, 1976; Tuan, 1974), it is somewhat surprising that this approach has not been more widely adopted within historic preservation. Much of this situation is likely due to the positivistic (anti-subjective) nature of codified preservation doctrine (see Chapter 1 for more details) and its focus on fabric-based authenticity, which is inherently incompatible with a methodology as subjective as phenomenology. It is worth noting, however, that Riegl (1996/1903) adopted what would now be considered a phenomenological approach in defining age value as an experience that “addresses the emotions directly” (p. 74). Certainly John Ruskin’s (1849/1849) emotional diatribes had a phenomenological quality to them, as did many writers up until the turn of the twentieth century when positivism subsumed historiography, and with it, historic preservation.

The personal experience of being in a particular environment, historic or otherwise, “begins with lived experience, being there, in the world” (Tilley & Bennett, 2004, p. 29). This phenomenological approach, based on Merleau-Ponty’s (1962) work, presents “a way of thinking through the body in its participatory reaction with the world” in order to understand the essence of sense of place (ibid.). The experience of place therefore rests on the phenomenological primacy of the “relation of body to world” (Dovey, 1999, p. 39). If we accept that the experience of place is fundamentally a phenomenological experience, then we can expect that the fundamental basis of historical authenticity is also a phenomenological one. Other forms of authenticity—fabric-based and constructed—must
therefore rest on this phenomenological platform. Phenomenology, as Husserl (1962/1931) noted long ago, is a “science of beginnings” (p. 20).

**Age value:** Riegl (1996/1903) originated the term and subjective qualities of age value in his seminal essay. Age value is covered in detail in Chapter 2, section 2.2.2 and is a valid argument for National Register of Historic Places nominations through the “feeling” and “association” components of the integrity of building fabric. The guidelines are quite clear, however, in stating that the “retention [of feeling and association] alone is never sufficient to support eligibility of a property for the National Register” (original emphasis) (National Park Service, 1997a, p. 45). In a similar sense, World Heritage properties have the criterion of “spirit and feeling” of place which can be used to relate to age value and place attachment as well (UNESCO, 2008). As with “feeling” and “association” for National Register properties, “spirit and feeling” plays a relatively minor role in defining the significance of World Heritage properties, however.

**Newness value:** Riegl (1996/1903) discussed this value in diametric opposition to age value. With age comes “the disintegrating effect of natural forces,” while newness value allows for the complete expression of “form and color” (p. 80). Newness value is compatible with unity and original design intent while age value impairs the ability of these messages to be read as intended (Brandi, 1996a/1953).

**Spatial value:** This term is derived from landscape architect Randy Hester’s (1985) work in community-influenced landscape design in which he links “unconscious attachment to place” (p. 11) with the valuation of spatial elements of landscape. Spatial value, while associated with aesthetics, is more effective in communicating its phenomenological relationship with place attachment. Within the preservation community, there are a number of authors who discuss aesthetics within a phenomenological frame. Lipe (1984) defines aesthetic value as the “forms, textures, and qualities of cultural materials [that] are more intrinsically appealing to the observer's aesthetic sense than are others” (p. 7). The Burra Charter (Australia ICOMOS, 1999) defines this value as based on “sensory perception”
while English Heritage (English Heritage, 1997) uses the term “sensory stimulation.” Worthing and Bond (2008) relate aesthetics to “character and what makes a ‘sense of place’” (p. 63). All of these definitions clearly exhibit a phenomenological basis although preservation authors tend to erroneously associate aesthetic value with sociocultural values. Surely environmental phenomena that directly impact “sensory perception” through a highly personal experience do not belong in a social or cultural domain. Where spatial values do aggregate at the community level, they acquire symbolic value. Also see Chapter 2, section 2.3.1 for a spatial value analysis of landscape elements.

**Attachment value:** Feilden (1994) refers to this value as “emotional values” in reference to feelings of “wonder,” “identity,” and “continuity” that one feels for certain historic environments (p. 6). World Heritage properties can use the criterion of “spirit and feeling” of place to describe the relationship between age value and spirit of place/place attachment; no specific guidance, however, is offered on how one should accomplish this assessment (UNESCO, 2008). While there is a widespread belief that the first reaction to a building or a landscape is emotional (Frank & Petersen, 2002, p. 90; Carr, 2005, p. 173), historic preservation doctrine forbids a consideration of emotional connections to place in context with significance (Alanen & Melnick, 2000, p. 17).

In historic preservation literature, sense of place and especially place attachment are rarely discussed (Dolores Hayden (1995) is an important exception). While the cultural dimensions of place attachment have been empirically addressed, chiefly by Setha Low (1992) and Lisa Breglia (2006), there is little or no empirical research on the relationship between historical significance and phenomenologically-based place attachment. (Geographers, for instance, have chosen to focus their attention elsewhere.) With so strong an emphasis on objectivity and authenticity of fabric, there is little opportunity for discussion on the importance or need for a phenomenologically based construct of authenticity.
1.2.4 Research problem example: An analysis of the expert, objective values of the National Register

The most widely-utilized preservation doctrine in the United States is the National Park Service guidelines for listing a building in the National Register of Historic Places. The National Register process is used at the federal, state, and local levels to determine if a building is or is not historically significant. As with most preservation doctrine, it relies almost exclusively on expert, objective values. As such, the National Register is so poorly suited to assessing the everyday values of people that Thomas King (2003), a highly regarded cultural resource management practitioner and author, advises against preparing National Register nominations at all for traditional cultural properties. Preparing a nomination may actually result in harm to these places through the inevitable rejection of the nomination by the state historic preservation office, which then allows the federal intervention to proceed unabated.

The National Historic Preservation Act of 1966 required that all federal agencies had to consider and mitigate, where possible, impacts of their actions upon historic properties. The problem, however, was that there was no way to officially determine which properties were “historic.” As a result, congress authorized the creation of the National Register of Historic Places in the Department of the Interior, but did not provide any specific guidance as to a method for differentiating significant buildings from non-significant ones (Rogers, 1987, p. 92). The creation of this method was left to a single individual in the National Park Service: William Murtagh, the first “keeper” of the National Register (p. 94). Murtagh defined historical significance through four criteria: a) association with historical events, b) association with a person or persons, c) architectural style, and d) informational—typically archaeological—value. Significance then had to be “communicated” through seven kinds of historical integrity. Murtagh (1997) explains that it was essential to privilege the “extremely important,” objective values of experts over the subjective values of the public (p. 73) for the National Register process.
Over the years, the directions provided by the National Park Service for preparing a National Register Nomination have expanded upon Murtagh’s original creation, but the way in which historical significance and integrity are defined have remained fundamentally unchanged since the early 1970s. Moreover, the historical positivism required in researching the past to establish historical significance has also remained stagnant.

While the National Register evaluation process for historical significance was only intended to address situations in which federal interventions occur,9 since its inception in the late 1960s, state and local government have readily adopted these guidelines—indeoendent of any federal pressure or requirement to do so—in order to define historical significance, such as with local historic districts and landmarks. Undergraduate and graduate historic preservation programs also teach their students how to evaluate historical significance using the National Register criteria, as they have since the first such program came into existence in 1973 at Columbia University (Tomlan, 1994, p. 189). The result is that the *de facto* measure of historical significance in both preservation practice and research within the United States is defined solely by the National Register process. Ultimately, the decision of whether a particular activity is considered to fall under the rubric of “historic preservation” depends on whether or not the property or landscape under consideration is eligible for or listed in the National Register of Historic Places.

Murtagh developed the National Register evaluation process in an era of historical positivism where stakeholders’ values simply did not factor into the system. Participatory planning, charettes, and pluralistic ideas were still many years away. It is, naturally, a product of its time and as such favors expert, objective values. It is for this reason that the National Register has been chosen as an example that epitomizes the problem area for this research.

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9. Examples of these federal interventions include situations where a federal permit is required, a federal agency initiates construction work, or where a private individual wishes to use the federal historic preservation tax credit.
According to the National Register, historical significance is defined by the association of a property with historical events, important people from the past, design characteristics, or informational value (National Park Service, 1997a, p. 2). Table 1.1 summarizes the values associated with these criteria. The method used to justify significance is a process of “gathering the facts” from the past (National Park Service, 1997b, p. 4) that only relate to broad patterns of history. There is no room for pluralist ideas of value within this context or the possibility, as espoused by Foucault (2003/1975, p. 69), that history can result from the action of obscure individuals en masse. Instead, this positivist framework demands binary definitions of reality and a narrow view of the past consisting only of the actions of “great” men and women averaged into dominant themes that lack important nuances of meaning. The process is akin to approaching historical research with a hammer: importance is defined by the fragments of the past that remain after a blunt methodological impact.

### Table 1.1: Objective/expert values associated with historical significance in the National Register

<table>
<thead>
<tr>
<th>National Register criteria</th>
<th>Associated value</th>
<th>Basic method</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: “Association with historic events or activities.”</td>
<td>Historical positivism value</td>
<td>“Gathering facts” about broad patterns of history</td>
</tr>
<tr>
<td>B: “Association with important persons.”</td>
<td>Historical positivism value</td>
<td>“Gathering facts” about broad patterns of history</td>
</tr>
<tr>
<td>C: “Distinctive design or physical characteristics.”</td>
<td>Artistic/design value</td>
<td>“Gathering facts” about the physical characteristics of the property</td>
</tr>
<tr>
<td>D: “Potential to provide important information about prehistory or history.”</td>
<td>Informational value</td>
<td>“Gathering facts” about the physical characteristics of the property</td>
</tr>
</tbody>
</table>

Related to historical significance is the parallel concept of historical integrity, which is “the ability of a property to convey its significance” (National Park Service, 1997a, p. 44). Integrity is entirely dependent on the presence of building or landscape fabric from certain period in the past, otherwise known as the “period of significance” (National Park Service, 1997b, p. 42).13 This situation is

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11. See section 1.2.2.
13. When defining historical significance, the significance must be framed within a “period of significance,” which could simply be the construction date of a building or the entire history of a site up until 50 years ago.
why reconstructed buildings fail to have historical significance—there is no building fabric from the past left to convey any historical significance, at least in the Ruskinian sense of authenticity. To attempt to fabricate building fabric that has the appearance of authentic fabric from the past is tantamount to a “lie” which presents a “false sense of history” through the use of “conjectural features or features from other buildings” (Weeks & Jandl, 1996, p. 19). As with historical significance, integrity is associated with expert/objective values, but not in totality (see Table 1.2). Of the seven criteria for integrity, the last two—feeling and association—are not objective at all; these are in fact related to phenomenological authenticity and age value. The reader may therefore think that the supposed reliance on expert/objective values of the National Register is not as complete as was originally posited, but this is misleading. The acceptance of phenomenological authenticity in the National Register process is incomplete; the National Park Service treats these last two criteria separately from the others with the caveat that “because feeling and association depend on individual perceptions, their retention alone is never sufficient to support eligibility of a property for the National Register” (National Park Service, 1997a, p. 45). In practice, integrity of feeling and association is deprecated in National Register nominations, with most state historic preservation offices actively discouraging such emotional, subjective terminology in “professional” work.
The National Register nomination, while a useful tool for its time, utterly fails to acknowledge sociocultural values and largely ignores most phenomenological values. Ultimately, the National Register process has never been able to accurately and holistically assess historical significance and without major modifications will continue to miss the mark. Surely, in the nearly forty years since the inception of the National Register criteria, there are better methodological tools with which to assess historical significance in a way that accommodates a broad range of sociocultural and phenomenological values along with the existing objective/expert values.

1.3 Significance and purpose of study

In the 150 years since John Ruskin wrote about the “deep sense of voicefulness” (1989/1849, p. 186) of old buildings, little or no research has attempted to define the experiential construct of age value. Or reframed in the context of attachment—a concept that deals with the cognitive and affective bonds between people and places—why do people feel a different quality and degree of place attach-

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15. See section 1.2.2.
ment to new versus old places? The answer to this question is fundamental to why we practice hist-
origic preservation, yet it has not been adequately addressed. As Yi-Fu Tuan (1977) observed thirty
years ago, “the concept ‘antique’ is modern, as is the idea that old furniture and buildings have a spe-
cial value bestowed by time and that they should be preserved” (p. 193). What we still fail to under-
stand is the fundamental essence of this “special value” in relation to the age of things—including
landscape.

Therefore this study is an attempt to understand age value—or, put in another sense, how the
experience of the physical age of urban cultural landscapes leads to the valuation and subsequent at-
tachment to these kinds of places. Over a century ago, Alois Riegl (1996/1903), a well-known Austri-
an art historian, defined “age value” in a dichotomous relationship with what he termed “historical
value”: “historical value ... rests on a scientific basis and therefore can only be achieved through intel-
lectual reflection,” but age value “addresses the emotions directly” through an “imperfection, a lack
of completeness, a tendency to dissolve shape and color” (p. 74). Reflecting on Reigl’s 1903 essay,
Kurt Forster (1982) explains the essential nature of how age creates the historical monument (and by
extension imbues landscape with age value): “The index of time was precisely what marked an old ar-
tifact or building as a historic monument. Restore the object thoroughly and you cancelled both its
documentary value—making it an unreliable witness to the time of its origin—and its capacity to con-
voy a sense of historical distance, of the time elapsed since its creation. It was this evocative distance,
arising from the ravages of time, which constituted the historical depth of old objects” (p. 9). Age val-
ue is different from historical value in that the former is related to the subjective, phenomenological
experience of place while the latter tries to achieve as objective of an account of a “truthful” history
as possible through the rigorous exclusion of “false” information. In simpler terms, age value is relat-
ed to how everyday people experience aged places while historical value is derived from objective
facts that are assumed to be universal among humanity without care or concern about personal, affec-
tive experiences. Thus, in the discussion of age value, we come full-circle to the fundamental problem
of the positivistic or objective trace of historic preservation, which is represented by historical value, and the subjective trace, which is represented by age value. This study seeks to explicate the phenomenological dimension of the subjective trace.

1.4 Description and context of research questions

1.4.1 Primary and secondary research questions

Based on the identified research problem, this study is designed to investigate the subjective experience of age value in urban, residential cultural landscapes. Moreover, the focus is on residents’ emotional attachment to their neighborhoods. A residential context was chosen because “without exception, the home is considered to be the ‘place’ of greatest personal significance in one’s life” and place attachment is greatest in this kind of environment as opposed to commercial or business contexts (Proshansky, Fabian & Kaminoff, 1995, p. 90). In addition, neo-traditional design (see below) is far more common in residential building than in other types of construction and is easy to find in many new urbanist developments. The research question for this study, therefore, is:

How does the age of traditionally designed, urban residential environments affect the degree and character of place attachment for residents?

The reader may observe that this question is rather broad and difficult to directly answer. In order to answer this primary question, three supplementary questions that address the physical elements of the environment, perception of physical age, and the experience of spontaneous fantasy were used to answer the primary question. These questions are as follows:
(1) What physical characteristics of this place positively and negatively affect attachment?

(2) How is attachment influenced by the age of this place?

(3) How does the experience of spontaneous fantasy influence place attachment?

This research is predicated on a pseudo-mathematical operation to “subtract” a “new” environment from an “old” one. Qualitative and quantitative data that fail to be congruent across the two environments will thus reveal the phenomenological basis of age value. The types of differences are framed in what the philosopher Derrida (1982) refers to as différance—a concept that not only means difference, but includes a temporal component to how these differences manifest in a critical context of multiple meanings. This is an important idea in the post-modern dimension of culture: there is never a moment when one can say the meaning is complete because these differences change over time. Therefore the meaning is slightly different at each “re-reading” of the phenomenological experience. Différance refers to the impact of time and space on meaning and how the meaning of something is always referent upon another thing. Figure 1.1 shows how the secondary research questions relate to différance.

![Figure 1.2: The use of différance to elucidate age value.](image)

1.4.2 The “new” versus the “old” residential environment

For the purposes of this study, a “new” residential environment contains buildings that have all been built in the past fifteen years or later. An “old” residential environment is essentially synony-
mous with what is commonly known as an “historic” district—a place that has buildings with sufficient historical significance and historical integrity to qualify it for listing on the National Register of Historic Places (and therefore must normally be aged fifty years or older). The new and old residential environments have been purposely selected to reflect extremely similar urban design practices that were common in the early- to late-nineteenth century in Charleston, South Carolina: dense, eclectic collections of detached homes in a variety of styles from Georgian to Queen Anne with small yards and many secluded spaces.

1.4.3 Traditional versus modern design

According to Salingaros (2006), there are only two kinds of design: “traditional” and “modern.” Therefore, the simplest definition is that traditional design is that which is not modern. For Salingaros, modern design differentiates itself from traditional design in that the former fails to adhere to the “three laws of structural order.” Unlike colloquial definitions, these two design paradigms have “nothing to do with the age or historical context of the buildings” (p. 40). Traditional design can therefore also be contemporary; there is no temporal component to its practice.

Salingaros’ three laws of structural order are:

Law 1: Order on the smallest scale is established by paired contrasting elements, existing in a balanced visual tension;

Law 2. Large-scale order occurs when every element relates to every other element at a distance in a way that reduces entropy;

Law 3: The small scale is connected to the large scale through a linked hierarchy of intermediate scales with a scaling ratio approximately equal to \( e \approx 2.7 \). (p. 30)

These three laws are based on Alexander's work on *The Nature of Order* (2002a, 2002b, 2004, 2005) which emphasizes design that mirrors organic, biological systems and whose reception is intuitive. The \( e \) in the equation of Law 3 refers to the constant used for the base of natural logarithms (Salingaros, 2006, p. 30). The first law emphasizes balance where elements exist on buildings as a means to an end to achieve this balance. The second law describes ornamentation and form which
may be complex, but does not dissolve into chaos. The third law describes a kind of unfoldingness where ornamentation smoothly blends into different scales of perception. In summary these laws emphasize compatibility, order, and relationships.

For Salingaros, traditional architecture “is successful in connecting to human beings” because it is designed for people and not machines; it is human-centric (pp. 42, 44, 240). Traditional architecture’s “small-scale structural order” (p. 42), otherwise known as ornament, is uniquely adapted to human psychology and mirrors the patterns in the mind. Traditional designers “were extremely sensitive to the need of appealing to and satisfying human psychological responses” (p. 86), an important factor that is deprecated in modern architecture with its emphasis on function and economic return. Therefore the intent of traditional design is to satisfy the masses where modern design satisfies the few—chiefly the designer and his or her sponsor.

Léon Krier (1998), a contemporary traditional designer, has written extensively on the nature of traditional design and traditional architecture. In his definition, traditional design emphasizes “long-term use” and continuity while the goal of modern design is to emphasize the intemperate and eulogize mass consumption (p. 39). With traditionally-designed buildings, the use and purpose of a building is clear to most people; in other words it is the use which “clearly distinguishes between public and/or sacred buildings … and utilitarian and/or private buildings” (p. 31). (Krier is not unique in this assertion, Lynch (2007/1960) refers to this concept as “legibility”). Thus, traditionally-designed buildings have increased meaning and “symbolic richness” (Krier, Porphyrios, Economakis & Watkin, 1992, p. 25) through “typological, morphological, and tectonic depth” whereas modern buildings have “surface depth” (Krier, 1998, p. 36), or in another sense are superficial.

While this analysis of traditional versus modern design has emphasized the visual, traditional design can also be defined through cultural processes. Tradition, in this context, refers to the handing down of ideas from one generation to the next where an apprentice learns from a master. Thus, change does happen—unlike the pejorative, stereotypical concept of fixed traditional design—but
over a longer period of time in an evolutionary and not revolutionary sense (Davis, 1999, p. 17). Traditional design has “relative stability over time and its repetitive nature in a particular place,” but perhaps most importantly it has “the ability to change when necessary” (p. 131). Modern design, on the other hand, emphasizes novelty, differentiation, genius and setting one’s design apart from others. It seeks a rupture with continuity rather than harmony.

1.5 Definition of terms

_Age value:_ Originally defined by Alois Riegl in 1903, age value describes the net effect of being immersed in a place that contains visual cues that indicate physical age through the appearance of patina (see patina). It is a deeply personal, phenomenological experience that may have no rational basis in an objective history of a place and which leads to place attachment. Age value is only associated with places that are perceived as authentically old by the viewer. All variety of urban landscapes can have age value, including places that are perceived to be unsafe or ordinary. Such ordinary urban landscapes are the domain for the sociocultural phenomenon of “urban exploration”—people who risk injury and criminal prosecution so that they can be in places with high levels of age value. See: Bonnes and Secchiaroli (1995), DeLyser (1999), Dickinson (2001), Elliott (2002), Ginsberg (2004), Lowenthal (1985), Riegl (1996/1903), Riley (1992), Tuan (1977), Vergara (1999).

_Experiential value:_ A qualitative assessment that is derived from the experience of being in certain places; it is based on a phenomenological principles.

_Fabric:_ The physical materials from which a building or landscape are constructed.

_Historical integrity:_ An assessment of the degree to which buildings and landscapes retain original fabric or fabric related to pre-defined, significant periods of time. See: National Park Service (1997).
Historical value: An objective attempt at communicating the importance of an aged place based on attaining as “truthful” a history as possible. In this sense, historical value is related to “information” value. It is based on the supposed acquisition of “facts” before interpretation. (Postmodern theory rejects the idea that facts can come before interpretation and instead emphasizes that all “facts” are in some sense interpretations.)

New place: A place that contains buildings that have all been built in the past fifteen years or more recently and reflect traditional urban design practices that were common in the early- to late-nineteenth century in Charleston, South Carolina: dense, eclectic collections of detached homes in a variety of styles from Federal to Queen Anne with small yards and many secluded spaces.

New urbanism: An urban design movement begun in the 1980s by planning and design professionals interested in promoting denser, more pedestrian-friendly development with mixed used based on empirical design evidence from the past.

Old place: Equivalent to an urban residential historic district that reflects traditional urban design practices that were common in the early- to late-nineteenth century in Charleston, South Carolina: dense, eclectic collections of detached homes in a variety of styles from Federal to Queen Anne with small yards and many secluded spaces.

Patina: The physical change that comes with age that affects the surface quality of discrete objects in the environment are the pre-requisite conditions for the formation of patina; such changes can take the form of a bubbled, cracked, or otherwise degraded surface conditions including the appearance of low- and higher-order plants and was referred to by John Ruskin (1989/1849) as “the golden stain of time.” Humans can also create patina through the process known as “patination.” The difference between decay (negatively perceived changes through nature) or a forgery (an attempt at artifice through patination) and patina (a positive connotation) are within the domain of the critical act of interpretation. Patina can obscure design intent, or the

Premeditated fantasy: A rationally designed, planned story about the past requiring careful thought and deliberation as opposed to spontaneous fantasy (refer to the definition of spontaneous fantasy). Examples of premeditated fantasies include day dreams and purposively directed story-telling based on high-order cognitive reflection under the direct control of the individual creating the fantasy.

Preservation doctrine: The philosophical body of knowledge used by the historic preservation discipline to define historical significance and appropriate and inappropriate interventions to building and landscape fabric. Representative examples include the nineteenth century arguments of John Ruskin and Eugène Viollet-le-Duc and the Society for the Protection of Ancient Buildings Manifesto (1996/1877), international conservation documents such as the Athens Charter (Congress in Athens, 1931) and the Venice Charter (ICOMOS, 1964), and the Secretary of the Interior’s Standards for Rehabilitation (Morton & Hume, 1979; concept dates to 1976). Other, less well-known doctrines include the Burra Charter (Australia ICOMOS, 1999; originally created in 1979), the Florence Charter (ICOMOS, 1982; addresses historic gardens), and the Nara Document on Authenticity (ICOMOS, 1994). For an in depth analysis of international conservation doctrine see Wells (2007).

Reading the layers of age: The process by which an individual notices something temporally out of context in an environment and deduces a history that may have lead up to the contemporary appearance.

17. Also see: http://www.spab.org.uk/html/what-is-spab/the-manifesto/

Spontaneous fantasy: The involuntary, spontaneous, creative act of making stories about the past that are catalyzed by the appearance of patina in an environment (see patina). Instead of creating an accurate, objective story of the past, spontaneous fantasy involves the creation of memories and meanings that likely never previously existed. Therefore spontaneous fantasy is not related to rational thought processes. (The rationally-derived fantasy is the premeditated fantasy; refer to the definition of premeditated fantasy.) Spontaneous fantasy is essentially equivalent to the “vicarious experience” described by Riley (1997). Derrida (1982) discusses elements of spontaneous fantasy when describing “a ‘past’ that has never been present, and which never will be, whose future to come will never be a production or a reproduction in the form of presence” (p. 21). See: Burns (2004), DeLyser (1999), Edensor (2005), Elliott (2002), Harrison (2004), Lukacs (1994/1968), Neuman (2002), Riley (1997), Ruggles (2000).

Sociocultural value: Subjective values about the built environment that are based on social and/or cultural contexts.

Townscape: A synonym for urban landscape or urban cultural landscape.

Traditional design: Design of buildings and landscapes from evolutionary principles based on historical precedent with an emphasis on sustainability and permanence as opposed to modern design which emphasizes impermanence, revolutionary change, and a rupture with precedence. In traditional design ornamentation and form serve the functions of creating harmony and en-

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\(^{18}\) The preservation tax credit program’s current implementation is officially recorded in the Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47).
suring compatibility within the designed object as well as its context through increased meaning, symbolic depth, and legibility. Design precedents are to be found in natural forms and natural algorithms, such as fractal orders. The objective of traditional design is to benefit the whole of humanity and not just a few individuals involved in the production and use of specific built environments. See: Alexander (2002a, 2002b, 2004, 2005), Krier (1998), Lynch (1960/2007), Salingaros (2006).

**Unseen effort:** All changes to landscapes require some degree of human effort, but most of the time we do not see these interventions as they occur. Thus, landscape is filled with evidence of past human effort, but such exertions remain unseen. We know these changes have occurred through extant visual evidence and the human effort behind these modifications are therefore implied. High levels of unseen effort are associated with places that show people care about and for their environment—these places speak of safety and comfort. Therefore, unseen effort is only associated with changes that have occurred fairly recently and not in the distant past; it is also associated only with dynamic, bounded, small-scale parts of landscapes, such as gardens, that have actively growing plant material. See: Hagerhall (2000), Imam and Motloch (1997), Lay and Reis (1994), Nassauer (1995).

**1.6 Assumptions**

This study makes a number of important assumptions, namely that residents of urban neighborhoods are positively attached to their environments and that the nature of this attachment is influenced by the physical characteristics of their neighborhood. It is also assumed that the degree and character of this attachment will vary based on the age of the neighborhood and whether or not the neighborhood is urban or suburban in nature.
1.7 Organization of the study

This study is organized in the traditional sequence of literature review, methods, data presentation, discussion, and conclusion. This does not, however, necessarily represent the order in which these sections were completed. In this mixed-methodological study, a phenomenology provided the core meanings to inform the literature review and the development of a theoretical framework. Therefore, the phenomenology not only informed the next sequence in the mixed-methodology, it also informed the literature review.

Chapter 2 discusses the two essential foundations for this study: place attachment and age value. Using the results of the phenomenology, this foundation is built upon using additional aspects of the environment including landscape elements, perception and reading of physical age in the environment, and the experience of spontaneous fantasy. Chapter 3 justifies the similarity of the two cases used for this study—historic Charleston and I’On—through a morphological and design analysis. The methodologies and methods used for the study are then presented in Chapter 4 along with the unit of analysis, variables, and descriptions of the samples employed. The results of the qualitative portion of the study is revealed in Chapter 5 while the quantitative results are discussed in Chapter 6. The qualitative and quantitative data are then integrated and compared in Chapter 7. The last chapter, Chapter 8, takes the interpreted results of the data and relates them to historic preservation and urban design practice and suggests future research directions.

1.8 Summary

A major problem with historic preservation research and practice is that it seeks to reaffirm predetermined outcomes; these outcomes are invariably based on objective, expert opinion and fail to address the kinds of subjective values experienced by everyday people. Of these subjective values, the phenomenological experience of being in places may be the most important as it serves as the foundation for the construction of group meanings at the level of culture and social structures. Unfor-
Unfortunately, very little research has been performed to discover and refine our understanding of sociocultural values and especially phenomenological values of the historic environment.

In order to address this knowledge deficit, this study seeks to understand the phenomenological construct of age value through the following research questions:

Primary research question: How does the age of traditionally designed, urban residential environments affect the degree and character of place attachment for residents?

Secondary research questions:

(1) What physical characteristics of this place positively and negatively affect attachment?

(2) How is attachment influenced by the age of this place?

(3) How does the experience of spontaneous fantasy influence place attachment?

These research questions are predicated on an understanding of what a “new” and “old” neighborhood is like that exhibits “traditional design.” A new neighborhood is one that was construction in the past fifteen years while and old neighborhood is essentially synonymous with areas that are at least fifty years of age and are officially recognized as “historic” places using the criteria supplied in the National Register of Historic Places nomination process.
CHAPTER TWO
THEORETICAL FRAMEWORK

2.1 Introduction

The theoretical framework for this study consists of an \textit{a priori} component based on place attachment and age value theory and an \textit{a posteriori} component informed by a qualitative study (see chapter 5). Both theoretical frameworks were used to develop the final quantitative portion of this study (see Chapter 6). This approach breaks with the tradition of a complete theoretical framework preceding all data collection as with purely quantitative research designs. In the sequential mixed-methodological research design employed for this study (see Chapter 4), a phenomenology provided meanings for the theoretical framework that was used to develop a quantitative survey instrument.

Munhall and Chenail (2008) describe the importance of this “atheoretical” approach to phenomenological research and specifically warn that “if you study the theory before collecting data, it could influence your perceptions and interpretations” (p. 9). It is only in the data analysis phase of a phenomenology that the theoretical framework comes into play (pp. 7-10). Therefore, the initial theoretical framework based on place attachment and “age value” theory serves as the foundation for the complete study, while the additional theoretical components informed by the qualitative study are treated separately.

Place attachment serves as a logical foundation for this study because it is an “integrating concept” under which disparate phenomena in the built environment can be organized into a reasoned whole (Low & Altman, 1992, p. 8). This characteristic coupled with its focus on the subjective, emotional valuation of place are the primary reasons why place attachment provides a theoretical foundation for this study. In addition, any discussion of historic preservation would be incomplete without
addressing the importance that the physical age of a place plays in the valuation of particular environments. Although “age value” is a very old concept, its characteristics are more complicated and nuanced than may appear at first glance. Thus age value joins place attachment as dual theoretical foundations for this study.

Additional areas that informed the theoretical framework for this study arose from meanings that informants shared from the phenomenological study, which are discussed in detail in Chapter 5. Topically, these areas constitute fantasy, individual elements of the landscape, the idea of “unseen effort,” the perception of the age of an environment, and reading landscapes. Thematically, these concepts are related in that they represent the affective interaction between the elements of a cultural landscape and people and, as such, relate back to place attachment. The quantitative specifics of this relationship are explored in Chapter 6.

### 2.2 Foundational theoretical framework

#### 2.2.1 Place attachment

Place attachment is a complex phenomena generated from the experience of being in a particular environment; it is a study of how place affects perception and cognition, creates emotional feeling, and how cultural, social, phenomenological, and biological factors mediate the person/place interaction. In its essential form, the study of place attachment is the analysis of the feelings one has for particular environments. The challenge, however, is in understanding the highly subjective nature of these feelings and hence, the various dimensions of place attachment. Both quantitative and qualitative approaches have been used to understand place attachment with the qualitative tradition predominating with some important exceptions, such as in environmental psychology and outdoor recreation.


2.2.1.1 Sense of place and place attachment

“Sense of place” (and its associated term, “spirit of place”) and place attachment are often used interchangeably, but while these two concepts have much in common, they are not equivalent. In its most basic form, sense of place is a general, holistic, qualitative assessment of the affective capacity of an environment while place attachment attempts to provide discrete dimensions of meaning, typically in a measurable or quantifiable manner. Sense of place rests on a phenomenological experience, which is why humanistic geographers typically discuss sense of place and not place attachment. Environmental psychologists, on the other hand, almost always refer to the person/place interaction as place attachment and invariably choose to measure the discrete character and degree of this attachment rather than describe the experience in holistic terms. Both sense of place and place attachment, however, are looking at the same, core principle: the affective experience of a human being immersed in particular environments or the intersection between humans and the physical environment.

A parallel concept to sense of place is genius loci which literally means “spirit of place.”

*Genius loci* is a very old concept, going back to the Romans where it “stood for the independent reality of place [and] above all, it symbolized the place’s generative energy, and it pictured a specific, personal, spiritual presence who animated and protected a place” (Walter, 1988, p. 15). It is a concept that is traditionally defined in terms of art, beauty, and poetry, such as Vernon Lee (1908) reveals in an ode to place:

> The Genius Loci, like all worthy divinities, is of the substance of our heart and mind, a spiritual reality. And as for visible embodiment, why that is the place itself, or the country; and the features and speech are the lie of the land, pitch of the streets, sound of bells or of weirs; above all, perhaps, that strangely impressive combination, noted by Virgil, of “rivers washing round old city walls.” (p. 5)

Lee goes on to compare the feelings we have for places to the feeling we have for friends, attributing the emotion of love to favorite places (p. 6). This more literal and oldest concept of *genius loci* is closely linked with panpsychism—an ancient belief that a place is “inhabited by gods/goddesses, spirits, fairies, etc. and that these are beings who live in this place and not elsewhere” (Brook, 2000, p.
Panpsychism, however, is not dead, but lives on even in our modern world through various associations of particular spirits with certain environments. Edward Relph (1993) discusses this aspect of place in describing the difficulty that designers have in creating so-called haunted houses as well as the impossibility of being able to literally put a “spirit” into a place at will:

A self-consciously designed haunted house can never be more than a fairground mockup, and architects have neither the skill nor the right to create ghosts. ... Moreover, while it is safe to assume that most individual buildings are not possessed by ghosts, it is a defining characteristic of any worthwhile place that it have its own spirit—its own genius loci. In this sense, all places are sacred, and it is most unlikely that they can be designed using the same techniques as those employed for single buildings. Indeed, how can mere mortals dare to design places, for is such an effort not to try and make gods and spirits? If religion has any meaning at all, the very idea of making genius loci borders on sacrilege. (p. 26)

Relph clearly acknowledges that a place can have something attributed to it that cannot be fabricated, much less clearly identified; moreover, this essence—regardless of what it is called, spirit or otherwise—cannot directly be measured. We can only indirectly observe the effects of spirit of place on individuals. Whether the idea of a “spirit of place” is literal or figurative, it is undeniable that in the popular imagination, some old houses and places are “haunted” and contain various specters, phantasm, and ghosts, especially if such places are associated with violent death. Whether such feelings lead to a greater attachment to place is an entirely open question, but certainly an intriguing one.

In the twentieth century, architects and especially landscape and urban designers subsumed genius loci, but in a more pragmatic sense of the phenomenological experience of place, rather than literally believing that places are filled with spirit entities. Representative examples include Cullen’s (1961) seminal work on townscapes and Christian Norberg-Schulz’s (1980) study on architectural phenomenology. For Norberg-Schulz (1980), genius loci is the phenomenological experience of being in an architectonic place. Robert Thayer (2003) further elaborates on this experience as an “immersion in bioregional culture and attachment to a naturally defined region [which offers] a deepened sense of personal meaning, belonging, and fulfillment in life” (p. 71). For Simon Bell (2004), genius

1. It is curious that Relph does not altogether exclude the possibility of “ghosts” existing in association with certain places.
*loci* is strongly associated with places that have a sense of both uniqueness and mystery (p. 104). This latter definition fits well with the original idea of a literal spirit being in a place; certainly such an entity, if it were to actually exist, would indeed be quite unique and mysterious because it is fundamentally unknowable.

Christopher Alexander’s (1979) work epitomizes the contemporary struggle to understand the *genius loci* of organic, neotraditional town planning in comparison to the modernist, rationally-derived design paradigms of the twentieth century. He describes how ancient towns have a unique “quality without a name” (pp. 19-40) that can instill a “morphological feeling, a swirling intuition” (p. 263) in people. In order to create new places that can give us this valuable feeling, Alexander et al. (1987) introduce a theory for how to give new places the same quality of “organicness” found in very old towns through a process of continually improving existing design over a very long period of time. These improvements are empirically based on both precedent and stakeholder values and in doing so, deprecate the singular genius of the designer. The focus, therefore, shifts from perfection found in a single moment of time (i.e., when the designer’s vision is realized) to perfection through an unending process. Ultimately, the success of the project is gauged against the emotive experience instilled by the place undergoing treatment.

2.2.1.2 *Disciplinary basis for place attachment*

Place attachment draws on a multiple of disciplines for its knowledge; these areas include anthropology, architecture, recreation, family and consumer studies, folklore, gerontology, landscape architecture, marketing, psychology, social ecology, sociology, and urban planning (Low & Altman, 1992, p. 1). While geography and environmental psychology are the core bastions of research in place attachment, most other fields that involve the environmental aspects of place address place attachment in some fashion. No single field “owns” place attachment because it is inherently interdisciplinary. According to Riley (1992), “attachment to place is a subject matter, not a discipline” (p. 30).
The origins of place attachment theory can be found in the transcendental phenomenology of Merleau-Ponty (1962, 1963) and in the work of humanistic geographers in the 1970s. Examples of these geographical works that built upon Merleau-Ponty’s phenomenological foundation include Yi-Fu Tuan’s *Topophilia* (1974) and Edward Relph’s *Place and Placelessness* (1976). (Relph (1985) explores some of these early relationships between phenomenology, geography, and sense of place from the perspective of the “geographical experience.”) Environmental psychologists became interested in place in the 1980s, beginning with Stokols and Shumaker’s (1981) investigation of “transactionalism” that exposes the interdependence of the individual in a cross-referential framework within environment. Proshansky et al. (1995) established the concept of place identity as a subset of place attachment which was broadly defined as “a potpourri of memories, conceptions, interpretations, ideas, and related feelings about specific physical settings” (p. 90).

Sociologists have contributed important concepts of attachment predicated on the bond between groups of individuals and place (Stokols & Shumaker, 1981, p. 396), but the most well-developed definitions for place attachment are derived from ethnographic research which positions attachment within the context of culture and personal experience rather than social structures. Setha Low, an anthropologist at the City University of New York, has arguably done the most research in culturally-bound concepts of place attachment since the 1980s. According to Low (1992), individual affections are “embedded in a cultural milieu” that makes place attachment “more than an emotional and cognitive experience, and includes cultural beliefs and practices that link people to place” (p. 165). Place attachment is a “symbolic relationship” that is created when shared cultural meanings are applied to places (Low, 1990, p. 85). It is a complex, interweaving concept of variations of scale, specificity, tangibility; actors and social relationships from individuals, groups, and cultures; and linear/cyclical concepts of time (Low & Altman, 1992, p. 8).

In the 1990s, anthropologists added concepts of ethnography, rapid assessments, and attachment rooted in cultural contexts. Low is also a prominent researcher in this area, contributing ideas on
attachment typologies (1990) and the Rapid Ethnographic Assessment Procedure (REAP) (2002). Other anthropologists investigating the qualitative aspects of place attachment include Breglia’s (2006) ethnographic work on the type and location of the attachment of indigenous peoples in Mexico to local archaeological landscapes. Some geographers, such as Hay (1998), have also integrated cultural research into their place attachment studies, emphasizing that the character and degree of attachment will vary widely depending on cultural and ancestral rootedness in a particular place.

Recent research in the fields related to outdoor recreation, such as parks, recreation, and tourism management, has made important contributions to the quantitative measurement of place dependence and place identity. For instance, Williams and Roggenbuck (1989) made the first attempt at developing a standardized measurement of place attachment which was influenced by Proshansky’s work on place identity. Their study consisted of a survey of 123 college students to identify specific questions that could be correlated with a measure of “resource dependence” or “resource identity.” Several years later, Williams et al. (1995) performed a followup study which reinforced the idea that dependence and identity could be measured separately by survey instruments.

2.2.1.3 Dimensions of place attachment

Attachment is a multidimensional construct that is informed through a multidisciplinary process. Brown and Perkins (1992, p. 281), for instance, provide a list of five essential definitions of place disruptions and attachments: (1) disruptions—a substantial loss in how one relates to the past, present, or future that interrupts continuity; (2) topophilia—humans’ affective bonds to landscape; (3) attachment—social and physical ties to a particular place or series of places; (4) place dependence—the degree to which an individual has an affective bond with a place; and (5) place identity—a cognitive valuation of self in relation to place.

Rootedness and insideness describe a type of attachment that takes place over a long period of time and requires intimate association with a particular place or places. Humanistic geographers, such
as Tuan (1977) and Rowles (1980), have extensively explored these concepts. Sociologists view place attachment in terms of social relationships, networks, and meanings. According to Gerson et al. (1977), “attachment to place refers to individuals’ commitments to their neighborhoods and neighbors” and the “rooting” of social networks (pp. 139, 140), while a more recent study done by Mench (1998) indicates that attachment is related to positive social interactions.

Environmental psychology contributes the concept of place identity, which according to Proshansky et al. (1995), is defined as “a sub-structure of the self-identity of the person consisting of, broadly conceived, cognitions about the physical world in which the individual lives. These cognitions represent memories, ideas, feelings, attitudes, values, preferences, meanings, and conceptions of behavior and experience which relate to the variety and complexity of physical settings that define the day-to-day existence of every human being” (p. 89). Memory embedded as a sequence of environmental experiences creates a cognitive identity based on biological, psychological, social, and cultural requirements. Place identity is closely tied to individual and group or social memory (Hayden, 1995, p. 9) and is expressed through human dialog that moves cognition into the realm of interpersonal conversation. Thus, place identity can be viewed as a social construct removed from the domain of the individual and placed within the larger context of society as a whole (Dixon & Durrheim, 2000, p. 32).

Low’s (1992) typology of attachment is based on the symbolic, cultural linkage of people with place. Place attachment is facilitated through bonds to family, disruptions in the physical character of place, and ideologies. Each of the six typologies described is meant to convey a specific element of ethnographic meaning. Genealogical linkage describes the method through which people attach themselves to land because of a significant history of association, such as a property that has been in the same family for a long period of time. Linkage through loss is created by the absence of a place; the attachment is only acknowledged when the place no longer exists in a significantly unaltered state, such as occurs during a natural disaster or urban redevelopment. Economic linkage involves ties to land through various forms of ownership or inheritance—in other words, responsibilit-
ties for places due to economic factors. Cosmological linkage refers to attachment via a religious or mythological significance inherent in a place. Churches or other sacred places are part of this category as are buildings or spaces designed with a cosmological significance in mind. Linkage through pilgrimage is an explicitly experiential event that causes attachment through a unique religious, spiritual, or sociopolitical level of significance. Traditional pilgrimages of Muslims to Mecca are an example of this kind of linkage where attachment develops even in the absence of ever having visited a specific place. Lastly, narrative linkage is a method whereby stories become ingrained in space. This linkage can occur through the naming of places as well as in origin myths (pp. 166-175).

2.2.1.4 Measurement of place attachment

Some of the best models for the measurement of place attachment can be found in the work of outdoor recreation and parks, recreation, and tourism management. Throughout the 1990s and 2000s, outdoor recreation studies have focused on the quantitative measurement of place attachment, primarily from the two dimensional constructs of dependence and identity, but often incorporating elements of rootedness and general attachment. The earliest work simply tested Williams’ (1989/1995) two-dimensional (i.e., dependence and identity) construct, such as Moore and Graefe’s (1994) study which concluded that place dependence and place identity can be individually measurable. This theme was later revisited by Williams (2003) in which he re-verified his 1995 study’s conclusions, but added that attachment can be measured by as few as four survey questions.

Applications of these measures include Bricker and Kerstetter’s (2000) study that examined whitewater recreationists of the South Fork of the American River and established that high specialization recreationists had higher levels of place identity. Interestingly, they determined that place dependence is not affected by specialization level—whitewater recreationists of all skill levels had a neutral dependence on the river, and thus felt unencumbered to go to other rivers when the need arose. Other studies have built on Williams’ work such as the investigation by Kyle et al. (2003) of
place identity’s relationship to dependence. They found that higher levels of place identity are correlated with a greater willingness of visitors to pay fees for park access, but dependence had no effect on this behavior. Place identity is predicted by “self expression” and “attraction” dimensions of activity. Moreover, place dependence is only predicted through measures of self expression. Hammit et al. (2004) found that the largest predictor of place dependence is the length of exposure to a particular resource; dependence does not seem to impact substitutability as Williams had originally hypothesized in 1989.

It is important to note that all of these studies use the same basic questions developed by Williams in 1989 to measure place dependence and identity. The goal has been to refine the kinds of questions that can be used to establish these measures. Kyle et al. (2005) created a more sophisticated model, which added social bonding. Their study interrelated place identity, place dependence, and social bonding of visitors to the Appalachian Trail by testing three models of place attachment: a) a single factor model where the responses to the twelve survey questions were considered as one dimension; b) first order, three factor correlated model (including all three elements of place attachment); and c) a second-order model—the three first factors loading into a single second-order factor. The results indicated the first order, three factor correlated model best predicted attachment. These results can be interpreted as reinforcement for the idea that place attachment is a complex multidimensional construct.

The work of Williams and Roggenbuck (1989), Williams et al. (1995), and Kyle et al. (2005) are frequently referenced by researchers conducting place attachment measures, especially in regard to creating scales. A recent example is a study by Lewicka (2008) that measured place attachment and place identity in a comparative case study of a Lviv, Ukraine and Wroclaw, Poland. The attachment and identity scales used a 5-point Likert scale derivative of these previous authors’ work in order to come to the study’s conclusion that place identity and attachment is positively correlated with ethnic bias.
2.2.1.5 Photo elicitation and place attachment

Photo elicitation techniques offer a useful way to understand place attachment that obviates the need to be physically present with the informant or respondent in a particular environment. The technique can also result in more reliable data collection. In this technique an informant interprets photographs (often taken by the informant) via an unstructured interview. A recent study used this technique to focus on permanent residents near high-use outdoor recreational areas by Stedman et al. (2004). Forty-five participants were given cameras in two communities near Jasper National Park, Alberta and told to take photos of elements that “most attach them to their communities.” The result exposed a complex relationship between ecological and sociocultural factors in place attachment. The study’s authors indicated that dividing the measure of attachment into either social or natural components was artificial and that “spectacular” local features were in fact irrelevant to some respondents. Moreover, attachment was found to be more strongly related to local features in the community than to natural amenities nearby, even though the local residents frequently engaged in outdoor recreation experiences.

In a quantitative study employing a survey instrument, Walker and Ryan (2008) used photo elicitation in their study of attachment to rural New England landscapes. The photos were included in a survey instrument in which residents rated their attachment to various scenes based on a five-point Likert scale. Of interest is the authors’ conclusion that the survey participants were “rating the photographs for place attachment rather than simply for landscape preference or ‘attractiveness’” (p. 145). The study concluded that place attachment was positively correlated to a desire to protect rural landscapes from development.
2.2.2 Age value

“Age value” is a term that is frequently used in historic preservation to describe how people appreciate the physical age of places as evinced by the way building materials naturally change and degrade over time. Barbara Appelbaum (2007) succinctly indicates that “an object has age value when it is old, it looks old, and we like that it looks old” (p. 104, original author’s emphasis). Moreover, age value is related to authenticity and to the ideal of telling the “truth” about objects because for “[some] objects that are no longer new, the look of newness can be unsettling. ... An unpleasant air of false newness is often caused by overly shiny surfaces, perhaps because of an incongruity between an object’s sign of age and the newness that the shine implies” (p. 109). Alois Riegl (1996/1903) is widely credited for introducing both the term and concept of age value in his seminal work on how the appearance of physical decay in architectural monuments can be an appreciated, if not revered, aspect of objects. While Riegl refers to age value as “imperfection, a lack of completeness, a tendency to dissolve shape and color” and “decay and disintegration” (p. 73), he did not provide specific details or examples as to how this would manifest on a particular monument, leaving it to the reader to provide an interpretation.

2.2.2.1 Age and perception

The human perception of age in the built environment is an essential, albeit complicated and nuanced experience. Age is a physical description of an object’s or an environment’s inevitable decay over time or it can be an emotional response to said decay. More often than not, both of these elements are intertwined where physical perception merges into feelings that result from being in and experiencing a certain place; it can be difficult to locate where description ends and emotion begins.

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2. Plants are sometimes included in the concept of age value as in an ancient live oak tree, but this usage is a very contemporary one. Plants and age value are discussed later in this chapter.
3. Riegl’s 1903 paper is required reading in most historic preservation theory courses around the world and along with John Ruskin, underpins much of rational philosophy of preservation practice.
Therefore the perception of age is in part a phenomenological experience as Jack Elliott (2002) describes where the “physical character and matrices of historical, mythical, and social associations can and do evoke experiences of awe, wonder, beauty, and identity, among others” (p. 54). It is not unreasonable to conclude that John Ruskin (1989/1849), widely considered to be the Godfather of historic preservation, was grasping at the emotional essence of an experiential immersion in a place when he wrote, “For, indeed, the greatest glory of a building is not in its stones, not in its gold. Its glory is in its Age, and in that deep sense of voicefulness, of stern watching, of mysterious sympathy, nay, even of approval or condemnation, which we feel in walls that have long been washed by the passing waves of humanity” (p. 186).

Over a hundred years ago, Alois Riegl (1996/1903) wrote that “historical value ... rests on a scientific basis and therefore can only be achieved through intellectual reflection” whereas age value “addresses the emotions directly” (p. 74). Jukka Jokilehto (1999) indicates that “age value is more comprehensive, associated even with ruins or fragments that would not necessarily have any specific, historic value” (p. 216). Age value is therefore not equivalent to historical value, or the objective assessment of historical facts about a place; the former is directly related to place attachment—a phenomenological, affective bond with place—while the latter requires higher-order analytical thought processes and deliberation to grasp its significance. Thus, historical value rejects the subjective elements of experience and instead concentrates solely on the acquisition of “facts” through an intellectual enterprise.

Humans seem to have an innate ability to assess the age of an environment (Tuan, 1977, p. 125) and can accurately judge the authenticity of a new place from an old place, even if the design of both environments are extremely similar. The degradation of building and landscape materials as well at art-historical changes in taste and design guide one’s perception of age. Authenticity is in part evinced from the presence of a sufficient degree and character of decay in a particular environment; the lack of decay bespeaks of insufficient authenticity. In this sense, old buildings have “history writ-
ten on their faces” and can “proclaim [their] age” (Architectural Review quoted in Lowenthal, 1985, p. 151). Certain places are known specifically for the overt signs of decay and its associated verisimilitude, such as ghost towns where “artifacts are expected to show signs of wear, and it is in large part this antiqued patina that lends a ghost town its authenticity” (DeLyser, 1999, p. 614).

In order to understand age value, it is useful to define the physical manifestation of decay in relation to perception through the use of a scale (see Figure 2.1). On the left side of the scale there is no evidence of decay at all; the materials or landscape appears to be “new.” On the opposite end of the scale is complete dissolution of form to the point where it is impossible to deduce original appearances. Although bricks from a building are used in the example, complete landscapes could also be assessed in a similar way. This device should make clear the relationship between perceived age, decay, authenticity, and complexity. As materials and landscapes age, both undergo a change in perception toward increased authenticity and complexity.

It is important to note that within writings on the physical age of an environment, most authors make little, if any attempt to define the temporal aspect of age in a quantitative fashion; or in another sense, how old does an object or landscape need to be in order to qualify as aged? The question is left open for the reader to judge for himself or herself. The answer, however, may be that it depends on the visual qualities of the place and is related to the possibility that time is “the province of biology—of animal sense perception—not of physics” (Lanza, 2007, p. 22). The assumption on the reader’s part is that these places can be from antiquity or they could be as new as a couple of decades old. The essential criterion is that they must exhibit physical manifestations of decay. Therefore the absolute quantification of the passage of time is not nearly as important as the manifestation of decay in defining the nature of age value.
2.2.2.2 Age, patina, and decay

In 1849, John Ruskin (1989) described building material decay as the “golden stain of time” (p. 187). The idea of a stain is appropriate because “patina” refers to the surface of objects and, in a metaphorical sense, the surface of landscapes. Patina is loaded with meanings of authenticity and value as Bernard Feilden (1994) relates: “Patina is acquired by the materials of an historic building through age, by weathering or oxidation and by use. It is something which cannot be produced artificially, for the artificial aging which forgers and commercial restorers apply will always look false after a short time. … Patina is precious because is can only be acquired by time” (pp. 247, 248). The value associated with patina makes it easy to imbue it with a heightened artistic quality; the brush of
nature improves humankind’s work through the “festoons of ornamentation comprising bubbles, cracks, peelings, emergent mould, random discolourings, and the residues deposited by water” (Edensor, 2005, p. 72).

Figure 2.2: Decay or patina? The answer is subjective and open to interpretation. (Photo by the author.)

Patina is a “good” decay as opposed to “bad” decay. The decision is an interpretive act rooted in personal experience and social mores. Bad decay is referred to as “rust or mildew”; only good decay is referred to as “patina.” The specific kind of material at hand also influences the appellation process. Generally speaking, the passage of time improves the appearance of traditional building materials such as stone, brick, and bronze while modern building materials such as concrete, aluminum, or steel look increasingly ugly over time (Dekkers, 2000, p. 51). Thus, the decision if decay is patina or rust, mildew, or dirt is related to the material at hand and the perspective of the viewer. Ultimately the classification of decay into positive and negative categories is related to personal values; one per-
son’s “damage” is another’s “romantic ruins” and such a determination is ultimately a subjective process (Muñoz Viñas, 2005, p. 104) (see Figure 2.2). Figure 2.3 presents a flow-chart of how this process may occur.

According to Phoebe Weil (1996/1976), the term “patina” first came into use in the seventeenth century to describe a dark surface finish “which time causes to appear on paintings, that can occasionally be flattering to them” (pp. 398-399). The application of this finish is known as “patination”—the same term often applied to the antiquing process of certain metals. Only humans engage in patination while nature simply creates a patina (i.e., patination is the exclusive domain of people, not nature). The contemporary use of patina has much larger and important connotations that expand beyond paintings and sculpture to entire buildings and even landscapes. The architectural and art conservator Paul Philippot (1996) defines patina as the “relationship between the original state and the present state of the original materials” of an historical object (p. 373). This relationship is not simply a physical description, but one that requires deliberation and interpretation. For Philippot, patina “is not physical or chemical, but a critical concept” (ibid.).

Patina is created by acts of nature and humans: when the change is of natural origins, it tends to be used synonymously with decay or degradation; when the change is artificial through the process of patination it is either artistic embellishment or an attempt at forgery. Decay and artifice become patina when they acquire positive connotations for the interpreter of the historical object. Patina, therefore, is a valuation term uniquely affiliated with the concept of age value.
While the development of patina may be desirable, it can present a barrier to the interpretation of a work of art and by extension, landscapes. Cesare Brandi, an art conservator, advocates a balance in which patina should not overwhelm the ability of a work of art to communicate to the viewer (1996/1953). Such communication is largely based on what the original creator of the work of art intended. This concept, known as design intent, drives much of the theory behind intervention in historical works of art, architecture, and to some extent designed landscapes. There are problems, however, in interpreting the original intent of a designer. Especially in the absence of any written documentation left by the artist, there can never be certainty in establishing the true nature of a work of art and how it was meant to be read by a viewer.
With the rise of modernism, patina became the enemy of the designer while in the past it was typically embraced. Time became something to battle, to hold sway through the fixation of a material’s appearance or through the impermanent nature of modern-era buildings. For a modernist designer, buildings and landscapes were not meant to show signs of age. For instance, the Futurists at the turn of the twentieth century went so far as to proclaim that they “combat patina” in one of their manifestos (qtd. in Banham, 1980, p. 108). Modernist architects sought purity of form and uncluttered landscapes; the tendency of age and patina to add complexity to environments is a foreign element that must be removed (Edensor, 2005, pp. 73, 74). As the ICOMOS 2002/2003 Heritage at Risk report on modern heritage explains, “the shiny new materials and streamlined forms that characterise modern architecture may not have left room for an evolving patina.” Even today in the conservation of modern-heritage buildings, we are not prepared for the “romanticism of modern ruin” through the eulogism of patina on the masterpieces of Le Corbusier, Mies Van Der Rohe, and others (ICOMOS, 2003).

While patina has traditionally defined change to the surfaces of certain, discrete objects over time, it has been used by writers on landscape at least in a metaphorical sense, as Marc Trieb (1999) does when he describes that meaning in landscape builds up over time “like a patina.” Other authors used the concept of patina in a similar way, such as Nick Spitzer’s (2006) description of a pre-Katrina New Orleans where the patina of decay was often viewed as part of its charm: “a lopsided set of quarters behind a raised nineteenth-century cottage in Faubourg Marigny; vines overtaking an unpainted shotgun houses’s rooftop in the Ninth Ward; an Anglo-Southern central-hall neoclassical plantation home in the lower Garden District converted into a maze of apartments, each with its own external wooden stairway, all trapped in a spiderweb of electric lines” (p. 315).

Sometimes landscape patina moves into the realm of the phenomenological as when Kevin Lynch (1972) describes patina as the process where “a landscape acquires emotional depth as it accumulates … scars” (p. 44). As far as the author is aware, however, there has not been any attempt to
categorically define the concept of “landscape patina” and move it from the metaphorical realm to one with discrete characteristics which can then be applied to this particular study. Therefore, for the purposes of this proposal “patina” will only refer to the physical changes that come with age that affect the surface quality of discrete objects in the environment.

2.2.2.3 Age and place attachment

While few authors have chosen to relate the age of a place and its materials to place attachment, the temporal aspect of place attachment is well addressed. In its basic form, time adds value to objects such that “old furniture and buildings have a special value bestowed by time and that they should be preserved” (Tuan, 1977, pp. 193). In a similar fashion, entire landscapes also acquire value over time (Riley, 1992). This value is rooted in how people have used an environment in the past as Bonnes and Secchiarioli (1995) relate: “environments must be conceptualized as time-related phenomena, assigning importance to the natural history of their use and to how their history regards the same participants in the same environment” (p. 161). Thus it is memory—individual and societal—which becomes an essential aspect of place attachment (Hayden, 1995, p. 227). Attachment to place is not attachment to a real, physical reality, but instead an affective and cognitive bond with one’s own memory and the “relived experience” (Riley, 1992, p. 20).

If memory is essential to attachment, then what role does the veracity or authenticity of the remembered past play? In other words, must memory accurately represent reality to create strong attachments to place? The answer points strongly in the opposite direction—spontaneous fantasy or the creation of imagined, hypothetical pasts may in fact increase attachment. The “power of imagined experiences, the stories that one sets in the landscape” as Riley (1992, p. 22) describes is part of the human experience of being in a place. In his work on Native-American attachments to landscape, Keith Basso (1996) reveals that “[w]hen places are actively sensed, the physical landscape becomes wedded to the landscape of the mind, to the roving imagination, and where the mind may lead is any-
one’s guess” (p. 55). There is a reason why Tuan, and later Lowenthal, refer to historic preservation as a “cult.” For Tuan (1977), “the cult of the past calls for illusion rather than authenticity [and encourages a] mood of time-soaked melancholy” (p. 194) while Lowenthal (1998) describes heritage as a “quasi-religious cult” that “smudges the line between faith and fact” (p. 250). Memory is indeed not equivalent to historical fact, an important distinction that the philosopher Foucault (1972) relates when he reminds us that memory is a “residual existence” that cannot accurately represent the past (p. 28).

Heritage, and its attendant attachments, is therefore manufactured or created. As Tuan (1977) explains “people can develop a passion for a certain type of environment without the benefit of direct encounter” (p. 184). This idea is different than the “heritage-as-artifact” or historical approach which focuses only on issues of time and authenticity—elements that are often external to the sphere of the everyday experience of place. According to Lisa Breglia (2006), an anthropologist, heritage is “a contingent practice situated in actual time and space” (p. 34) and is based on individual experience which defies single, monolithic definitions (p. 27). The context of heritage engenders specific memories, ideas which Foucault (1972) has called meanings contingent on “material existence”—similar experiences in different contexts will alter the resulting meanings of those contexts (p. 100).

While age can add positive value to a place—e.g., patina—it can also be perceived negatively depending on context. For instance, we think decay in animals is ugly while decay in vegetation is generally beautiful, but even in this context, too much deterioration of plant material can be unsettling—a landscape too closely associated with death is undesirable (Lowenthal, 1985, p. 135). But even the products of death can be construed in a positive light, as David Lowenthal (1994) explains:

Viewed without prejudice, products of plant decay can be seen to have a charm of their own. Slime molds congeal into a mass of powdery grey or sulfur and crimson spores that enliven lawns. The intricacy of bird’s nest fungus is a fascinating adjunct of stem decay. When bacterial fasciation infects forsythia, flower-fanciers generally cut off the clusters of distorted leaves that tip the plank-like shoots. Yet their oddity would add varietal interest to any garden. (p. 41)
The idea is that decay in itself can add value to landscapes that would otherwise be feared or abhorred. Ruins are an example of this phenomena—places that may have strongly negative associations, but yet have become revered places for their melancholia. The Romantic Period of the nineteenth century ushered in the passion for ruins—typically Classical or Medieval variations—to the degree that wealthy individuals had “new” ruins created that attempted to mimic the decay of the authentic objects (Roth, Lyons & Merewether, 1997, p. 79).

Can modern monuments, such as old warehouses, skyscrapers, prisons, and modern-era landscapes also be imbued with positive connotations due to their age? James Dickinson (2001), a sociologist from Rider University, believes that this possibility is indeed plausible: “Obsolete industrial structures constitute an important stock of potential symbolic architecture and thus are prime candidates for transformation into historical monuments” (p. 55). These monuments become increasingly valuable as they “gradually acquire the worn patina and fragmented, eroded structure that give familiar survivals of the past, such as castles, temples, and pyramids their distinctive allure” (p. 58).

Since the 1960s, artists have increasingly depicted and photographed industrial areas and “ordinary” modern landscapes that exhibit signs of decay. The end result of their work is a new definition of beauty in which modern decay is transformed into art (see Figures 2.4 and 2.5). Ruins have even spawned coffee table books such as American Ruins by Camilo Vergara (1999), a work that explores the “peculiar beauty” (p. 11) of the ruined inner cities of New York, Camden, Newark, Philadelphia, Baltimore, Chicago, Gary, Los Angeles, and Detroit. These are places universally perceived as dangerous and forbidding, yet they have an allure of mystery and an aesthetic appeal unique to these landscapes. Ruins are poetic, magical places, “a fantasy that dances in the moonlight. Ruin-mood excites wonder. Enthralled, we are captivated by inchoate feelings that come to light like moon-beams and then sink behind the shadows of primitive walls. Shudder with delight” (Ginsberg, 2004, p. 317).
Ruins obtain their value in part through the “intersection of culture and nature” (Dickinson, 2001, p. 60). Normally through regular maintenance plants, lichens, and mildew are not allowed to begin to digest and slowly dissolve structures. With ruins, however, nature has free abandon and adds to the patina of place, adding an extra aesthetic layer of appreciation. In the extreme, it becomes difficult to determine where culture ends and nature begins as both blur into a new phenomenological experience.

Figure 2.4: The ruins of Bethlehem Steel, Bethlehem, Pennsylvania. (Photo by Shaun O'Boyle, oboylephoto.com; used by permission.)
Figure 2.5: “Shoot the Live Human.” (Photo by Cormac Phelan; used by permission.)

Figure 2.6: Nature gains a foothold on culture. (Photo by author of a building in Old Olinda, Pernambuco, Brazil.)
Eastern State Penitentiary, located in Philadelphia, Pennsylvania, is revered around the world specifically for its melancholy decay. This place has housed the worst examples of human behavior since its construction in the early part of the nineteenth century. Abandoned in the 1970s, it was left to molder, but was resurrected as a monument in the 1990s. It is now open for tours; the Halloween tours are one of the most popular events at the site, capitalizing on the mystery and intrigue of the decayed surroundings.4

Figure 2.7: Al Capone’s cell at Eastern State Penitentiary, Philadelphia, rendered more authentic and vicarious because of extensive decay. (Photo by author.)

4. The author used to be employed at this site and has participated in the Halloween tour.
“Urban exploration” is a relatively recent development in which people explore abandoned or distressed landscapes for the sheer pleasure of the experience. There are several reasons why these explorers engage in this activity, but chief among them are a desire to fulfill a fantasy or connect the outer world to an inner landscape of the imagination. Julia Sols, for instance, is an avid urban explorer and author of *New York Underground*. Driven by her “love of fiction and horror ... [she] became attracted to dark, mysterious, desolate places” (Bender, 2006, p. 12). The results of her exploration can be seen at www.darkpassage.com where she reveals “unscientific application of archaeological principles to inspect evidence of previous human habitations and demises, preferably involving an amateurish and histrionic analysis of human relics, case and site assessments based on children’s diagrams of parlor games, and palindromic investigations of imaginary crime scenes” (http://www.darkpassage.com/postmortems.htm).
While the web and blogosphere are rich sources of information on urban exploration and the associated activity of “urban spelunking,” (a search on the terms “urban exploration” and ruins turn up over 28,000 hits in Google as of November 2008), this cultural phenomena does not appear to have been studied to any extent by anthropologists, sociologists, or geographers. Most information is to be found directly from the photography and writings of these explorers who post their adventures online or through interviews and popular writing in magazines and newspapers. Regardless, there is a large contingent of people across the world who enjoy being in places of abandonment and decay and will engage in dangerous and illegal activities in order to get their “fix.”

In summary, while decay in built environments can be interpreted in a negative light, it is often just the opposite. When decay becomes patina, it is a revered, precious commodity that lends authenticity to place and allows us to use our imagination to connect with the past. Patina, therefore, opens the door to spontaneous fantasies—stories rooted in particular places catalyzed by the physical appearance of objects in landscapes. It is this idea which will be explored next.
2.3 Theoretical framework informed by qualitative study

The qualitative study (described in Chapter 5) revealed important themes that deserve further exploration in the literature. These themes revolved around specific elements in the landscape, behaviors related to wanting to “read” the layers of age in building or landscape, and spontaneous fantasy. This section will address the theoretical implications of these themes in order to present a more complete framework for the entire study.

2.3.1 Landscape elements

This first theme deals with theory that addresses the discrete, character-defining elements of the landscape, including landscape features and buildings, and the way these features are perceived separately or in unison. These particular themes are the result of the analysis of the qualitative data presented in the phenomenology presented in Chapter 5. A significant number of these areas are weakly addressed, if at all, in the literature, with a few important authors dominating, such as Arthur Stamps (1999, 2000).

2.3.1.1 Relative importance of landscape or building elements

The idea that people may value the elements of landscape more than the elements of buildings is not a novel concept. In the 1960s, Gordon Cullen (2007/1961) described how the pedestrian experiences the urban environment as a “series of jerks and revelations.” In other words, we experience place through a “serial vision” where one image replaces another in our mind through the “drama of juxtaposition” as dichotomous frames create meaningful contrasts, such as when a building interacts with a fence (p. 169). There is an equality to the elements as they are experienced—in other words, in one frame a building might appear followed in quick succession by an interesting ornamental gate that strikes one’s fancy. In the minds-eye, the building and the gate exist as equals—they are
all elements of the landscape. In combination, the whole landscape becomes a composition whose
caracteristics are defined by how individual elements contribute to the affective feeling of the whole
(Bell, 1999, p. 88).

Environments that are rich in landscape elements, such as traditional urban areas, are more
likely to invoke this serial vision and thereby create a powerful emotional experience that fosters our
drive to explore. Each frame of the landscape that is visualized in the minds-eye becomes part of a
thread that pulls the pedestrian deeper into the landscape; given insufficient landscape elements the
thread unravels and cognitive apathy results. The intensity of the experience is directly related to the
number of surprises in the landscape. Pre-industrial townscapes are particularly capable of instilling
this sense of discovery as Peter Smith (2003) explains:

Medieval towns are the ultimate expression of man-made chaos pattern. Their delight results in their
unpredictability. The elements that make up their townscape may be largely familiar, but the appeal
lies in the way they can combine to create a unique pattern. They satisfy the primitive drive to explore
in order to enrich our urban schema, at the same time satisfying the aesthetic demand by exercising the
mental facility for extracting pattern from complexity. Above all there is the hope that surprising riches
lie around the corner or at the summit of a hill. The ultimate aesthetic reward lies in discovering views
in which everything coheres into an epic composition that stands out from its surroundings. (p. 166)

There are certain elements of the landscape, however, that seem more prone to elicit the
“unique pattern” to which Smith refers. Based on the results of the phenomenology (see Chapter 5),
these elements include trees, fountains, gardens, iron fences, masonry walls, and gates which fall un-
der the rubric of landscape elements, and doors, windows, shutters, and balconies, which belong to
the category of building elements.

2.3.1.2 Cultural landscape elements

For many people landscape is synonymous with plants; the act of “landscaping” is in part the
planting of vegetative material. Thus, it is not surprising that vegetation factors highly in the experi-
ence of residential urban areas; wherever humans make interventions in the landscape, plants usually
play an important role. The “biophilia” hypothesis developed by Edward Wilson (Wilson, 1984)
states that we need other living entities in our environment in order to increase human flourishing. Wilson’s idea is rooted in another hypothesis that argues that since humans evolved in natural landscapes, we are therefore most at home in environments which feature certain kinds of vegetation that mirror the savannah experience in Africa (Orians, 1986). The natural conclusion is that people prefer environments in which there are trees with wide, spreading canopies and include open and secluded areas offering “prospect” and “refuge,” that again, mirror the African savannah (Appleton, 1975).

There is a good deal of empirical research that establishes the connection between the presence of vegetation in an environment and general well-being (e.g., Ulrich, 1979; Kaplan & Kaplan, 1989; Thayer & Atwood, 1978), although the focus has predominantly been on “natural” environments rather than urban ones. The general positive effect of vegetation remains true, however, in urban contexts. Kaplan and Kaplan (1989), for instance, indicate that “people feel more satisfied with their homes, with their jobs, and with their lives when they have sufficient access to nature in the urban environment” (p. 162). Given a choice of vegetation in an urban environment versus no vegetation in the same environment, people invariably choose the former (Herzog, 1989). The presence of vegetation in urban areas is linked to improvements in the quality of life (Sheets & Manzer, 1991), a sense of tranquility (Herzog & Chernick, 2000), and helping people psychologically cope with stressful life situations (Kuo, Bacaicoa & Sullivan, 1998).

Berman et al. (2008) examined this therapeutic aspect of natural environments as it relates to enhanced mental functioning. In their study, volunteers were subjected to memory and attention tasks before and after walking in a park and after walking in downtown Ann Arbor, Michigan. The results indicated that people who took the walk through a park increased both memory retention and the ability to focus on specific tasks while those individuals who walked through the downtown experienced a decrease in these measures. A third group that viewed photographs of nature scenes also experienced a similar increase in memory and attention as those who walked through the park. The authors hypothesize that urban environments are filled with a greater degree of “dramatic” stimulation versus
the “effortless” stimulation of natural scenery. Thus, one’s mind is constantly redirected to external stimuli in an urban environment whereas one can be more contemplative in a natural environment. Of note is that the urban area chosen by the authors—downtown Ann Arbor—consists of wide streets with multiple traffic lanes and relatively tall buildings. A consistent characteristic is a large amount of automobile traffic.

Trees are considered to be one of the most important kinds of vegetation for urban places—a fact substantiated by a survey of 1,379 people from the state of Alabama by Zhang et al. (2007). The results of this study concluded that “more than 90% of citizens appreciated urban trees in choosing their residential location and community” (p. 810). Beyond their pure aesthetic appeal, however, trees are also credited with improving the psychological and physical health of people. For instance, a study by Sullivan et al. (2004) concluded that an increase in trees and grass is positively correlated with the amount and character of social interactions in urban spaces while Ulrich (1984) revealed that views of trees through a hospital room decreased the time it took patients to recover in comparison to rooms without such views.

Empirical research supports the African savannah hypothesis that trees with a wide, spreading canopy—much like the acacia trees of the African savannah—have the highest aesthetic value (Heerwagen & Orians, 1993) (See Figure 2.10). More recently Lohr and Pearson-Mims (2006) reaffirmed the savannah hypothesis by concluding that trees improve the aesthetics of built environments and make people feel better when compared to such scenes without trees. In particular, participants thought that trees with a spreading canopy were more aesthetically pleasing than trees with a conical form. Live oaks, found throughout the coastal zones of the southeastern United States, exhibit this spreading form (see Figure 2.11).
Figure 2.10: Typical acacia tree from the African savannah. (Photo by Andrew Stacey, stacey.peak-media.co.uk; reproduction permission granted for academic use.)

Figure 2.11: Typical live oak tree with spreading canopy. (Photo taken in l’On by informant “Cindy”.)
Water—especially flowing water—has played a prominent role in landscape design since antiquity. Many cultures traditionally employed water in the design of gardens and public spaces such as the Moorish gardens in Spain (Hubbard & Kimball, 1927, p. 36) and the “grand display fountains” which the Romans strategically placed at the terminating points of aqueducts (Pulvers, 2002, p. 44). Whether because of its essential role in life or its affective qualities, water lends a kind of magic to the environment as Ortloff, Raymore, and Rockwell (1945) described over fifty years ago: “There is something fascinating about water in the landscape. Its cool serenity flecked by shadows, its crystal mirror held up to nature’s sky, its star-scattered lily pads, rippling shallows, or laughing cascades all give to the scene an indefinable, though potent, charm” (p. 168).

It is widely recognized that water is important in landscape and urban design, especially for its aesthetic and affective qualities. For instance, Christopher Alexander et al. (1977) believe that “water plays a fundamental role in our psychology” to such a degree that fountains should be placed on every street (p. 64). The topics of water and fountains are easily located in many landscape architecture treatises. Many landscape architecture textbooks include a section on the aesthetic qualities of water in the landscape, such as John Motloch’s (2001) eulogy on water’s “unique power to stimulate the mind and captivate attention” (p. 69). There are also entire books devoted to the subject of water and landscape design with a focus on its aesthetic qualities (e.g., Jellicoe & Jellicoe, 1971; Litton & Tetlow, 1974; Bahamon, 2006). Most works on water and landscape, however, tend to be directed at the amateur gardener and not the professional designer per se. While there are countless rational examples of water’s affective qualities, such as those explained here, it is much more difficult to provide empirical evidence for such claims, especially in relation to fountains.

Two studies which have looked at the affective role of water in the environment include Ulrich (1981) and Real et al. (2000). Both studies conclude that people prefer landscape scenes with water in them versus those without water. Neither study, however, addressed the specific effect of running water on people as an isolated variable, much less the effect of fountains. While a few qualitative
studies reveal that people seek places with the sound of running water for stress relief among many other behaviors (Marcus & Barnes, 1999, p. 5), there appears to be few, if any, studies that attempt to look at the relationship of water and stress in a quantitative, correlative manner. A study by Mace et al. (1999) did incorporate the sound of running water into their research design on the effects of aircraft noise in natural landscapes, but the water sound was only provided as a background reference noise in context with other “natural” sounds; the direct effect of the sound of water was not addressed by the authors. In fact, the end result of an extensive literature search resulted in few, if any, empirical studies on the specific, affective role of running water on people. This finding is surprising as many books and articles that address landscape design, stress reduction, and healing environments suggest the use of running water for stress relief without offering specific evidence to back up this claim. Perhaps the soothing effect of running water is taken for granted to such a degree that few people have thought to confirm our anecdotal experiences of it. Certainly the prevalence of running water in landscape designs for thousands of years does indicate a very strong probability that people prefer and will seek the sound of running water for its soothing and stress-reduction characteristics.

Traditionally, urban residential buildings incorporated fences of some kind—either the stereotypical white picket fence or other wooden fence, an iron fence, or masonry walls as a way to bound and demarcate public versus private space. One of the few people to look at the aesthetic preferences of fences is Stamps (1999, 2000) in his quantitative study on people’s preferences for residential facades. The addition of an iron fence to a building resulted in a substantially increased positive evaluation of the scene, for instance. Beyond Stamp’s work, however, no other studies were identified that specifically addressed the affective impact of fences, walls, and gates on people.

2.3.1.3 Building elements

In the practice of historic preservation, doors, along with windows, assume prominence as one of the most important character-defining features of buildings. Preservation activities in the Unit-
ed States often use the Secretary of the Interior’s Guidelines for Rehabilitation either by law or customary use. This document places considerable importance on the treatment of doors and windows in historic buildings, which are considered to be “extremely important in defining the overall historic character of a building” (National Park Service, 2008). It is important to note that while the Standards are highly prescriptive, they are based on rational ideas derived from traditional historic preservation theory and not empirical evidence. Few, if any, researchers have designed empirical studies to support or refute the supposedly objective standards embodied in this government document.

While there are studies that focus on the design preferences of buildings in urban contexts, these studies almost universally neglect historic or neo-traditional buildings. Examples of these kinds of studies include Nasar’s (1994) work that relates increased aesthetic preferences to more complex and “popular” building designs and Stamp’s (2000) findings that added window trim, door trim, and balconies substantially increase the aesthetic assessment of buildings. One exception to this rule is Herzog and Gale’s (1996) study that concludes that clearly discernible entrances are one of the most important aspects of older buildings.

Alexander et al. (1977) address doors and windows in detail within the domain of traditional construction, emphasizing the role of connecting the inside to the outside, scale and variation, and flow. Windows, for instance should have low sills, with the sills rising as the building height increases (p. 1050) with deep reveals (p. 1053), a design pattern that can be found throughout neotraditional design. Within their analysis, however, is an emphasis on the inside looking out whereas this inquiry is more interested in the perspective of the view looking from the outside to the inside.

No empirical studies were found that specifically addressed the aesthetic or affective impacts of window shutters on people.
2.3.1.4 Landscape as layers, mystery, and exploration

Kaplan et al. (1998) discuss the concept of layers in the landscape as “definable bands” which add a “sense of depth” to the scene. This depth then “provide[s] an invitation to explore” (p. 46). The theme of exploration, landscape layers, and urban scenery can be found in a great deal of literature. Earlier research by Kaplan and Kaplan (1989) revealed that landscapes which are perceived as mysterious invite people to explore—a finding that was later revisited and confirmed by Hagerhall (2000). Typically mystery will produce more positive feelings in natural landscapes than urban ones, but even urban landscapes have the power to generate positive feelings associated with mystery (Herzog & Miller, 1998). According to Simon Bell (1999), historic urban environments are “participatory landscapes par excellence, by encouraging entry and exploration” specifically because people perceive these places as mysterious (p. 91). This sense of mystery is due to the layers in the landscape which “unfold their characteristics” over time (p. 92) and encourage pleasure through the “creative act” of discovery (Smith, 2003, p.167). This “unfoldingness” of urban landscapes has been explored by many urban writers, including Kevin Lynch (1981) in his work, *A Theory of Good City Form*.

A sense of discovery is related to the overall design of an urban area, along with some degree of chaos and a varying street pattern as Khalid Imam (1997) describes:

> The traditional street pattern often appears spontaneous, but has an underlying sense of order, and within this order in turn, a healthy hint of chaos. The aesthetic of the traditional street perspective tends to be one of evolving order, as it unfolds in a series of related facades, each expressing itself as a variation of a regional theme or expression. The irregularity of the street pattern, and blocked vistas, provide an elements of mystery and surprise unlike the wide and fast scaleless streets planned today—where everything is seen at once. (p.2)

There is an intriguing connection between the sense of mystery in urban places, their seemingly chaotic pattern, and fractal design. Urban environments have a fractal quality to them, a “subdivision into various sizes and proportions; a varying sense of enclosure and openness, all defined by edges and zones of transition” (Bell, 1999, p. 92). In older cities, “narrow lanes lead at right angles from wider streets into complex labyrinths, now branching again, now reconnecting with a small
square or a wider street” and exhibit the essential pattern of “self-organized fractal structures” (p. 289). The facades of traditional buildings, densely arranged along the street are also associated with fractal patterns (Bovill, 1996, pp. 144-149). Surprise is related to this fractal experience of the urban space: as spaces become increasingly more organized into fractal patterns, people experience greater feelings of wonder and amazement about their environment (p. 116). Moreover, spaces designed with fractal complexity seem to be analogous to how the brain perceives and processes information (Salingaros, 2006, p. 86).

Related to fractal patterns are the Fibonacci series that Peter Smith (2003) uses to describe the layers which make up urban landscapes. According to Smith, the Fibonacci series helps us render a scene into binary images that still preserve the complex nature of the townscape, but produces a condition in which some elements are more dominant than others (p. 168). This binary effect is related to the point at which elements of the scene “fracture” or “bifurcate” according to the principles of the Fibonacci series, much in the same manner in which plant growth produces points at which leaves emerge or stems branch (p. 80). Thus, we know what is a “leaf” and a “stem” even though all of these elements of a plant are connected to one another; the point of differentiation is determined mathematically (see Figure 2.12). Nikos Salingaros (2006) describes a similar phenomenon where “the eye is observed to focus most of the time in the regions of a picture that have the most detail, differentiations, contrast, and curvature. ... The brain thus selects informative details such as ... contrasting edges for recognizing and remembering an object” (p. 86).
2.3.1.5 Unseen effort embedded in the landscape

Most change to landscapes in urban settings require some degree of human effort, but most of the time we do not see these interventions as they occur. We can tell that some landscapes have no human effort associated with them, such as so-called “natural” areas, while other landscapes, such as compact urban gardens, communicate a message of intensive human effort. While this literature review has covered the visual, and to some extent auditory, aspects of the environment, this is a unique category of experience that represents human activity. Termed “hidden effort” by my informants, this idea represents recent changes people have made to certain parts of landscape, typically on a small scale such as a yard or pocket garden. Landscape is filled with evidence of past human effort, but such exertions remain unseen. We know these changes have occurred through extant visual evidence; the human effort behind these modifications are therefore implied. Without exception, these changes involve plant material and growth (i.e., landscapes which are highly dynamic), happen without the in-
formant’s prior knowledge, and are relatively recent. In other words, the actual implementation of these changes are rarely observed directly, and only apply to small-scale, bounded spaces that are dynamic.

Curiously, an extensive literature search resulted in a paucity of material which covers this concept. The terms “unseen effort” and “hidden effort” do not appear to have been used by cultural landscape writers previously. Of the literature that addresses some of these concepts, however, there is evidence that humans seem to prefer urban areas which exhibit the highest degree of this unseen effort as part of the landscape. In essence, places that show that people care about and for their environment speak of safety and comfort (Nassauer, 1995). In a study by Lay and Reis (1994), the maintenance of landscapes and buildings sent a clear message to people that “an ambience of dereliction and neglect tended to evoke misuse and carelessness, while good maintenance and surfaces of good quality tended to be valued and appreciated” (p. 93). The overall level of maintenance of landscapes and buildings is attributed to feelings of safety, such as the appearance of lawns that are mowed on a regular basis (Hagerhall, 2000, p. 88). These feelings of safety seem to be related to why well-maintained buildings contribute to an overall positive sense of place as was revealed in a case study in San Francisco of two urban residential neighborhoods (Imam & Motloch, 1997).

2.3.2 Perception and reading of building and landscape age

Considering the importance of historic buildings to sense of place and the aesthetic appreciation of townsapes, it is surprising that very few studies have been done on landscape preferences in relation to the historical or cultural components of place. This is a particular problem in the realm of urban aesthetic preference studies as Galindo and Hidalgo (2005) relate. Generally speaking, it has been long established that people tend to prefer the historic cores of the cities to suburban areas, such as an early study of Parisians’ perceptions of their city revealed (Milgram & Jodelet, 1976) and which
was recently reaffirmed by Galindo & Hidaldgo (2005). Certainly much of the global heritage tourism trade relies on this fact.

The few studies that have considered older or historic buildings as a valid unit of study have done so in comparison to new buildings. The general results of these studies are that when building maintenance is not a factor, people tend to prefer older buildings to new buildings. When building maintenance is a factor, such as when older buildings are in disrepair while new buildings are not, people prefer the new buildings (Freewald, 1989; Herzog & Gale, 1996). More recently Herzog and Shier (2000) revealed their hypothesis that what people are really valuing is the visual or ornamental complexity of older buildings and not their age. Thus, it is still largely an open question if people specifically value the aesthetics of urban places because of the intrinsic quality of age related to the appearance of patina or decay—in other words, those visual clues that provide hints about the age of certain materials.

In Howard Davis’ (1999) book on The Culture of Building, the appreciation of a building for its age is not directly addressed, but rather the central thesis is based on value derived from traditional systems of building construction that emphasize craftsmanship, increased autonomy, and collaboration in deference to contemporary practice which deprecates these factors. The argument is that in today’s culture of building, design is bland and homogenous because all the labor happens in the creation of pre-fabricated building units which are then installed into buildings; thus “building” becomes more like working with Legos, where all the pieces are designed to fit together quickly, but do not easily betray the qualities of craftsmanship. In addition, strict hierarchical systems concentrate power and further homogenize the built environment and prevent character from developing in building and urban design. In other words, contemporary buildings lack cultural value because they have little character or personality that has been incorporated into their construction by design. Functionality and economic return are paramount; other factors pale in comparison.
In recent years anthropologists and sociologists have begun to contribute empirical studies that address place attachment to older, or “historic” environments. These kinds of studies are still rare, as Breglia (2006) relates: “[Today] ethnographic studies [of heritage places] are still few, while their import and necessity are greater. [...] Only a handful of studies have focused ethnographically on the living communities coexisting with heritage sites” (p. 13). Melinda Milligan (2007, p. 109) echoes a similar theme in assessing the lack of contributions of sociologists and other social scientists to the study of historic preservation. Examples of these studies include an ethnography of Mayan peoples living in context with pre-Columbian archaeological sites (Breglia, 2006), social uses of traditional Latin-American plaza spaces (Low, 1992), and a revealing look at how historic preservationists perceive their older homes as social actors, complete with the ability of the building to think and feel (Milligan, 2003).

When people experience an environment, they seem to engage in the process of “reading the landscape” for clues about its history and change over time. Certainly in historic Charleston my informants engaged in solving a kind of mental puzzle as they peeled back the layers of time. The puzzle was solved when the informant was satisfied that he or she had deduced how the final appearance of the landscape or building came into being. Both buildings and landscapes were read in this way, usually in relation to landscape or building features that the informants considered to be odd or unusual.

This particular behavior is well rooted and refined into a methodology in certain academic traditions such as cultural geography and in some instances, landscape architecture. The work of cultural geographers and folklorists such as Fred Kniffen (1965), Henry Glassie (1969), Donald Meinig (1979), and John Brinckerhoff Jackson (1984) fall into this category. More recently Anne Spirn (1998) took this same approach with her work on The Language of Landscape. But while these authors’ works fall under the rubric of reading the landscape, there appears to be very few, if any, studies that have looked at if and how everyday people read the landscape and how this behavior is influenced by the age of the environment. Again, this is also an open question.
2.3.3 Spontaneous fantasy, imagination, and the vicarious experience

Many people enjoy historic urban places because of their ability to catalyze our imagination; sitting in a street cafe in Paris, for instance, it is hard to not have one’s mind drift to Paris as Vincent Van Gogh experienced it in the nineteenth century. The key to this experience is that the images in our mind only have a tangential connection with a real, or genuine past. This phenomenon is the difference between what David Lowenthal (1998) refers to as history (the objective past) and heritage (the subjective and revisioned past that most of us experience). Knowing the “real” history of a place and whether the buildings are authentic or not is not necessary in order to become attached to it. In fact, knowing too much about the objective history of a place can ruin the sense of discovering it for the first time (Bell, 1999, p. 93).

For the most part, the professional and academic practice of historic preservation focuses on the objectification of history, while tangentially addressing the role of heritage in defining historical significance. The more objective the history, the higher the degree of supposed historical significance. This practice, unfortunately, ignores how everyday people experience place, or their phenomenological experience of place, as Jack Elliott (2002, p. 54) describes. Fundamentally, people experience place in a highly subjective fashion and knowing or revealing an objective or “true” history does not necessarily correspond to an increase in the overall affective experience, nor does it necessarily relate to how important the place is to an individual or groups of people. This subjective quality of the historic built environment is fundamentally at odds with the golden rule of preservation: Do not create a “false sense of history” to prevent the “subjective” aspects of an affective experience from entering the picture (Weeks & Jandl, 1996, p. 19). Salvador Muñoz Viñas (2005) explains that the fundamental problem with this line of reasoning is that for an object to have a false history, its existence must also therefore be false, but this cannot be as “objects cannot exist in a state of falsehood, nor can they have a false nature. If they really exist, they are inherently real” (p. 93).
What if an imaginary history of a place—or in other words, a personal, spontaneous fantasy—increases personal attachment to a place? If so, then this experience is fundamentally at odds with both preservation practice and theory. Such subjective approaches to preservation practice are likely to be maligned as a nostalgic, “romantic vision” of the past (Cliver, 1992, p. 177). Indeed, spontaneous fantasy and the imagination is a problematic concept for all disciplines of the built environment. These words conjure pejorative images of the “Disneyfication” of landscape and the ills of nostalgia; it is the penultimate of irrational frivolity that designers should avoid at all costs. The existence, however, of a relationship between patina and spontaneous fantasy cannot be erased by the diatribes of designers. According to Rodney Harrison (2004), “ruin and decay [evoke] the phenomenological sense of ‘being-affected-by-the-past’” and foster a “creative space within which new memories can be evoked and created” (p. 204). What is the nature of this process of “being affected”? Inevitably, the answer leads to the creative act of the imagination. Robert Riley (1997) refers to the term “vicarious” as a type of landscape experience “in which the real, observed landscape leads to an internally experienced landscape that is far richer and more personal than the ‘real’ landscape. Vicarious is an inadequate name for this experience, but it does dramatically mark the distinction from the ‘real,’ or observable, landscape experience, and it is at least as adequate as the other terms that come to my mind—fantasy landscape or internal landscape narrative” (p. 207, author’s emphasis). After all, “the most perfectly preserved building or document becomes evocative, indeed, ‘historical,’ only through our imagination” (Lukacs, 1994/1968, p. 238).

Spontaneous fantasy, decay, and ruins are a prominent theme in the literature of many disciplines, including history and geography. The authentic appearances of objects from the past, evinced through the display of patina, “act as focal points for creatively imagining the actions of ancestors” (Harrison, 2004, p. 204). There is no better example of this phenomena than ghost towns—places in which patina is ubiquitous. According to Dydia DeLyser (1999), ghost towns are “a mythic West of the imagination” where “authenticity is a vehicle through which [visitors] can experience a fantasy
past that may never have been, but that nevertheless holds meaning for each person who imagines it” (p. 626). Ghost towns typically have the appearance of ruins; as far back as the early nineteenth century, Romantic landscape painters where motivated to paint decrepitude because “ruins embodied [their] inner fantasy” (Burns, 2004, p. 25). As D. Fairchild Ruggles (2000) reminds us, a ruin “allows the mind’s recollection to reconstruct the place as it might have and ought to have been” (p. 136). Instead of creating an accurate, objective story of the past, spontaneous fantasy involves the creation of memories and meanings that never previously existed.

The process through which spontaneous fantasy occurs is “involuntary” and “haunts” our “foreground experiences of memory.” Any attempt to rationally analyze the meanings of these spontaneous fantasies is met with failure (Edensor, 2005, p. 18) because they are not real, truthful, or accurate. They are, by definition, artificial meanings that may be entirely divorced from historical events. So why does the human mind persist in their creation, even if we mightily attempt to will them from existence through preservation doctrine? Edensor (2005) explains that we value spontaneous fantasy because it offers the transcendent experience of discovery, magic, novelty, and mystery:

[T]he promise of extraordinary sights and mysterious experiences is built into the popular culture of children with its myriad tales of adventures in secret gardens, magical labyrinths and dense, enchanted forests. ... Ruins [have this] promise of the unexpected. Since the original uses of ruined buildings have passed, there are limitless possibilities for encounters with the weird, with inscrutable legends inscribed on notice boards and signs, and with peculiar things and curious spaces which allow wide scope for imaginative interpretation, unencumbered by the assumptions which weigh heavily on highly encoded, regulated space. Bereft of these codings of the normative—the arrangement of things in place, the performance of regulated actions, the display of good lines up as commodities or for show—ruined space is ripe with transgressive and transcendent possibilities. (pp. 3, 4)

Natural landscapes are also associated with spontaneous fantasy. For instance the Grand Canyon has been called a “geography of fantasy” where place becomes a “space of invention” (Neuman, 2002, p. 41). Thus, it is not natural nor cultural landscapes which produce spontaneous fantasy, but rather the combination of both through the manifestation of patina. Without nature, patina
would not form and without culture, there would not be the interpretive acts required to invent new meanings from which to engender attachment.

At this point, fantasy is assumed to be a positive or at least neutral activity. Within certain contexts, however, fantasy has negative connotations. School children, for instance, are regularly chastised for daydreaming when they should be studying or doing otherwise productive activities. Certainly within Western cultures fantasy is to be kept in check, especially if it interferes with productivity and the bottom line. Only certain professions, such as artists, are exempt from this mantra. Even so, excessive tendencies toward fantasy are likely to attract the attention of mental health-care professionals. On the other hand, the current view in psychology is that “fantasy is now regarded as a sign of mental health. In fact, one’s ability to engage in play, imagination, and fantasy are considered indicators of a flexible, adaptive, and healthy mental life” (Knafo & Feiner, 2005, p. 26). It is safe to say that normal, healthy people do tend to have spontaneous fantasies and daydream and such activity is within the range of accepted behavior in moderation.

Fantasy can also be a way to avoid negative or troubling history. For instance, it is only recently that historic “sites of conscience” have opened their interpretations to the atrocities of the past, be it slavery, Japanese internment camps, or the Holocaust. Even so, we still prefer to face these events obliquely, if at all. In Lies Across America: What Our Historic Sites Get Wrong, James Loewen (1999) exposes countless examples of historical events that are twisted or fabricated for potentially nefarious social ends. According to Loewen, “America has ended up with a landscape of denial [through the interpretations of historic sites]. ... These misrepresentations on the American landscape help to keep us ignorant as a people, less able to understand what really happened in the past, and less able to apply our understanding to issues facing the United States today” (p. 5).

But there is a significant difference from spontaneous fantasy and pre-meditated fantasy. In the latter, cognition and higher-order thought processes come into play when creating a narrative. In the former, however, the narrative simply appears without significant effort on the part of the affected
individual. These spontaneous fantasies seem to arise unconsciously and automatically and as such it may be difficult, if not impossible to repress the formation of these imaginative narratives about the past. While one could delve into the Freudian implications of the nature of these fantasies, the fact remains that they will happen, and continue to happen, regardless of cultural or societal mores. To deny these kinds of spontaneous fantasies is to deny human nature.

2.4 Summary

The theoretical framework for this study consists of two parts: a foundation based on place attachment and age theory that was conducted prior to the qualitative phase of this study, and supplementary theory based on the findings of the qualitative study, primarily dealing with the elements of the built environment, perception of physical age in the environment, and spontaneous fantasy. The mixed-methodological design of this study dictated the need for this two-phased approach to theory. The foundational theory and the supplemental theory from the qualitative study informed the development of the final, quantitative phase of this research.
CHAPTER THREE
MORPHOLOGICAL AND DESIGN ANALYSIS OF CASE AREAS

3.1 Introduction

Historic Charleston, south of Broad Street and I’On (see Figure 3.1) are extremely similar in morphology and design, but exactly how similar are they to each other? This chapter will attempt to answer this question through a comparative analysis of the urban morphology and urban and architectural design of both of these areas. The analytical technique employed in this chapter is inspired by the works of M. R. G. Conzen (1958, 1975), M. P. Conzen (1978), Cullen (1961), and Ford (2000) in the manner in which urban design history is combined with an examination of the characteristics that give Charleston and I’On a layered quality.

3.2 Brief history of Charleston, south of Broad Street

English colonists founded Charleston in 1670 on the Ashley River across from the present-day location of the city. Unhappy with this original location, the colonists decided to move the settlement to the southeast corner of the Charleston peninsula along the Cooper River, just north of what is today known as White Point Gardens, and established a small fortified, walled city roughly bounded by present-day Cumberland, Bay, Water, and Meeting streets. (The southern half of this original walled city lies within the study area.) The walls quickly came down starting in 1717, however, as the city outgrew its original boundaries and threats from pirates abated. No houses exist in the study area from this early period, many of which were merely shacks of poor construction (Rosen, 1997, pp. 11, 12, 14, 18, 30). The 1740 fire that consumed most of the city was largely responsible for this situation (Smith, 2007, p. 23).
Figure 3.1: Location, boundary, and general plan of historic Charleston (case 1) and I’On (case 2).
Charleston’s urban plan was heavily influenced by Enlightenment thinking and featured a mostly regular grid pattern, similar to its contemporary city in the north, Philadelphia (Figures 3.2, 3.3, and 3.4). Lot sizes are quite small at about 2,000 to 3,000 square feet or less (about 1/20th of an acre or less) being typical. The original plan, developed in the 1670s using London as a template, survives essentially intact to this day (Rosen, 1997, pp. 12, 13). Although much of the late seventeenth and early eighteenth century fabric of the city has not survived, the basic urban footprint still retains the imprint of the colonial settlers. Charleston’s urban plan, however, was far from a model implementation of a seventeenth century ideal; According to John Reps (1965), “there is nothing particularly noteworthy about the scheme; indeed, when compared to New Haven or Philadelphia, the Charleston plan comes off distinctly second best” (p. 177). The end result is that the neighborhood south of Broad Street is still pedestrian oriented with a pattern of small, grid-like blocks with a good deal of irregularity to them, which is especially evident in the occasional haphazard street or building orientation and a plethora of hidden alleys and oddly arranged spaces.

![Figure 3.2: Charleston in 1704 with approximate study boundary in red. The original walled city is located on the east half of the peninsula. (From the Perry-Castañeda Library Map Collection, University of Texas at Austin)](image)
Figure 3.3: Charleston in 1780 with present study boundary in red. (From the Perry-Castañeda Library Map Collection, University of Texas at Austin)

Figure 3.4: Charleston in 1869 with present study boundary in red. (From the Perry-Castañeda Library Map Collection, University of Texas at Austin)
One of the earliest houses in the study area is the Georgian-style Miles Brewton House, built in 1767, located at 27 King Street (Figure 3.5) (Rosen, 1997, p. 27). Other examples are the “Rainbow Row” houses located near the 100 block of East Bay Street, constructed shortly after the 1740 fire (Smith, 2007, p. xxi). Around a hundred houses south of Broad Street were built in the colonial era of 1768 to 1773, many of which survive to this day (Rosen, 1997, p. 27). The fire of 1861 destroyed some of the homes in the west side of the study area (Smith, 2007, p. 25). The area west of Savage Street to the north and west of Green Street to the south were marshland until after the Civil War (refer to Figure 3.4). Thus, as one travels from east to west across the study area, the construction dates of the homes move from the middle of the eighteenth century to the turn of the twentieth century.

Figure 3.5: Miles Brewton House at 27 King Street, built in 1767 (photo by author)
The majority of the buildings in the study area, therefore, date between about 1780 and 1860, many of which are Charleston Single Houses, a unique style only found in the Charleston area and typified by a side piazza (see Figure 3.6 for an example). After the Civil War, as with most of the South, Charleston fell into a long economic decline and as a result, few houses were constructed after 1865. The economic conditions helped to preserve the existing housing stock (a condition commonly referred to as “preservation by neglect”) until the 1930s when Charleston’s preservation movement began to blossom. The city of Charleston established the country’s first local historic district in 1931 south of Broad Street in the general area of the old fortifications (Weyeneth, 2000, p. 13). Over the years, the local historic district grew to not only encompass the study area south of Broad Street, but north into the other areas of the city. The post-Civil War economic decline coupled with a strong preservation movement resulted in a landscape with no modern infill at all—a remarkable state of affairs considering most other urban areas of the country.
Although the original 1931 ordinance did not prevent demolition, by 1959, the architectural review board was given the power to delay demolitions by ninety days. By 1966 the architectural review board could prevent, rather than simply delay, demolitions (Weyeneth, 2000, p. 78). Today, Charleston’s local preservation ordinance is one of the strongest in the country, regulating demolition, design changes, and even exterior paint colors. Owners who live in the local historic district must submit changes to the exterior of their building (typically in the public viewshed) to the city’s Board of Architectural Review (BAR). The BAR then reviews the changes and either approves or denies them. This process has been happening in the study area since the 1930s.

3.3 Brief history of the I’On development

I’On is the brainchild of Vince Graham, developer and founder of the I’On Group. Graham desired to create a new development based on the “best models of urbanism in the region including Savannah and Charleston, as well as the historic areas of lesser known coastal towns like Beaufort, Rockville, and the Old Village of Mt. Pleasant” (Graham, personal communication, 2008). According to the promotional materials for the I’On development, it was named after Jacob Bond I’On (1782-1859), a veteran of the War of 1812, who operated a plantation on the future development’s land in the first half of the nineteenth century. An obituary in the *The American Almanac* (1860) described I’On as

a native of South Carolina, and a graduate of Yale College in the class of 1803. In 1811 he entered the United States Army as Captain of the First Regiment of the Artillery, and served until 1815. At the reorganization of the army on the close of the war, he was retained. The fortifications at Charleston, S.C., and Savannah, Ga., were intrusted [sic] to his command. He was conspicuous for his devotion to the interests of his native State. For many years he was President of the State Senate, and he was an influential member of the Convention which in 1832 put the State upon her sovereignty, and passed the ordinance of nullification. (p. 375)

Today there is a monument to Jacob I’On in the center of the I’On family’s cemetery at the northwest corner of the development.
Planning for the I’On development commenced in May 1995 and construction of the first house began in March of 1997. Dover Kohl and Duany Plater-Zyberk & Company created the development plan that incorporated existing natural vegetation, a modified grid pattern with curved streets, and a design code (the “I’On Code”). These original plans called for 800 single-family homes, 440 multi-family units, 90,000 square feet of mixed-use retail space, and eleven thoroughfares, all of which required variances and generated heated town council debates. Mt. Pleasant’s Town Council objected to the density and large amount of commercial space in the plans and as a result, a compromise was made to reduce the number of single-family lots to 759, entirely eliminate any multi-family units, and reduce the retail space by two-thirds and the number of thoroughfares to four (Frej & Good, 2002). Although the Town Council approved the amended plans for I’On in 1997, citizens against the I’On development presented a petition of 3,500 signatures requesting that the council reverse its decision to approve the development. A series of legal battles ensued which culminated in a final ruling from the South Carolina Supreme Court in 1999 that upheld the original approval (ibid.).

From 1997 to 2003, about 300 homes were built with original selling prices from $160,000 to $1.7 million (Graham, personal communication, 2008). While many older trees—especially live oaks—were saved, the majority of existing trees were cleared as a prelude to construction (see Figure 3.7). As of January 2009, approximately 600 homes have been built in I’On and about 150 lots remain empty (primarily in the northwest corner of the development). Lot sizes are predominantly on the small side in comparison to a low-density suburban development (many lots are only 1/20th of an acre), but a few lots near the marshes at the north end of the development are a half acre in size. Lot size, however, does not equate to home value as many of the highest value homes are actually on the smallest lots near the center of the development. All new construction and modifications to existing buildings must adhere to the I’On code, which ensures adherence to “traditional neighborhood de-

\[1. \text{Current property values (as of 2009) are now three to four times the original price of homes sold through 2003.}\]
sign” principles. In this fashion, the I’On Code functions in much the same way as design guidelines do for a local historic district, such as in historic Charleston, including design review under the purview of volunteer citizens.

![Figure 3.7: I’On under construction about 1999. While many trees were saved, large areas were cleared of all vegetation prior to house construction. Note the cleared areas, especially in the middle of the site as compared to the northwest corner. (Source: County of Charleston GIS maps)](image)

### 3.4 Urban morphology and design

Historic Charleston and I’On are very similar in terms of morphology and urban design. This observation should not be surprising considering that the developers of I’On readily acknowledge that historic Charleston served as a template for their community. Other than physical age, the chief difference between I’On and historic Charleston is that the latter is more dense by about a third. Had ob-
jections to the original plan of I’On not occurred, I’On would likely have been about as dense as historic Charleston. One way of comparing historic Charleston to I’On is by contrasting these traditionally-designed communities to the suburban development immediately to the west of I’On. Whatever differences there are between Charleston and I’On pale in comparison to this suburban development. Refer to Table 3.1 for a comparison of density, building footprint, orientation to the street, setback, road widths, architectural styles, and sidewalks.

Table 3.1: Comparison of historic Charleston and I’On to the suburban development to the west of I’On.

<table>
<thead>
<tr>
<th></th>
<th>Suburban development</th>
<th>Historic Charleston</th>
<th>I’On</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of land occupied by buildings (a measure of density)</td>
<td>13%</td>
<td>41%</td>
<td>33%</td>
</tr>
<tr>
<td>Typical building footprint</td>
<td>Square</td>
<td>Rectangular</td>
<td>Rectangular</td>
</tr>
<tr>
<td>Orientation to street</td>
<td>Random</td>
<td>Always short side to street</td>
<td>Always short side to street</td>
</tr>
<tr>
<td>Typical setback</td>
<td>30 to 35 feet</td>
<td>0 to 10 feet</td>
<td>0 to 10 feet</td>
</tr>
<tr>
<td>Typical road width</td>
<td>~22-28 feet</td>
<td>~15-20 feet</td>
<td>~15-20 feet</td>
</tr>
<tr>
<td>Architectural styles</td>
<td>Modern/contemporary</td>
<td>Traditional with Charleston Single House styles predominating</td>
<td>Traditional with Charleston Single House styles predominating</td>
</tr>
<tr>
<td>Sidewalks</td>
<td>Sometimes present</td>
<td>Always present</td>
<td>Always present</td>
</tr>
</tbody>
</table>

The comparison between historic Charleston, I’On, and a low-density suburban development is further elucidated by figure-ground representations of these areas. In graphic form, the similarity of Charleston and I’On is remarkable, while the suburban development has little in common with the former two places. Refer to Figure 3.8 for these figure-ground representations. Other than density, there are clear differences in the street pattern of Charleston and I’On. Charleston has a more traditional grid pattern, but it is far from a perfect grid with a number of irregularities, such as streets that bisect the grid into smaller segments at forty-five degree and ninety-degree angles. I’On was originally intended to have a more regular grid-like street pattern, but compromises to obtain a development permit resulted in the reduction of thoroughfare streets, which resulted in an overemphasized
Figure 3.8: Representative samples of the suburban development immediately to the west of I’On, historic Charleston, and I’On.
north/south travel pattern. Still, in comparison to a suburban template, there are far more thoroughfares in I’On and a semblance of a grid pattern is evident. The suburban hallmark—the cul-de-sac—is also largely absent except for the far northern end of the development. Again, while Charleston’s and I’On street layout are different, they are much closer to each other than either example is to a suburban development.

3.5 Architectural styles

The architectural styles found in many new-urbanist communities often reflect pre-World War II styles. This is also true of I’On, which contains many of the same traditional architectural styles found in historic Charleston as well as other areas in the southeast coastal regions, which means a heavy emphasis on eighteenth and nineteenth century architectural styles. I’On’s designers have gone to great lengths to emulate the original historical styles in detail; from a distance they can be difficult to distinguish from the originals. Refer to Table 3.2 for a comparison of architectural styles found in historic Charleston and I’On. Table 3.3 gives some visual representation of these styles along with an overall comparison of the urban design of both locations.

Table 3.2: Comparison of architectural styles found in historic Charleston and I’On

<table>
<thead>
<tr>
<th>Style</th>
<th>Historic Charleston</th>
<th>I’On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charleston Single House</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Georgian/Federal</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Greek Revival</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gothic Revival</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Italianate</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>French Second Empire</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Neo-Classical</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Colonial Revival</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Queen Anne</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
The absence of patina is often the major distinguishing factor between the Charleston original and the contemporary version. Since vinyl and aluminum siding are not used in I’On, the quality of materials is higher than in most suburban developments. Still, up close, there are definite clues that the buildings of I’On are mostly constructed of new materials. Windows tend to be the main give-away as modern float glass cannot emulate the look of cylinder or crown glass found in Charleston’s eighteenth and nineteenth century homes. (Note that many of the windows in I’On are made, in part, of wood.) Whether it was the builder’s or owner’s choice, there are instances of recycled building materials in I’On. For instance, there are a number of front doors in I’On that are clearly from much older buildings, but have been repurposed for use in a new house. Undoubtedly, if one were to look closer, more examples of this practice would likely be evident. In a similar sense, some builders or owners have attempted to emulate the look of the patina of age on masonry surfaces. Distressed paint or stucco occurs on a significant number of the homes or masonry walls in I’On. One example that clearly stands out for the author is a home in the southwest corner of the development where the brick was painted and distressed to look much like the older painted brick houses in Charleston. From a maintenance standpoint, developers sell new brick homes for their lower maintenance, yet here is an example of a new home in which low maintenance was clearly not as important as achieving an aesthetic end.
Table 3.3: Comparison of architectural styles and urban design of historic Charleston and I'On

<table>
<thead>
<tr>
<th>Historic Charleston</th>
<th>I'On</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image of Historic Charleston" /></td>
<td><img src="image2.png" alt="Image of I'On" /></td>
</tr>
<tr>
<td><img src="image3.png" alt="Image of Historic Charleston" /></td>
<td><img src="image4.png" alt="Image of I'On" /></td>
</tr>
<tr>
<td><img src="image5.png" alt="Image of Historic Charleston" /></td>
<td><img src="image6.png" alt="Image of I'On" /></td>
</tr>
<tr>
<td><img src="image7.png" alt="Image of Historic Charleston" /></td>
<td><img src="image8.png" alt="Image of I'On" /></td>
</tr>
<tr>
<td>Historic Charleston</td>
<td>I’On</td>
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<tr>
<td><img src="image1" alt="Historic Charleston 1" /></td>
<td><img src="image2" alt="I’On 1" /></td>
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<tr>
<td><img src="image3" alt="Historic Charleston 2" /></td>
<td><img src="image4" alt="I’On 2" /></td>
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<tr>
<td><img src="image5" alt="Historic Charleston 3" /></td>
<td><img src="image6" alt="I’On 3" /></td>
</tr>
<tr>
<td><img src="image7" alt="Historic Charleston 4" /></td>
<td><img src="image8" alt="I’On 4" /></td>
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</tbody>
</table>
3.6 Landscape layers

No examination of historic Charleston and I’On would be complete without an analysis of their landscape layers. These layers were one of the first things that informants commented about in the qualitative portion of this study (see Chapter 5). As these layers are experienced in three dimensions, it is helpful to look at the layers separately horizontally and vertically. For instance, landscape plans of Church and Atlantic streets in Charleston (Figure 3.9) and Shipyard and Ponsbury roads in I’On (Figure 3.10) exhibit the following characteristics:

• High density; buildings are very closely spaced.
• No front yards or very shallow front yards.
• Very narrow side yards (or no side yards at all).
• Large, mature trees.
• Fences that usually completely surround each property’s boundary, right up to the sidewalk.
• A building orientation that encourages long, narrow vistas between buildings (similar to looking down a tunnel). The narrow streets also have a similar effect.
• An irregular quality to the building’s orientation in their lots.
• Streets that do not conform to a perfect grid, thereby creating vistas around corners.

The cumulative effect of these intentional and unintentional design elements is to create an environment in which buildings and landscape elements are always partially obstructed; one can only view objects in slices, much like Cullen and his description of “serial vision” (refer to Chapter 2). A pedestrian, on the sidewalk, is forced (or encouraged) to walk in order to build a mental picture of the complete quality of the landscape. This experience is analogous to the way a digital flatbed scanner works whereby an image is created by moving a very thin sensor over a photograph. The computer software sees the photograph as a discrete series of very thin lines which it then reassembles into a complete photograph.
Figure 3.9: Sample of a plan of historic Charleston at the intersection of Church and Atlantic streets. (Drawing by author)

Figure 3.10: Sample of a plan of I’On near the intersection of Shipyard and Ponsbury roads. (Drawing by author)
Trees are very important in creating a layered environment as their irregular, three-dimensional shape helps to obscure elements of the townscape, especially buildings. For instance Henry Arnold (1993) discusses how trees can “maintain distinct layers [to] create spatial compression and contraction” (p. 72). Trees also help to create a sense of discovery by “cocooning” buildings within a larger composition (Moughtin, 2003, p. 68). Lastly, trees are important for their emotive qualities that can change the “mood of the urban landscape [to a] place where beauty and grace become public values” (Lawrence, 1995, p. 29). When one adds the age value of older trees to these factors, such as the mature live oaks in both case study areas, it is readily apparent that trees serve a multitude of functions in defining and segmenting three-dimensional space and in the process adding emotional values to historic Charleston and I’On.

From a vertical orientation, the layers in the Charleston and I’On landscape exhibit the overall arrangement of a stack of cards placed on end, especially in the densest environments where long, narrow buildings are separated from each other by ten feet or less (see Figure 3.11). It is impossible to see an individual card in its entirely without removing it from the stack. In the case of the built environment, the “card” (i.e., the building) is not moveable; the pedestrian, however, is free to move around the building in order to “see” the complete building as a whole.
It is also possible to analyze layers in Charleston and I’On in cross section. What immediately becomes apparent is that the narrow front yards and ever-present fences do an excellent job at clearly delineating public, semi-private, and private space. In this fashion, the dense environment is compartmentalized into a series of virtual rooms. For instance, the street and sidewalk are the “public” room; the space between the fence and the house is the “semi-private” room, and the house consists of the “private” rooms (Figure 3.12).

In comparison, a low-density suburban cross section does little to clearly delineate public from semi-private space (Figure 3.13). The road and front yard are very large and combine to create an undefined space. From a logical standpoint, we know that the thirty or forty feet between the sidewalk (or curb) and the front of the house is private property of course, but visually there tends to be few clues to call these spaces out—in other words, the yard/road space feels as if it is a single, contiguous element. Even if a fence exists between the sidewalk and front of the house, the spaces are much larger than in Charleston and I’On; moreover, the emphasis on horizontally found in modern design destroys bounding elements that would help to serve as walls to define this virtual room.

Figure 3.12: Cross-section of typical street scene in historic Charleston and I’On. Note how the fence and small yard helps to create a clear delineation between public and non-public space. (Drawing by author)

Figure 3.13: Cross-section of a low-density (suburban) street scene. Note how the interface between the street and building is not well defined. (Drawing by author.)
3.7 Summary

This chapter has made a case for the close similarity between the morphology and urban and architectural design of historic Charleston and I’On. While these two areas are not identical, they do share comparative densities, road layouts, building forms and orientations, and the same architectural styles, especially when compared to a typical suburban area, such as the example which exists to the west of I’On. Therefore, Charleston and I’On share far more in morphology and design with each other than either does with a typical contemporary, suburban development.
CHAPTER FOUR
RESEARCH METHODS

4.1 Introduction

What is the nature of research in historic preservation? From its inception as a field of study in the nineteenth century, historical or interpretive research within a positivist paradigm is synonymous with historic preservation research. Bachelor’s and master’s degree programs in historic preservation, for instance, only teach interpretive research methodologies independent of critical theory, as they have from the time the first such degree program was created at Columbia University in 1973.1 Thus, the assumption is that an objective history of a building, site, or landscape can easily be assembled by simply collecting the “facts” about a structure or site in order to establish its significance. This perspective is little different from the positivist approach of historians at the turn of the twentieth century who wished to impart a “spirit of scientific accuracy and impartiality” (Williams, 1904, p. 4) to their work. For instance, Fiske Kimball (1935), a noted early preservationist involved in Colonial Williamsburg, only accepted “valid” scientific approaches in historical research and documentation of cultural landscapes that would be able to “evoke substantial accuracy and perfection” (p. 359) and singular truths. The codification of preservation practice in the 1960s, 1970s, and 1980s into government regulations, such as the National Register for Historic Places nomination, has saddled the field with an epistemologically antiquated approach that was long ago jettisoned by historians (Green, 1998). The reason for this situation is related to the manner in which national and international preser-

1. The National Council for Preservation Education maintains a web site at http://www.ncpe.us/ that lists most of the undergraduate and graduate preservation degree programs in the country. A look at the posted curricula and syllabi of these schools’ programs clearly reveals that the interpretive methodology is taught to the exclusion of other research methodologies, and often without any associated critical approaches to historiography.
vation doctrines inhibit the evolution and acceptance of new methodological approaches to research within the field (Wells, 2007).

This critique of preservation research methods makes the assumption that a positivistic historical research methodology alone is inappropriate for understanding the valuation of the older built environment (and by extension any part of the built environment). Many authors share this perspective that the traditional historical/interpretive methodology misses “the intricate relationship between cultural landscape history and place-specific memory” as Dolores Hayden (1995, p. 13) describes. The historical/interpretive approach tends to result in the “monumentalizing” of history into grand universal narratives through the “ossification of meaning in material cultural icons” as Lisa Breglia (2006) relates in her recent work on *Monumental Ambivalence* (pp. 3, 10). In reality, historic preservation seeks to maintain meanings “based on values generated by us” (Jokilehto, 2006, p. 3) that cannot exist as an objective characteristic independent of perception and interpretation. Breglia (2006) explains in more detail: “we can think of heritage as a particular kind of social relationship, a postmodern search for origins, if you like, that references—without being predicated upon—material culture” (p. 11). In other words, the meanings of heritage exist independently from the historical object, but yet the field continues to employ a research methodology that believes otherwise.

The historical/interpretive methodology misses sociocultural and phenomenological significance because it was never designed to understand culturally, socially, and phenomenologically constructed meanings from a contemporary population—it is the wrong tool for this purpose. If this situation was not the case, we would have historians practicing ethnographies and grounded theory as equals with anthropologists and sociologists. Clearly, such a substitution does not occur. The historical/interpretive methodology is important to understanding significance, but it is only one tool of many available to the researcher. This study, therefore, is part of a broad movement in historic preservation research that replaces the search for an objective “truth” with an understanding of subjective meanings embedded in pluralistic sociocultural contexts (Muñoz Viñas, 2005, p. 175). The key to
practicing research in this new manner, however, is selecting more appropriate methodologies than have traditionally been employed.

Because of these problems inherent in traditional historic preservation research, it is necessary to venture into other disciplines that are not traditionally considered the domain of historic preservation for methodological guidance. The social sciences offer a variety of approaches to identifying meanings and measuring values that are more appropriate choices for answering the questions postulated for this study. There are rather few examples of social science research methods applied toward historic preservation topics, however. Some exceptions, which are typically qualitative, include Melinda Milligan’s (2003) research on how homeowners anthropomorphize their historic homes, Lisa Breglia’s (2006) ethnography of the various cultures that intersect archaeological space, and Diane Barthel’s (1996) sociological comparison of the practice of preservation in the United States and Europe. Urban design and planning, which have traditionally embraced the social sciences to a far greater extent than has historic preservation, have many more examples, especially from a quantitative tradition, which is exemplified by Arthur Stamps’ (1999, 2000) research on the perception and valuation of urban form and design. Similar works include Daniel Levi’s (2005) analysis of the valuation of “fake” historic architectural design and William Whyte’s (2007/1980) classic research on the life of urban plazas. Within these examples and many others, there is no ready-made methodological template that was an appropriate fit for the research questions postulated in Chapter 1 of this study. Therefore, the methodological tools chosen for this study are an amalgam of best practices from a wide range of social science and built environment research.

Generally speaking, research methodologies fall into quantitative and qualitative traditions. The quantitative one is perhaps the oldest and is associated with the positivistic sciences organized by Auguste Comte in the early part of the nineteenth century (Moyer, 1992, p. 37).\textsuperscript{2} If the research ques-

\textsuperscript{2} More recently, quantitative methodologies incorporate a post-positivist approach to interpreting data that recognizes the difficulty in achieving direct access to “reality.”
tion requires measurable or quantifiable data, a quantitative approach is a good fit. If the research question seeks meanings or subjective data, then a qualitative approach is a common choice. A mixed-methodological approach combines quantitative and qualitative methodologies in a manner that will tend to increase the accuracy of the results through a triangulation process. One methodology may follow the other sequentially or be accomplished in parallel; the design is up to the researcher. Creswell (2003) offers a detailed explanation of how to design this mixed-methodological research.

A method is the tool with which data is collected; every method is associated with at least one methodology. For instance interviews, which are a method, are associated with the methodologies of ethnography, phenomenology, and grounded theory. Treatment and control groups are methods that are exclusively associated with the methodology of experimental research. As with any tool, methods must be chosen for their ability to answer a research question or questions. Thus, with a typical research project, the approach is top down, usually in this order:

1. Define the problem (contextualize the need for the research).
2. Define the research question(s) (relate to the problem).
3. Select a methodology for its ability to answer the research question(s).
4. Select methods for their ability to gather data relevant to answering the research question.

Guidance on the use of these methodologies and methods can be found within their parent disciplines. For instance, anthropology has a well-developed knowledge base for ethnographies (Spradley, 1979) while sociology has a knowledge base for grounded theory (Strauss & Corbin, 1997). Each discipline has developed their methodologies for specific purposes rooted in their epistemological traditions; knowing why these techniques were created can be useful in understanding their applicability for a particular research question. For instance, action research was developed out of a need to empower disadvantaged groups to take action for themselves (Greenwood & Levin, 2005) while grounded theory was developed in order to create sociological theories and places a high standard on validity through repeated visits to the field until no variations in data are observed.
4.2 Unit of analysis

The unit of analysis for this study is defined as full or part-time (at least three months out of the year) adult (eighteen years or older) residents of 1) the I’On new urbanist development located in Mt. Pleasant, South Carolina and 2) historic Charleston south of Broad Street in South Carolina. (Refer to Chapter 3 for a geographical boundary description and an in-depth morphological and design analysis of each of these study areas.) I’On represents the “new” case while historic Charleston represents the “old” case. As described in Chapter 3, these cases were chosen because the urban and architectural design of these two areas are extremely similar; only their age differs to a substantial degree. In the case of I’On, the entire built environment post-dates 1996 while for historic Charleston, the majority of the built environment pre-dates the Civil War. The majority of the natural (e.g., trees, living landscape elements) environment in I’On also post-dates 1996, with the exception of a number of mature live oaks that were saved during its construction (see Chapter 3 for details); historic Charleston’s natural environment has far more mature landscape elements, such as trees, some of which date to the early part of the nineteenth century. These two cases are compared and contrasted to reveal the differences and similarities of residents’ perceptions in order to answer the research questions postulated in Chapter 1.

All participants in this study were required to be age eighteen or older and capable of informed consent; all participants could leave the study at any time without repercussions. Participants in the qualitative portion of this study were provided an informational letter (see Appendix E) and consented by agreeing to participate in the study; the approved IRB protocol allowed for a waiver of documentation of consent. Participants in the qualitative portion of the study gave consent by clicking

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3. As historic Charleston is an important tourism destination, many of its residents do not live in the neighborhood for the complete year. For the purposes of this study, a minimum of three months residence per year is required to be familiar with either historic Charleston or I’On, respectively.
on the link to begin the online survey (informed consent information was also provided through a clearly labeled link). See Appendix E for more details.

4.3 Methodology

4.3.1 Overall mixed-methodological design

This research is designed as a comparative case study using a sequential mixed-methodology⁴ defined by Creswell (2003). The overall design is represented in Figure 4.1. The two methodologies are a phenomenology and a survey methodology performed in that order. The unit of analysis (see above) for these methodologies remains the same. Even though the ideas behind mixed-methodological research were pioneered by Campbell and Fisk in 1959, this approach is still somewhat novel in many fields. Over the past decade, however, its acceptance and application has grown significantly. For instance, the Journal of Mixed Methods Research was established in 2007, and several new works on the subject, such as those by Tashakkori and Teddlie (2003) and Creswell and Plano-Clark (2007), have helped to add increasing legitimacy to this approach. Regardless, the basic idea behind a mixed-methodological approach is the use of complementary qualitative and quantitative traditions to reveal new ways of interpreting and understanding various phenomena which otherwise would remain obscured if the qualitative and quantitative portions of the research were conducted independently (Creswell, 2007, p. 5).

![Figure 4.1: The basic sequential mixed-methodological approach used in this study.](image)

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4. While the term “mixed-methodology” correctly indicates that multiple methodologies are involved in this type of research design and is the term that this author uses, Creswell (2007, p. 5, 6) and others consider that the correct term should be “mixed methods.” The problem is that “method” is usually construed to mean a technique with which to collect data, while “methodology” has a broader, philosophical point of view which incorporates epistemological and ontological positions, such as those related to pragmatism.
The selection of a mixed-methodological approach for this study accomplishes several goals. One, it provides a pragmatic way of approaching real-world research through induction and deduction which is well suited for the study of people and behavior (Creswell, 2007, p. 10). Two, the nature of the research questions imply that they can be answered with either a qualitative or a quantitative method (p. 33). Moreover, jumping to a purely quantitative design would most likely have resulted in substantial measurement error due to a lack of understanding of the various phenomena being measured. (In other words, how can one measure a phenomenon without understanding what is being measured?) Lastly, the overall nature of this research calls for the “five justifications for combining quantitative and qualitative research” identified by Alan Bryman (2008, p. 262) in his survey of the reasons why several hundred authors chose mixed-methods for their research:

- **Triangulation**: using results of one method to help corroborate the results of another
- **Complementarity**: using one method to complement another to provide greater clarity or coherence of the results
- **Development**: the use of results from one method to inform another
- **Initiation**: the use of different methods to explore novel positions
- **Expansion**: broadening the nature of the research and increasing its depth

Interestingly Bryman’s work indicates that the major discipline employing mixed-methods is sociology (36%), with social psychology (27%) and management and organizational behavior (23%) being a close second and third. Other disciplines, such as geography and cultural studies came in at less than 10% each (p. 258). Very few of the authors came from the built environment disciplines.

In sum, the importance of using a mixed-methodological design in this research comes from pairing weaknesses with strengths; the weakness of qualitative research is that it cannot be generalized while the weakness of quantitative research is that it cannot produce meanings. By first generating the meanings which provide an interpretive context, the results of a later quantitative study can be
more fully understood an interpreted. The end goal, therefore, is to increase the validity and reliability of the entire research design through this pairing of weaknesses and strengths.

4.3.2 Sequence one: phenomenology

Like all qualitative methodologies, phenomenology originates in a particular discipline. Anthropology is the home of ethnography, sociology is the home of grounded theory, and philosophy is the home of phenomenology. Ethnography’s goal is to describe and reveal culture, grounded theory’s goal is to further explicate sociological theory, and the goal of phenomenology is to understand the meanings inherent in a highly personal experience. Ethnography and grounded theory are founded on group meanings whereas phenomenology is the experience of the self, or the experience inside one’s mind.

Phenomenology as a general concept is first credited to Kant (1934/1787) when he separated objects into “phenomena” and “noumena.” Phenomena alone is generated from perception and experience; noumena can exist purely as an intellectual concept without a concrete presence. Hegel (1937/1807) later refined these ideas into a study of consciousness and the phenomenon of the mind. The modern concept of phenomenology was developed by Husserl in the early part of the twentieth century and focuses on “being of the world” and transcendence, or the process of “conferring meaning by the knowing ego [and] reflecting on itself” (Ray, 1994, p. 119). The goal is to “attain the genuine and true form of the things themselves” (ibid.). This emphasis on the true and genuine quality of things has led to the label of “pure” phenomenology for Husserl’s methods.

As opposed to Husserl, Heidegger (Husserl’s student) focuses on “being in the world” because for Heidegger “being, as such, already is present in the world. … [P]resuppositions are not to be eliminated or suspended, but are what constitute the possibility or intelligibility of meaning” (Ray, 1994, p. 120). Most phenomenological researchers use Husserl and Heidegger as a division between the two major strands of phenomenology. While Husserl represents a pure or transcendental phenom-
enology, Heidegger stands for an interpretive or hermeneutical perspective. Husserl’s methodology insists that “phenomenological research is pure description and that interpretation (hermeneutics) falls outside the bounds of phenomenological research” (Van Manen, 1990, pp. 25, 26).

Phenomenology is the study of the essences of human perception; the goal is to find definitions for these essences based on perception and consciousness (Merleau-Ponty, 1962, p. vii). It is the “explication of phenomena as they present themselves to consciousness” (Van Manen, 1990, p. 9). Phenomenology seeks to describe and understand the preontological ramifications of “being in the world” (Heidegger, 2005/1924) and “experiential meanings as we live them” (Van Manen, 1990, p. 11). Seamon (1982) describes phenomenology as a “science of beginnings” that dispenses with “assumed notions and perspectives [in order to] return to the foundations of meanings, things, and experiences” (p. 119). According to Van Manen, phenomenology “differs from almost every other science in that it attempts to gain insightful descriptions of the way we experience the world pre-reflectively, without taxonomizing, classifying, or abstracting it” (p. 9).

Phenomenological research focuses on the experience. What is it like to be in a certain environment? What senses are called into action? What kind of feelings are engaged? For instance, Merleau-Ponty (1962) spends many pages describing the experience of the color red: “This red patch which I see on the carpet is red only in virtue of a shadow which lies across it, its quality is apparent only in relation to the play of light upon it, and hence as an element in a spatial configuration” (p. 4). Phenomenological research requires the researcher to become in part a philosopher, reflecting on the experience of the self and of others. Munhall (2007) describes the importance of “being phenomenological” and immersing oneself in the philosophy of phenomenology before even beginning to ask research questions: “We must know how to ‘be’ phenomenologic in our own being” (p. 147).

Phenomenology is a qualitative methodology focusing on meaning instead of causality and predictability. Seamon (1982, p. 123) describes the difference between existential phenomenology
and “conventional” or positivistic approaches in Table 4.1. Much of what he describes holds true for all qualitative methods.

Phenomenology was chosen for this study because of its focus on lived experience, the “life-world,” and the “foundations of meanings, things, and experiences” (Seamon, 1982, p. 119). Unlike other methodologies, phenomenology allows one to delve into the origin of perception before cognition interrupts the process and obscures core, fundamental feelings and subjective meanings. Because it completely relies on intuition, phenomenology is always focused on the initial, pre-cognitive, first experience (Moustakas, 1994, p. 52) and is well suited to understand people’s feelings for places because “emotions almost always play a role in every phenomenological experience” (Hesselgren, 1975, p. 116). Merleau-Ponty (1962) reminds us that “the world is not what I think, but what I live through” (p. xvii), which reinforces the idea that it is emotions that are important, rather than detailed, objective analyses of people’s concrete ideas. Lastly, phenomenology is well suited for questions regarding the subjective significance of historical places because such places engender feelings of “awe, wonder, beauty, and identity” (Elliott, 2002, p. 54).

4.3.3 Sequence two: survey methodology

According to Groves (2004), a survey methodology “seeks to identify principles about the design, collection, processing and analysis of surveys that are linked to the cost and quality of survey estimates” (p. 30). Surveys are typically based on samples from a population, especially where the population size is large and there is limited time and money, but they can also utilize a census. A census is appropriate where there is a small population size along with a high likelihood that the entire population can be solicited for participation. Surveys have enjoyed a long and widespread application in social science research since at least the first decades of the twentieth century. In the decades from the 1940s through the 1960s the Bureau of Applied Social Research at Columbia University, the National Opinion Research Center, and the Survey Research Center at the University of Michigan developed
Table 4.1: Analysis of “phenomenology vs. conventional scientific methodologies”
(table copied from p. 123 of Seamon’s (1982) article)

<table>
<thead>
<tr>
<th>Conventional [positivistic] methods:</th>
<th>Phenomenology:</th>
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<tr>
<td>(1) Standardly empirical—i.e., variables to be considered must be perceivable by one of the five senses, generally vision.</td>
<td>(1) Radically empirical—i.e., experiential; relies on all kinds of evidence, inner or outer, more or less tangible.</td>
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<td>(2) Emphasis on pre-definition—of theories, assumptions, hypotheses, concepts, terms.</td>
<td>(2) Emphasis on discovering the thing in its own terms, being open, letting the thing tell what it is, what its parts are, how they fit together. Predefinitions are to be avoided at all costs.</td>
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<td>(3) Reductionistic. The phenomenon is made equal to its operational definition.</td>
<td>(3) Holistic; seeks to maintain the uniqueness of the phenomenon as student seeks for generalizations.</td>
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<tr>
<td>(4) Primarily quantitative. To the greatest extent possible the phenomenon should be described in logical and mathematical terms.</td>
<td>(4) Qualitative only. Interpretive. Descriptive. The emphasis is on what and how rather than why.</td>
</tr>
<tr>
<td>(5) Emphasizes causality, which may lead to prediction and control.</td>
<td>(5) Dubious about causality. Does it really exist? Takes note that life may be one vast, interconnected, interpenetrating synergism. Can causality happen in such a system?</td>
</tr>
<tr>
<td>(6) Emphasizes certitude. Facts established should be certain and immutable.</td>
<td>(6) Dubious about certitude. Recognizes that existence is ambiguous, filled with light and shadow. Description perhaps can be only imprecisely precise.</td>
</tr>
<tr>
<td>(7) Predictive. The main aim of study is to get facts that will yield laws predicting actions and behaviors.</td>
<td>(7) Dubious about prediction. It is really possible, or an illusion of humankind’s vanity?</td>
</tr>
<tr>
<td>(8) Repeatability and public verifiability. To be true, must be repeatable, able to be checked by independent confirmation.</td>
<td>(8) Public verifiability but in terms of experience. Is this true experientially for you? Does this pattern describe your experience or the experience of others with whom you can empathize?</td>
</tr>
<tr>
<td>(9) Independence of observers. The phenomenon under study must be explored in such a way that the data are not influenced by the idiosyncrasies of the student.</td>
<td>(9) Dependence on observers. The idiosyncrasies of the student are crucial and often provide important and unique insights that might not be discovered by someone else.</td>
</tr>
<tr>
<td>(10) The aim is explanation—the search for the genesis and root causes of an occurrence; a process of finding out why something happens. Leads to methodologies of inquiry which may become instruments, tools, for the future control of history.</td>
<td>(10) The aim is understanding—the coming to see more deeply and more respectfully the essential human nature of human existence and the world in which it unfolds. Seeks the meaning of events, not their causes.</td>
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the essential methodologies which are still used today in survey research (Converse, 1987). Typically quantitative in application and thus associated with correlational research, surveys measure people’s attitudes by associating attitudinal orientation with a particular variable. As such, it has traditionally held to a positivistic paradigm that assumes reality can be reduced to measurable phenomena and that, when analyzed, the results should accurately represent an objective truth. Objectivity and the separation of the researcher from the phenomena are always assumed and required, unlike qualitative research that often seeks to obscure the barrier between the subject and researcher. Survey research, therefore, incorporates the “scientific method” of laws, theories, hypotheses, cause and effect relationships, and repeatability (i.e., intersubjective testability) (Singleton & Straits, 2005, pp. 14-39) along with the concept of a probability sample, which if defined correctly, should represent a specific population within a known probability of error (pp. 111-152).

With the rise of post-modernism in the latter half of the twentieth century, some social scientists questioned the positivistic roots of quantitative social science research, including survey research. While the essential elements of the scientific method—namely hypotheses, cause and effect relationships, and repeatability—were retained, the concept of the supposed objectivity of the researcher was attacked. This situation gave rise to alternative paradigms such as post-positivism that shifted positivism’s realist ontology toward critical realism and while still lauding objectivity, openly accepted the possibility that true objectivity is not obtainable, and therefore “truth” may also be elusive (Guba & Lincoln, 1994, p. 110). For instance, a problem with correlational research is the frequency with which “accidental relations” appear. Such a circumstance can occur in regression equations that exhibit spurious relationships such as the number of storks and the birth rate in certain geographical regions (Sayer, 1992, p. 193). Clearly, the “reality” shown in this case is not what it seems. An interpretive act is required to convert the results of such an analysis into meaningful infor-

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5. For a census the sample frame is identical to the population, so no sample is utilized. In addition, there is also no inference from the sample to the population with a census.
mation, a situation which positivism rejects, but post-positivism accepts. In a similar fashion, a positivist approach assumes that all respondents interpret survey questions in the same way while a post-positivist approach recognizes that people may in fact have different interpretations (Foddy, 1993, p. 12).

Survey research should incorporate, at a minimum, the following elements: 1) a probability sample taken to represent a known population or a census; 2) a survey instrument or questionnaire; and 3) the collection of answers to questions that can be quantified, coded, and analyzed (Singleton & Straits, 2005, p. 219). More specifically, survey research makes ten assumptions according to Foddy (1993, p. 13):

1. The researcher has clearly defined the topic about which information is required.
2. Respondents have the information that the researcher requires.
3. Respondents are able to access the required information under the conditions of the research situation.
4. Respondents can understand each question as the researcher intends it to be understood.
5. Respondents are willing (or, at least, can be motivated) to give the required information to the researcher.
6. The answers that respondents give to a particular question are more valid if they have not been told why the researcher is asking the question.
7. The answers that respondents give to a particular question are more valid if the researcher has not suggested them to the respondents.
8. The research situation per se does not influence the nature of the answers given by respondents.
9. The process of answering questions per se does not change the respondents’ beliefs, opinions, habits, etc.
10. The answers that different respondents give to a particular question can be meaningfully compared with one another.

In order to improve measurement reliability, focus groups are typically part of the process of vetting the wording of questions and improving the construction of questionnaires (Rea & Parker, 1997, p. 82-94) as is repeatedly testing the resulting instrument (pp. 28, 29). The data analysis varies depending on if the survey is simply descriptive or explanatory. In the former case, distribution analyses are adequate, while the latter case may involve multivariate statistical methods with the goal of establishing cause and effect relationships (p. 223).

In selecting the second methodology to use for this study, the author determined the results must be measurable and generalizable. Since “measurement is the process of assigning numbers or la-
bels to units of analysis in order to represent conceptual properties” (Singleton & Straits, 2005, p. 76), a quantitative (i.e., discrete, countable) methodology and corresponding method is essential. Generally speaking, these quantitative measures consist of nominal, ordinal, and ratio measures (p. 86-90). A survey methodology was chosen because it is a good technique “for gathering information from [a sample of] entities for the purposes of constructing quantitative descriptors of the attributes of the larger population of which the entities are members” (Groves, 2004, p. 2). A census was employed with this research, meaning that while there was no inferences (e.g., confidence intervals) involved, the external validity is highly dependent on response rates and minimal self-selection bias.

4.4 Methods

4.4.1 A phenomenological “method”

Attempts at creating a systematic method for phenomenological research have been stymied by problems in converting a philosophical outlook on the world into discrete methods. This issue is especially troublesome since phenomenology is supposed to force oneself to be liberated from prescribed steps (Munhall, 2007, p.151). As Munhall asks, “How could we possibly come to understand the meaning of being human in experience if we were to follow linear, prescribed steps that create boundaries to exploration?” (p. 152). Notwithstanding this issue, Van Manen (1990) proposes a general “methodological structure for human science research” (pp. 30, 31):

(1) turning to a phenomena which seriously interests us and commits us to the world;
(2) investigating experience as we live it rather than as we conceptualize it;
(3) reflecting on the essential themes which characterize the phenomenon;
(4) describing the phenomenon through the art of writing and rewriting;
(5) maintaining a strong and oriented pedagogical relation to the phenomenon;
(6) balancing the research context by considering parts and whole.

Munhall goes a step further and does, in fact, create a flexible, but structured method for phenomenological research. It is based on what began as a process description and later grew into a method based on a pragmatic need to guide students and layout research proposals. Munhall’s method
is described in Table 4.2. The phenomenology conducted for this study employed Munhall’s method as a general process for directing the research.

Interviews with informants provided the majority of data for the phenomenology; these informants were purposefully selected to 1) be at least part-time residents of either I’On or historic Charleston and 2) be familiar with their neighborhood and regularly walk in it. A photo-elicitation process supplemented the interviews. As Douglas Harper (2003) explains, “the power of the photo lies in its ability to unlock the subjectivity of those who see the image differently than the researcher” (p. 195). Photo elicitation, therefore, is a key method in understanding the subjective experience of a respondent in a particular environment. The informants were provided with disposable cameras and instructions to take photographs of objects or landscapes in their neighborhood that were particularly meaningful to them. Upon being developed, the photographs were used to guide the interview process. Refer to Chapter 5 for more details and an analysis of the collected data.

4.4.2 Web-based survey instrument

The meanings from the phenomenological portion of this study (see Chapter 5) were used to inform the development of questions for a web-based survey instrument administered through the SurveyMonkey.com service. Skip patterns were created based on previous entries in order to reduce the amount of time a respondent had to spend taking the survey. As with the phenomenology, the survey instrument used a photo elicitation process using images captured by the informants in the qualitative phase of the study. In total, the maximum number of questions presented to an informant was 29. Most informants answered fewer questions than this due to the skip-pattern logic in the survey instrument.
Table 4.2: Munhall’s Method for Phenomenological Inquiry  
*(table copied from pp. 156, 157 of Munhall’s (2007) paper)*

| I. Immersion | A. Describe and interpret the philosophical assumptions and underpinnings of a particular phenomenological experience.  
B. Exemplify the meaning of phenomenological concepts.  
C. Elucidate the worldview of phenomenology as an approach to answering questions. (If you know the experience in which you are interested, use it as an example.) |
|---------------|-------------------------------------------------------------------------------------------------|
| II. Coming to the phenomenological aim of the inquiry | A. Articulate the aim of your study.  
B. Distinguish the experience that is part of your study.  
1. Describe, if circumscribed experience, or delimit context, if broad experience.  
2. Articulate the situated context that is available to you in the moment.  
C. Decenter yourself and come to “unknow.”  
1. Reflect on your own beliefs, preconceptions, intuitions, motives, and biases so as to decenter.  
2. Adopt a perspective of “unknowing.”  
D. Articulate the aim of your study in the form of a phenomenological question. |
| III. Existential inquiry, expressions, and processing* | A. Listen to self and others; develop heightened attentiveness to self and others.  
B. Reflect on personal experiences and expressions.  
C. Provide experiential descriptive expressions: “the experiencer.”  
D. Provide experiential descriptive expressions: “others engaged in the experience.”  
E. Provide experiential descriptive expressions: the arts and literature review.  
F. Provide anecdotal descriptive expressions: as experience appears.  
G. Record ongoing reflection in your personal journal. |
| IV. Phenomenological contextual processing* | A. Analyze emergent situated contexts.  
B. Analyze day-to-day contingencies.  
C. Assess life-worlds. |
| V. Analysis of interpretive action | A. Integrate existential investigation with phenomenological context processing.  
B. Describe expressions of meaning (thoughts, emotions, feelings, statements, motives, metaphors, examples, behaviors, appearances and concealments, voiced and nonvoiced language.  
C. Interpret expressions of meaning as appearing from integration. |
| VI. Writing the phenomenological narrative | A. Choose a style of writing that will communicate an understanding of the meaning of this particular experience.  
B. Write inclusively of all meanings, not just the “general” but the “particular.”  
C. Write inclusively of language and expressions of meaning with the interpretive interaction of the situated context.  
D. Interpret with participants the meaning of the interaction of the experience with contextual processing.  
E. Narrate a story that at once gives voice to actual language and simultaneously interprets meaning from expressions used to describe the experience. |
| VII. Writing a narrative on the meaning of your study | A. Summarize the answer to your phenomenological question with breadth and depth.  
B. Indicate how this understanding obtained from those who have lived the experience calls for self-reflection and/or system reflection.  
C. Interpret meanings of these reflections to small and large systems within specific context.  
D. Critique this interpretation with implications for political, social, cultural, health care, family, and other social systems. |

*Concurrent processes*
The questions associated with each independent variable (see section 4.5.2) were accompanied by a photo to increase measurement validity. No photographs were used in association with the dependent variables. There are three categories of photographs for the independent variables:

1. Photographs of historic Charleston taken by informants
2. Photographs of I’On taken by informants
3. Control photographs (images of the suburban landscape of Mt. Pleasant, proximate to I’On) taken by the author

Due to skip pattern logic, the survey instrument only presented photographs of Charleston to respondents from Charleston; in a like manner, only those informants from I’On were presented with photographs from I’On.

Informants from the qualitative sequence in the study provided the photographs used in the survey instrument in association with the independent variables. The selection of these photos was a two-stage process: in the first stage, the author selected five photos that represented specific themes as related by the informants; in the second stage, a focus group reviewed these photographs and recommended one of the photographs for presentation to respondents in the survey instrument. Members of the focus group were aware that at any time, they could reject all five photographs or recommend that specific photographs be retaken. These latter options were not exercised by the focus group.

The author took the third group of control photographs—suburban images of the traditional, low-density neighborhoods found in Mt. Pleasant near I’On. The focus group was instructed that these control photographs should represent an “anti” Charleston or I’On: new places that should not exhibit layered landscapes and without apparent mystery and a sense of discovery.

In a similar fashion, a focus group vetted the wording of questions and the design of the survey in order to improve the readability and comprehension of the survey instrument as well as to minimize measurement error. This process resulted in the rewording of several questions. Ten people
then tested the resulting on-line survey in order to identify any potential problems. Any errors or issues were corrected before the final survey went live.

4.5 Variables

A list of all demographic variables is in Table 4.3, a list of independent variables is in Table 4.4, and a list of dependent variables is in Table 4.5. An example of the on-line survey is in Appendix D.

4.5.1 Relationship between independent and dependent variables

In the theoretical review of place attachment literature (see Chapter 2), it is clear that place attachment is dependent on an individual’s perception of his or her environment. Therefore, increased levels of place attachment (Y) should positively correspond to increased perception of valuation of the measured elements (X) of the townscape. See Figure 4.2 for a graphical example of this relationship.

![Figure 4.2: Example relationship between independent (X-axis) and dependent (Y-axis) variables](image)
4.5.2 Independent variables

A set of basic demographic variables, such as age, sex, and location of residence was created for the survey instrument. The following variables are treated as independent variables in Table 4.3:

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age range of respondent</td>
<td>Interval</td>
</tr>
<tr>
<td>Sex</td>
<td>Sex of respondent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Race</td>
<td>Race of respondent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Ethnic</td>
<td>Ethnicity (Hispanic or Latino)</td>
<td>Nominal</td>
</tr>
<tr>
<td>Income</td>
<td>Income range of respondent</td>
<td>Interval</td>
</tr>
<tr>
<td>ResPlace</td>
<td>Location of residence (I’On or historic Charleston)</td>
<td>Nominal</td>
</tr>
<tr>
<td>ResChar</td>
<td>Number of months out of the year residing in I’On or historic Charleston</td>
<td>Nominal</td>
</tr>
<tr>
<td>ResLength</td>
<td>Total length of residents in I’On or historic Charleston</td>
<td>Interval</td>
</tr>
</tbody>
</table>

The meanings shared by informants in the qualitative sequence of this study informed the development of additional independent variables. A list of the meanings and the associated variables can be found in Table 4.4. These independent variables are defined in terms of people’s affective response and/or valuation of certain physical characteristics of their environment. Each independent variable is a scale, ordinal, or nominal variable. There was a three-step process for creating each variable: 1) a list of independent variables was created using informants’ meanings; 2) the survey question was worded to measure a given concept; and 3) the survey question was subjected to one or more focus groups to increase reliability and validity.

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6. Used to conform to the manner in which the United States census collects data.
### Table 4.4: Independent (perception) variables

<table>
<thead>
<tr>
<th>QUALITATIVE THEME (see Chap. 5)</th>
<th>INDEPENDENT VARIABLES (type)</th>
<th>SUPPORT IN THE LITERATURE (see Chap. 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal: Measure aesthetic preferences to specific photographs of historic Charleston, I’On, and controls</td>
<td>(All ranked individually as ordinal; Likert scale)</td>
<td>Cullen (1961/2007); Bell (1999); Smith (2003); Wilson (1984); Orians (1986); Appleton (1975); Ulrich (1979, 1981, 1984); Kaplan and Kaplan (1989); Thayer and Atwood (1978); Herzog (1989); Sheets and Manzer (1991); Herzog and Chernick (2000); Kuo, Bacaicoa, and Sullivan (1998); Zhang et al. (2007); Sullivan et al. (2004); Heerwagen and Orians (1993); Lohr and Pearson-Mims (2006); Real et al. (2000); Marcus and Barnes (1999); Stamps (1999, 2000).</td>
</tr>
<tr>
<td>Elements of buildings</td>
<td>(All ranked individually as ordinal; Likert scale)</td>
<td>Stamps (1999, 2000); Nasar (1994); Herzog and Gale (1996).</td>
</tr>
<tr>
<td>Landscape layers, mystery, and discovery</td>
<td>1. Perception of layers (ordinal; Likert scale)</td>
<td>Salingaros (2006); Kaplan et al. (1998); Kaplan and Kaplan (1989); Hagerhall (2000); Herzog and Miller (1998); Lynch (1981).</td>
</tr>
<tr>
<td>Unseen effort</td>
<td>1. Perception of unseen effort (ordinal; Likert scale)</td>
<td>Nassauer (1995); Lay and Reis (1994); Hagerhall (2000); Imam and Motloch (1997).</td>
</tr>
<tr>
<td>Patina</td>
<td>1. Valuation of patina (ordinal; Likert scale)</td>
<td>Mitgrom, &amp; Jodelet (1976); Galindo and Hidalgo (2005); Freewald (1989); Herzog and Gale (1996); Herzog and Shier (2000).</td>
</tr>
<tr>
<td>Reading the landscape</td>
<td>1. Ability of certain landscape or building elements to tell a story of their origins (ordinal; Likert scale)</td>
<td>As method: Meinig (1979), Lewis (1970); Kniffen (1965); Glassie (1969); Jackson (1984); Spim (1998).</td>
</tr>
<tr>
<td>Spontaneous fantasy</td>
<td>1. Previous experience of spontaneous fantasy — general (ordinal; Likert scale)</td>
<td>Lowenthal (1998); Bell (1999); Riley (1997).</td>
</tr>
<tr>
<td>2. Previous experience of spontaneous fantasy — in case study area (ordinal; Likert scale)</td>
<td></td>
<td>Lowenthal (1998); Bell (1999); Riley (1997).</td>
</tr>
<tr>
<td>3. Experience of spontaneous fantasy from presented photo (ordinal; Likert scale)</td>
<td></td>
<td>Lowenthal (1998); Bell (1999); Riley (1997).</td>
</tr>
</tbody>
</table>
4.5.3 Dependent variables

The survey used the question wording established by Williams and Roggenbuck (1989), Williams et al. (1995), and Williams and Vaske (2003) for attachment measures of general attachment, dependence, identity, and rootedness. These studies tested a large number of questions in order to accurately measure several dimensions of place attachment including general attachment, dependence or substitutability, identification, and rootedness. Although these studies focused on outdoor recreation, their results should be applicable to urban areas as the general nature of place attachment does not appear to be substantially different depending on context (at least no studies seem to indicate there is a difference). Moreover, the author has not been able to locate similar studies which have attempted the same rigorous treatment as applied to urban areas. Table 4.5, below, gives a basic description of these variables.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>General place attachment</td>
<td>Ordinal (Likert scale)</td>
</tr>
<tr>
<td>Place dependence</td>
<td>Ordinal (Likert scale)</td>
</tr>
<tr>
<td>Place identity</td>
<td>Ordinal (Likert scale)</td>
</tr>
<tr>
<td>Place rootedness</td>
<td>Ordinal (Likert scale)</td>
</tr>
</tbody>
</table>

4.6 Samples (quantitative)

For this study the sample frame and the population are equivalent and consist of the two units of analysis for this study: 1) residents of historic Charleston and 2) residents of I’On. Determining the population size is somewhat difficult as there are no known sources of exact population counts for these geographically-bounded areas. Using United States census data from 2000, it is possible to estimate the population for the historic Charleston case study, however. The study area consists of block groups 2 and 3 from tract 1 and block groups 1 and 2 from tract 2. An area calculation indicates that the case study area consists of 63% of the total area of these these block groups (refer to Figure 4.3).
Adding up the adult population (i.e., age 18 or older) for these block groups and then multiplying by the area represented by the case study (63%) results in an estimated population of 1,874 (see Table 4.6). This calculation assumes that the population density and distribution are constant throughout the area being compared, however.

![Figure 4.3: Comparison of case study area and census block groups. The case study area is 63% of the size of all four census block groups that comprise the study area.](image)

<table>
<thead>
<tr>
<th>Block group</th>
<th>Adult (18+) population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tract 1, block group 2</td>
<td>606</td>
</tr>
<tr>
<td>Tract 1, block group 3</td>
<td>941</td>
</tr>
<tr>
<td>Tract 2, block group 1</td>
<td>569</td>
</tr>
<tr>
<td>Tract 2, block group 2</td>
<td>858</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,974</strong></td>
</tr>
<tr>
<td><strong>Area adjustment factor</strong></td>
<td><strong>0.63</strong></td>
</tr>
<tr>
<td><strong>Estimated total for case area</strong></td>
<td><strong>1,874</strong></td>
</tr>
</tbody>
</table>
Calculating the population for I’On is more difficult because the latest accurate census data is from 2000 when I’On was largely unbuilt; using this data would result in a serious under-representation of the population. Because of the problem in using census data, an alternate method was chosen based on the number of houses in the development that appeared to be occupied. A raw count of plots in I’On comes to 720 and of these approximately 50 are empty and not built upon (mostly in the northwest corner of the development). That leaves approximately 670 individual houses that have been built in I’On. While soliciting for respondents, the author walked the entirety of the I’On development. In this process, it was conservatively noted that approximately 10% of the houses are not occupied (typically with a “for sale” sign in the front yard). Therefore, it would be relatively accurate to say that I’On is composed of 600 occupied houses. Assuming that each house is occupied by two adults, on average, a conservative population estimate would be that 1200 adults live in I’On.

A multimode approach was used to solicit for survey participants in I’On and historic Charleston in order to maximize response rates and reduce self-selection bias. The methods that were employed included the following activities:

1. *Solicitation through a homeowners association.* The Charlestowne Neighborhood Association twice sent an e-mail to approximately 300 of its members while the I’On Assembly included a brief mention of the survey in their electronic newsletter to all I’On households (approximately 600). Examples of these solicitations are in Appendix C.

2. *Solicitation through a local arts organization.* The I’On Trust, a local arts organization serving the I’On community sent an e-mail solicitation to approximately 250 members.

3. *Door-to-door flyers.* The author placed approximately 600 flyers on the doorknobs of each occupied house in I’On. Approximately 1,000 flyers were distributed through historic Charleston, south of Broad Street. An example of the flyer is in Appendix C.

4. *Local establishments.* The author left 50 flyers each in several retail businesses in I’On’s downtown area.
5. News articles. Clemson University distributed a press release about the survey, including the URL to participate, to local media outlets in the Charleston area. The press release was also available online.

4.7 Data analysis

For the phenomenology, the author recorded the audio of each interview and transcribed the responses for further analysis. The analytical frameworks of Munhall (2007) and Van Manen (1990) were used to analyze the textual data with a focus on integrating the author’s auto-phenomenological research (through literature and personal experiences), describing expressions of meaning, and interpreting meanings within specific contexts. The goal was to uncover themes as a way to describe the “structures of experience” (Van Manen, 1990, p. 79) using a “wholistic or sententious approach”, a “selective or highlighting approach,” and, where necessary a “detailed or line-by-line approach” (p. 93). As part of Munhall’s phenomenological method, the author listened to the interviews repeatedly to extract particular essences from the narrative.

Quantitative data in the form of dependent and independent variables derived from the survey instrument was processed using the SPSS version 16 software program. Because all data consisted of nominal or ordinal variables with no continuous variables, the choice of techniques was limited to non-parametric statistics. Chi-square tests were used to determine if there were any statistical differences in the responses of Charleston or I’On residents to the same questions. Binary logistic regression provided an opportunity to understand the degree of correlations between independent and dependent variables. Lastly, Spearman’s rank correlation coefficient was used to help explore which variables might have meaningful correlations.
4.8 Summary

The preceding chapter discussed the design of a research study in order to answer the questions outlined in Chapter 1 that revolve around understanding the nature of age value. In order to ascertain what the affect of physical age is on the perception and valuation of urban residential neighborhoods, a comparative case employing a mixed-methodology approach was used. Case one is historic Charleston, South Carolina, south of Broad Street and case two is the I’On new urbanist development in Mt. Pleasant, South Carolina; residents of these neighborhoods are the units of analysis. The particular methodologies used in this study are a phenomenology and a survey methodology, employed in that order. Data was gathered via interviews and a survey instrument. The phenomenology was a critical first step in this study as it provided essential meanings to inform the development of independent and dependent variables and a survey instrument with the underlying assumption that place attachment is dependent on people’s perception and valuation of the built environment.
CHAPTER FIVE
QUALITATIVE RESEARCH FINDINGS

5.1 Introduction

This chapter reveals the qualitative meanings from five residents of I’On and six residents of historic Charleston. It is written in the first person in order to convey human action, to show an emotional connection with the informant, and to conform to narrative traditions in qualitative studies (Creswell, 2003, p. 197). The phenomenology described herein informed a significant part of the theoretical framework (see Chapter 2) for the overall study and also helped in developing a subsequent quantitative survey instrument (see Chapter 6). Phenomenologies offer some of the best tools for an in-depth examination of “lived and felt space” or the pre-reflective experience of being in particular environments (Van Manen, 1990, p.102), which is why this methodology was chosen to explore the experience of being in I’On and historic Charleston. Since the valuation of the built environment stems from an intimate and primarily visual experience, phenomenology is superior to other methodologies because it alone “seeks meanings from appearances” and focuses on the essential properties of physical materials as Moustakas elucidates (1994, p. 58). The overall methodological design for this phenomenology is described in detail in Chapter 4.

I purposely selected my informants for two primary characteristics: 1) the individual had to be a resident of either I’On or historic Charleston and 2) had to regularly walk in his or her neighborhood and be familiar with the particular area. Upon introducing the study to the informant and receiving consent to participate, I provided him or her with a disposable 35 mm camera (with 27 exposures) along with open-ended instructions to take photographs of objects or land-
scapes of any scale, without people or animals, that were particularly meaningful. I collected a first name, phone number, and e-mail address in order to contact the informant for an interview after the photographs had been developed; a letter corresponding to each camera was linked to the informant. When the film was exhausted, the informants then mailed the disposable cameras back to me using pre-addressed, postage-paid envelopes. After I developed the film, I then scheduled an interview with each informant.

The interviews used open-ended questions that sought the experiential essences of being in either I’On or historic Charleston, south of Broad Street. I utilized the photographs that each informant took in the interview process to elicit responses and trigger the informant’s memories (see Harper, 2003). The informants used the photographs to guide their responses, and in this manner, they were fully aware that they controlled both the specific direction of responses as well as the overall length of the interview. On average, each interview was approximately thirty to forty-five minutes. The following questions guided the general direction of the specific, contextual questions that I used in the interview process:

(1) What physical characteristics of this place positively and negatively affect attachment?

(2) How is attachment influenced by the age of this place?

(3) How does an imaginary history of a place that a person has created influence attachment?

I recorded the audio of each interview and transcribed the responses for further analysis. As part of Munhall’s (2007) phenomenological method, I listened to the interviews repeatedly to extract particular essences from the narrative and to develop themes.

The analytical frameworks of Munhall (2007) and Van Manen (1990) were used to analyze the textual data with a focus on integrating my auto-phenomenological research (through literature and personal experiences), describing expressions of meaning, and interpreting meanings.
within specific contexts. The goal was to uncover themes as a way to describe the “structures of experience” (Van Manen, 1990, p. 79) using a “wholistic or sententious approach”, a “selective or highlighting approach,” and, where necessary a “detailed or line-by-line approach” (p. 93).

5.2 The shared experience of place

Residents of historic Charleston and I’On perceived and valued their neighborhoods in substantially identical ways. For instance, in both places informants experienced their neighborhood in terms of discrete elements that were layered. Surprisingly, the buildings, while important, did not play as large of a role in the experience of place as one would expect—especially in Charleston where popular media focuses primarily on historic buildings while paying far less attention to the spaces in-between the buildings. Rather, it was landscape elements that the informants most valued and which engendered the greatest degree of attachment.

5.2.1 Elements of landscape

Historic Charleston and I’On are composed of varied landscape elements such as trees, fountains, gardens, iron fences, masonry walls, and ornamental gates. All of these elements were very important for my informants and made the difference between a place which was valued and one which was simply ordinary. Sally, an I’On resident, told me that she is enamored about a particular oak tree in front of a house in her neighborhood because “it just kind of warms up the house” (Figure 5.1) while Cindy marveled at how the oaks that the developers had saved cover the street in some parts of I’On (Figure 5.2).
Figure 5.1: Oak tree that “warms up the house” in I’On (source: Sally)

Figure 5.2: Coveted old oaks in I’On (source: Cindy)
Several informants mentioned that they loved the fountains in the neighborhoods because of the sound they made. For Mary, a Charleston resident, it is a “soothing and beautiful sound.” Mandy’s photograph of a fountain in I’On (Figure 5.3) is a good representation of the kinds of fountains that people in Charleston and I’On enjoy to a great extent. While the fountain in I’On is in a public space, some fountains are not so easily seen and must be discovered through some modicum of effort. Many informants tried to take photographs of fountains through gates or over fences (Figure 5.4); in these cases the fountain was not always clearly evident in the photograph. This sense of discovery is an important theme which will be explored later in this chapter.

Public parks and private gardens were also important to my informants. For instance, informants in Charleston often mentioned Whitepoint Gardens, near the Battery in Charleston. Roger, for instance, referred to this park as “a beautiful, wonderful place to go” because of its “oak trees, with all their long trunks and big branches that were planted 250 years ago” (Figure 5.5). Sally liked the gardens in I’On because they have a “feel that you see in older neighborhoods where people have come in and planted a tree here and there as they felt like it” (Figure 5.6) instead following a “cookie-cutter” plan. Sam, a lifelong resident of Charleston, told me that he took a photo of one of the gardens in historic Charleston (Figure 5.7) because “peeking in over the fence [and] looking in” to take pictures and marvel at the scene that lay beyond is an enjoyable activity. Gardens, however, are not necessarily a formal space as Sam represented, but rather are considered by some informants as impromptu places that become gardens because of their treatment. Paul, from Charleston, described to me that when he took a photo of a driveway, he did so because “it looks almost like a garden even though it’s a driveway” (Figure 5.8). This theme of utilitarian spaces becoming aesthetic ones is an important one and will be described later in detail.
Figure 5.3: Fountains are valued in I’On (source: Mandy)

Figure 5.4: Most fountains are hidden and need to be discovered, such as here in Charleston (source: Phillip)
Figure 5.5: A “beautiful, wonderful park” in Charleston (source: Roger)

Figure 5.6: The gardens in I’On have a “feel that you see in older neighborhoods” (source: Sally)
Figure 5.7: These hidden gardens are important for residents of Charleston (source: Sam)

Figure 5.8: In Charleston, even driveways can be gardens (source: Paul)
Fences are another landscape element that my informants mentioned with great regularity. Curiously while both Charleston and I’On have wooden fences, only the metal (typically cast iron, wrought iron, or steel replicas) elicited much interest from my informants. An example is Sam who shares with me that the ironwork in Charleston “is so beautiful [for its] design” (Figure 5.9). Metal fences in I’On are represented by the photograph taken by Cindy (Figure 5.10). Masonry walls are common in historic Charleston, but they are also found to a lesser extent in I’On. For Roger, these masonry walls in Charleston are valued because “they’re not a standard brick wall [because they have] different shapes and different headers and this [one] has a pillar [and] a little monument on top—it’s very cool and Colonial” (Figure 5.11).
Figure 5.10: Metal fences are also valued in I’On (source: Cindy)

Figure 5.11: Masonry walls in Charleston are “very cool and Colonial” (source: Roger)
My informants photographed many gates in Charleston and I’On. For instance, Roger likes an elaborate gate in Charleston because it is “creative and unique and beautiful” (Figure 5.12) while Sally enjoyed the metal gate of her friend’s home in I’On (Figure 5.13). Gates, however, played a far greater role than simply their aesthetic qualities. For my informants they represented a kind of mental challenge and spurred the imagination into wonder about what lay beyond the gate. Thus, the gates proved to be mental catalysts of sorts that caused an unconscious reaction to wonder about elements that could not be seen and to motivate the informant to want to explore.
Figure 5.13: A valued metal gate in I’On (source: Sally)

Figure 5.14: Buildings, when mentioned, were “gorgeous” or “charming” as in Charleston (source: Dave)
My informants did talk about the buildings in their neighborhoods, but again not to the extent that landscape elements were discussed. Typically the reactions were along the lines that a building was “gorgeous” or “charming” usually for its ornamentation and detailing, such as found in Figure 5.14. Specific elements of buildings that informants found important included doors, windows, shutters, and especially balconies. Dave described to me how he found a “beautiful, handsome door [that] is evocative of old Charleston, old Savanna—Antebellum times when there was a little bit of mystery in things” (Figure 5.15). For Sam, Charleston’s identity comes in part from the large number of buildings that have “real wood” shutters as opposed to plastic ones. He muses why more people do not consider stealing these shutters because he considered them to be so valuable (Figure 5.16).

Of all the parts from which buildings are constructed, my informants mentioned balconies more often than any other element. Balconies are essentially odd anachronisms in the modern world. They are not a porch and many have little function other than as a frame to look out upon the world. For my informants, however, balconies are a staging area for the imagination. Like mnemonic devices to some imaginary place, a balcony causes one’s mind to drift into possibilities of alternative modes of existence. This phenomenon is what happened to Mary when she snapped a picture of a small balcony on a building (Figure 5.17). While she appreciated it because balconies are hard to find in suburbia, it was the vision that came into her head as she took the photograph that was most meaningful: “You can just imagine someone walking out there [on the balcony] with a glass of wine looking out onto the parks, like Whitepoint Gardens which is right here.”
Figure 5.15: A “beautiful, handsome door [that] is evocative of ... Antebellum times” in Charleston (source: Dave)

Figure 5.16: Sam wonders why people do not steal these shutters in Charleston because they are so valuable to him (source: Sam)
5.2.2 Layers in the landscape, discovery, and the unexpected

Historic Charleston and I’On exhibit a complexity to their environment that is significantly different from a typical low density, suburban residential development. In a suburban residential area, homes are arranged in regular patterns that share the same appearance, form, and setback. Streets are wide and curvilinear while sidewalks may be absent. Moreover, the landscape elements are far and few between—it is very easy to spot each house and there are few, if any, unexpected landscape elements and little or no layering. The landscape is homogenous, regular, expected—in other words, bland, or as my informants relate to me, “boring.” Mary, from I’On, recognized that the houses in her neighborhood are “right up against each other” without large yards, but she appreciates the “tiny little gardens.” She told me enthusiastically “how happy I am to be here and how wonderful it is to take walks around here. I moved here from the suburbs and it’s a much better feeling.” Many informants from Charleston and I’On expressed to me that their neighborhoods felt better that the typical suburban neighborhood. The reasons why this was the
case are related to how they experienced their environment as landscape layers that encouraged a process of mentally peeling each layer back to reveal what lay beyond. This sense of discovery often led to unexpected revelations that my informants cherished.

Paul, from Charleston, described how he finds fascination in “what’s behind the frontage on the street. ... You can peek around and you know that behind there there’s probably as many interesting things as what you can see on the street” (Figure 5.18). Thus, for Paul, his neighborhood is a series of layers that must be discovered and the unknown is what drives him to explore his environment: “it’s a little mystery and every time you can open up a hidden door behind there and see what’s behind these houses, which I've had a chance to do, they’re often as fascinating as what you see on the front of the street.” Mandy, from I’On, describes a similar kind of layering effect that an ivy-covered fence provides (Figure 5.19); she wonders what is beyond the fence—it invites discovery.

Figure 5.18: Fascination with landscape layers in Charleston (source: Paul)
Figure 5.19: Hidden layers in I'On: What is behind the fence? (source: Mandy)

Figure 5.20: “[Q]uiet little secret places” in Charleston (source: Ann)
Thus, the landscapes of Charleston and I’On hide various kinds of secret, unexpected, and mysterious places that help to create a sense of intrigue and a desire to explore as Ann relates for a photo (Figure 5.20) of a space in-between buildings in Charleston: “This is such a little alleyway ... but [it] create[s] these quiet little secret little places.” I asked her to elaborate on the kind of feeling that she associates with this secret place, and she explained a childhood story about “just being able to get down there and whisper to a friend ... to have a little place that’s off the beaten path. ... You can kind of just slip in there and you really feel that you have come to some place that’s really secret and not as public.” Cindy from I’On took a photograph of her version of a secret place—a courtyard garden hidden down a long passageway (Figure 5.21).

Secrets are closely related to landscape layers because without the layers, there could be no hidden secrets; one is dependent upon the other. Ann also tells me about her love for the “unexpected places” of Charleston and the sense of discovery that comes from finding such a place.
The reason she loves these places is because they catalyze thoughts of wondering “how did that happen ... isn’t this wonderful and this is unusual.” These are places that make one pause, think, and ponder. While informants from Charleston and I’On both expressed their affinity for secret and unexpected places, only the informants from Charleston turned these physical elements into a reason to explore a story about a hypothetical past.

In both Charleston and I’On the sense of the unexpected is linked to an anti-suburban aesthetic. In other words, elements in the landscape are valued because they do not typically appear in a suburban residential setting of tract homes. From Sally’s perspective in I’On, “So many times you go into a community and they have landscape plan number 101. It almost looks like it’s out of some sort of book. Where [I’On] just has a feel that you see in older neighborhoods.” Historic Charleston is a place of “strange looking conditions that nobody would design on purpose,” explains Ann. These places may not look anything like the person who created it originally intended—the passage of time has significantly modified the original design. What Ann is referring to is the nature of organic change that occurs naturally over time in any built environment, yet even in I’On informants remarked that they appreciated how so much of their environment had similar kinds of unexpected elements. The designers of I’On clearly knew about this element; take for instance the fact that some buildings in I’On have faux bricked in windows (Figure 5.22). The cheapest, easiest way to have built such homes would have been to create a flat expanse of wall; instead there is the impression that there was once a window that has now been filled with brick. In Charleston, the previous existence of this window would be assured; in I’On, however, it represents a kind of replicated, artificial organic past which is appreciated by its residents.
Lastly, the key to experiencing this sense of discovery and mystery is walking as opposed to driving. Paul, from Charleston, emphatically explained that “you can't really see Charleston by driving down the road. You’ve got to walk, you’ve got to peek around things and when you have a chance, walk down a driveway or two and you’ll be delighted to see what’s behind [things].” This direct encounter with the environment allows vistas to unfold and new sights to come into focus slowly enough to catalyze mystery and a sense of discovery in the landscape. Moreover, only when I walk can I “peek around things” as Paul explains.

5.2.3 Unseen effort embedded in the landscape

Every landscape conveys an implicit degree of human effort that went into its creation. If I view a mountain meadow in the Rocky Mountains, I will not perceive an appreciable degree of human intervention whereas if I look at one of the gardens in Charleston, it is easy to see that a
great deal of effort went into creating and maintaining the individual elements that comprise the total composition of the garden. As we look at landscapes, we unconsciously appraise the degree of human intervention required to create and maintain these landscapes. In the dense, urban residential environments of Charleston and I’On, the landscapes have more human effort per unit of area than a typical suburban development. Paul, for instance, views historic Charleston as a place where people have maximized the utility and aesthetic qualities of the landscape, by packing in a “tremendous amount of work” into the smallest area possible. This high density of landscape interventions directly equates to an increased value of a place and greater place attachment.

Closely related to perceptions of human effort in the landscape are activities that show “people care” about their homes and yards. In Charleston, for instance, many of my informants commented about how people regularly are outside shining their door knobs and knockers. This activity expresses that the residents of these homes have a concern for their neighborhood and it results in a positive feeling for my informants. People want to live in historic Charleston and I’On because people show that they have a concern for the appearance of their homes and yards. This expression is unselfconscious and was never tied to things like increased property value; rather my informants simply felt good about being in a place in which people would expend the extra effort in maintaining.

### 5.3 Themes unique to I’On

Several themes were important because they were uniquely associated with either Charleston or I’On, but not both places. These differences have important implications in understanding the nature of being in a new place versus being in an old place and to revealing the meanings of age value.
5.3.1 Personal memories

For informants in Charleston, memories catalyzed by a place were associated with hypothetical pasts which an informant could not have personally experience him- or herself. In l’On, elements of the environment were important because of a concrete, personal experiences during an informant’s lifetime. Places had definite importance because they reminded an informant of a place he or she had been before. The most common version of this phenomena was the constant allusion to historic Charleston. Many informants in l’On liked their neighborhood because it was essentially a copy of historic Charleston. Several informants mentioned that they even bought a home in l’On because they could not afford the “real thing” in historic Charleston. A variation on this theme was expressed by Sally in relation to similarities that a part of l’On has to Venice, Italy (Figure 5.23):

I just think that these canals are really neat. I just think that there’s a lot of character to them. One time they had an event here and someone was kind enough to bring canoes in and our family took a little canoe trip. We kept on going up and down the different canals because there was just something magical about it. There’s also walking paths along the canal. Maybe it’s my Italian descent, but it kind of reminds me of Venice. It’s not typical, I’ve never seen anything like this here in the neighborhood and I think it’s quite unique for a neighborhood to have a canal such as this. A unique quality.

Note that Sally also mentions the personal experience her family had in this place; its meaning is two-fold: the canal is important because it reminds her of Venice and because a family event took place there. The experience is magical because it took her to a different place and time, a common theme amongst informants from both l’On as well as Charleston. The basic difference is that these sort of “magical” trips were far less common in l’On and rooted in living memory instead of in a time long, long ago as the informants from Charleston expressed.
Figure 5.23: Little Venice in l’On (source: Sally)

Figure 5.24: Valuing places through the future memories of one’s children in l’On (source: Sally)
5.3.2 Hypothetical futures: Attachment through the future memory of one’s children

In I’On Sally described how she took some of her photographs because she thought the places would be important for her children in the future. In talking about a photograph she took of East Lake (Figure 5.24), she described how the various play activities around this lake would “mark a place in my children’s minds.” Through further elaboration, this place as well as others she photographed were not directly important to her, but would be important to her children at some point in the future. Thus, these are landscapes that have hypothetical meaning for her children, not now, but sometime in the future. This kind of displaced place attachment has not been addressed in the literature to any significant degree, but one can understand that many places are important to parents because they are important to their children. What makes this phenomena interesting is that these places may not yet be that important to children; rather, it is the promise that these places hold for children when they become adults looking back on their childhood. Another aspect of this displacement may take the form of a parent thinking of how he or she viewed childhood and then attributing these feelings to his or her child.

5.3.3 Nature and wetlands

Although historic Charleston and I’On share quite similar characteristics in their built environments, their contexts are different. Historic Charleston is contained on the tip of a peninsula jutting into Charleston harbor while I’On is surrounded by typical suburban development on the east, west, and south, and marsh wetlands to the north. Because of this geography, there is more natural scenery available at the border of I’On which was attractive to some of my informants, such as George (Figure 5.25). It should be noted, however, that even Charleston has a similar environment with the White Point gardens and the walk along the Battery waterfront.
5.4 Themes unique to historic Charleston

5.4.1 Spontaneous fantasies and hypothetical pasts

Historic preservation has traditionally emphasized informational value or a factual history of places and things based on an objective reality or on the assessment of “facts” about a place. Three of the four criteria used for listing a building on the National Register of Historic Places, for example, must create an argument for historical significance based on detailed research to establish a known past based on factual evidence. We do not experience historic places in such an objective way, however. There is no “text” on each building that can be read to establish the truth of its historical past and only a few individuals know a local history in such detail so as to become attached to this objective past. In the traditional assessment of historical significance, there is no room for the subjective experience of place, or put it in more concrete terms, there is no room for significance based on the way everyday people experience place. Ultimately, attachment
to historic places—at least in a residential context as revealed in this study—is associated with the ability of places to catalyze the imagination through fantasies about hypothetical pasts or spontaneous fantasy (see Chapter 2 for more details).

In other words, each object in an historical landscape—be it entire landscapes, buildings, trees, or fences—may act as a trigger from which a fantasy spontaneously forms. These fantasies take form as stories about the hypothetic past activities of people and things that were in context with the object that catalyzed the fantasy. Because things look old in historic Charleston and are embedded in a context of similarly aged objects, they contain this unique property to engender spontaneous fantasy. These vignettes of the past are highly subjective, lack veracity based on actual events, and are not premeditated. These experiences, therefore, are quite unlike like a planned daydream which requires a significantly higher degree of cogitation. There is a connection between the intensity and frequency of these fantasies and the degree of attachment that a resident has to historic Charleston.

The words that my informants use to describe their spontaneous fantasies include “intriguing,” “mysterious,” “charming,” and “melancholy.” The word charming is worth exploring because no word is used more frequently in the context of historic places, yet few have chosen to understand its real meaning in this context. According to the American Heritage Dictionary (2006), the etymology of “charming” is “magical spell” and “incantation.” The word therefore connotes a place that instills a kind of magic on those who experience it. My informants frequent use of the word charming in context with historic Charleston is associated with their tendency to daydream and fantasize about the past. Historic Charleston is literally “casting a spell” over my informants. This milieu is not the objective world of historical significance that is demanded by the National Register of Historic Places, but rather it is the result of the subjective experience of being in historic Charleston—an experience that is rarely, if ever, captured to describe the nature of historical significance.
Spontaneous fantasy begins with a feeling of mystery when one encounters an unexpect-
ed aged object in the landscape. Ann described this experience upon stumbling into an obelisk-
like stone in the middle of a small alleyway (Figure 5.26). She explained that “there are these
mysterious ... things that you don’t know what they’re for, and they are intriguing for that reason.
... You feel that it’s telling a story. What it gives you is also a sense of a bit of melancholy sense,
about the understanding of the people who put it there and how long it’s been since they’ve been
gone or how things are overwhelmed by the passage of time.” This aspect of the landscape telling
a story was echoed by Paul when he said that “it’s nice to see what these old things are and then
kind of guess, ‘hmm I wonder what was there and the whole story of that?’”

Figure 5.26: Mysterious objects in Charleston’s landscape (source: Ann)
Figure 5.27: The (new) lantern as time machine in Charleston (source: Ann)

Figure 5.28: A fantasy of carriages in Charleston (source: Dave)
Ann then described a photograph of a gas lantern (Figure 5.27) on the street. Even though this was a new lantern and did not exhibit the patina of age, it was still able to “give you a little window into what life was like in another place and time. It’s like traveling into another place almost but you’re in the same physical place that you’re traveling to in another time.” The object was able to perform as a kind of time machine because it was embedded into a landscape that was able to communicate its overall age. The contextual cues of the past were all around this lantern; if it were in a new suburban residential area, it could not perform this time-machine function because its context would be destroyed.

As Dave took a photo of a small park-like area off the street (Figure 5.28) he was “envis[ion]ing carriages coming up here and dropping their people off.” It was a little vignette in his mind—a hypothetical past which may or may have not actually happened as he envisioned—but a powerful one. This time-machine like travel was very important for my informants. This aspect of the landscape had a powerful, magical allure as Dave describes, “Charleston is [like] putting yourself back in time, these places, trying to imagine the lifestyle of the time, just how people lived and behaved and what was everybody’s role and how important was everybody’s place.”

Dave painted an elaborate picture of the past which was catalyzed by ruts in some flagstone along the street (Figure 5.29):

This is Longitude Lane. What I like about it is you can see the wagon ruts coming down. They would bring down the cotton, store the cotton before they exported it and you can see how heavy those wagons were because those are slate stones from Massachusetts. They put them there so they were strong enough to hold up those wagons. Down at the end, you can see the wagon ruts but on the right there is old wall of the warehouses. ... The docks were right off from there, they would load them up when the ships came up.

In a similar vein, Roger took a photo of some steps (Figure 5.30) because he imagined Civil War soldiers marching up and down the steps. The theme of the horse and buggy reappeared as he focused on a stepping stone on the sidewalk (Figure 5.31) and imagined that many years ago this is where people would “get off their horse and buggy, step off it to go to their home.”
Figure 5.29: Ruts in flagstone as catalysts for fantasy (source: Dave)

Figure 5.30: These stairs catalyzed a story about Civil War soldiers in Charleston (source: Roger)
Of all the landscape and building elements in Charleston, balconies were very important to my informants. While they held a good deal of aesthetic appeal, they also catalyzed stories about hypothetical pasts. These stories revolve around a man, women, or a group of people from the past standing on the balcony or looking out through the balcony. One story related by Sam described “people sitting out there and just yaking and so forth with a mint julep” in an Antebellum era. Other stories involve people trying to stay cool on their balcony and waving at people as they passed below during various periods of the nineteenth century. The mere sight of a balcony on an older building seems to immediately suggest in the mind’s eye that someone from the past must have been standing there looking out upon the scene. Without any tangible evidence of what might have actually happened, my informants imagination is free to wander to any number of creative possibilities.
Living in Charleston is an exotic adventure for some of my informants as it reminds them of an experience from a movie or a novel. For Mary, a photo of the front of a building with an allée of trees (Figure 5.32) was particularly poignant in this regard as she imagined herself playing the role of some kind of character walking through the allée to the doorway of the house. Again, fantasy plays a role here, but instead of a trip to the past, the experience becomes a mental trip to an entirely fictional realm of existence. Contrast this experience to a typical suburban residential environment where there are insufficient visual cues in the realm of mystery and intrigue to feed such fantasies.

![Figure 5.32: Landscape as a movie in Charleston (source: Mary)](source: Mary)

### 5.4.2 Reading the layers of age

For my informants in Charleston, layers in the landscape held additional meanings beyond those found in I’On because these layers can be read as a sort of record of what may have occurred in the past. Think of them as layers of age, with each discrete layer having some attribution.
uted date of genesis. It is possible to mentally peel back each layer in an attempt to decipher the reasons why a particular element in the landscape or a building appears as it does today. This process is an enjoyable one in which my informants consciously wanted to participate. When Paul goes on walks in Charleston, for instance, he is constantly engaged in this process. In describing a large window in a building (Figure 5.33), he asked, “What was there before? How did they convert it? And how did they realize it? I’d love to go through each of these houses and get a history [of their changes].”

![Figure 5.33: Oddities in buildings as a catalyst for stories (source: Paul)](image)

The deconstruction of various elements in the landscape and built environment can also be performed on a much smaller scale. Ann described how she peeled apart the layers on an old stucco wall (Figure 5.34): “Here’s a wall with a lot of layers on it. You get to see through all the layers—what it’s really made of. ... More layers [are] interesting [because they] add richness.” In peering through the layers on this building, Ann could see that it was built from brick and that
each additional layer on top of the brick signified different points in time. She contrasted this experience with deconstructing a new building where “there’s only one layer that’s interesting on the new stucco building and that’s the stucco.”

![Figure 5.34: Peeling apart a building, layer by layer in Charleston (source: Ann)](image)

**5.4.3 Physical manifestations of age**

The founding of Charleston dates to the late seventeenth century. Many of its structures were constructed before the Civil War; many date to the 1700s. This is a very old place in New World terms. There are few cities in the New World settled by Europeans that are more ancient or have a building stock that is collectively as old as Charleston’s. The result is that age is an ever-present characteristic in historic Charleston. It is evident in surfaces that show decay and that are imperfect compared to contemporary standards. Whether it is ancient live oak trees pushing flagstone sidewalks apart or crumbling stucco, there is evidence of physical decay at every turn.
What is the phenomenological experience of this decay? What is the effect of being in an environment that is so different from contemporary development where materials are homogeneously new? For my informants, the experience was a conflicting one. While many truly appreciated the decay—or in more positive terms, patina—the same informants expressed concern that the decay sometimes created safety hazards or was inappropriate in certain situations. They wanted the decay, but they also wished for it to be controlled and expressed in ways that fit both safety and certain aesthetic precepts. There is a kind of balance to be achieved in having an environment express its age, but not to such a large degree that the environment becomes unusable. This phenomena is essentially one of balancing age value with identity: some decay is pleasing while too much makes the neighborhood look bad.

The appraisal of the aesthetic qualities of age is a subjective matter as Dave explains:

“Age sometimes can be off the wall and crumbling and there is a question of whether that is beautiful or not, [but] the dilapidation and the decadence of something—that’s very appealing.” Referring to the ferns growing at the top of a masonry pier (Figure 5.35), Ann explained that she took the photo because it represented “the way the buildings are turning into vegetation,” and then gave a story rooted in a bit of fantasy: “So it’s almost like the beginnings of the jungle book, like the old cartoon, the old city, no longer inhabited except by monkeys but it’s half vegetation and half old stones.” Paul took a photo of another masonry wall (Figure 5.36) as a representative example of the “decaying elegance” of Charleston because there is an “aesthetic value to have certain things that you don’t just try to have pristine. Clean is not necessarily good for all things.” He went on to explain that if all the surfaces in Charleston were clean and pristine “it would be like Disneyworld and it would be very uninteresting.” Then a conflict arises when he admits that even though he finds the wall attractive, “it needs some work.”
Figure 5.35: In Charleston, “buildings are turning into vegetation” (source: Ann)

Figure 5.36: “[D]ecaying elegance” in Charleston (source: Paul)
There is a difference between authentic age and replicated age; the former version has the evidence of the past imprinted on it while the latter is a rushed job, so to speak. Replicated age is a kind of “forgery process” that can be accomplished by “acids and stains and distressing things” as Dave explains. Authentic age, on the other hand, has “all the mistakes of the life of whatever it lived.” Thus, while it is possible to make things look old, we can usually still tell if they are authentically old. Without an extraordinary amount of effort in materials and labor, it is extremely difficult to imprint the organic nature of slow decay and the hard knocks of material existence into an object. With apologies to Heidegger, letting an object age naturally is a kind of authentic being toward death.

A bit of John Ruskin lives in my informants. Ruskin was well-known for his diatribes expressing a desire for the expression of hand craftsmanship in objects. It was one of his major justifications to engage in historic preservation—to preserve the collective acts of craftsmen that were evident in the fabric of a building. This evidence of the work of people from the past is expressed in part by the passage of time on the surfaces of materials. We know that the handicraft before us is authentic because its surface conveys a kind of honesty to the viewer—if it looks genuinely old, then it must be authentic. Once this authenticity is established then the object can begin to catalyze a story in our minds of the craftsman that created the object; perhaps he is standing right before you in the mind’s eye carefully carving the surface. Thus, there is a link between craftsmanship, age, and fantasy; all three must be present.

Roger provided a good example of this phenomena by describing how he experiences the craftsmanship of the materials from historic Charleston. First, he verifies that it expresses age, or as he describes, “it’s worn.” Then he looks for evidence that the “craftsmanship is unique” or that it expresses a character that is antithetical to contemporary fabrication. Only then can the object begin to catalyze a sense of mystery and intrigue and produce “a sort of a charming, wonderful
feel. The feeling you get when you see it and you think, this is something that’s been here for 200 years and it was cool when it was built.”

5.5 Summary of findings

In reviewing the meanings collected for this phenomenology, a number of themes emerged which are summarized below. While most of the themes are shared between I’On and historic Charleston, several are unique to either location. It is in Charleston, however, where the largest number of themes diverge from the common whole.

**Common themes of I’On and historic Charleston:**

- Individual elements of place: a) landscape elements: trees, fountains, gardens, iron fences and masonry walls, and ornamental gates; b) building elements: doors, windows, shutters, and especially balconies
- Layers in the landscape, discovery, and the unexpected
- Unseen effort embedded in the landscape

**Themes unique to I’On:**

- Personal memories
- Hypothetical futures: Attachment through the future memory of one’s children
- Nature and wetlands

**Themes unique to Charleston:**

- Spontaneous fantasies and hypothetical pasts
- Reading the layers of age
- Physical manifestations of age
This chapter began by asking how the following aspects of the built environment affect place attachment: 1) the discrete, individual elements of the environment, 2) the age of the elements in this environment, and 3) fantasies about this environment. The data that I have presented paints a rich picture of the phenomenological experience of being in historic Charleston and I’On. By performing a separate analysis on environments whose primary difference is their age, my hope was to tease out the meanings of age value. The results of this phenomenology indicate that there is indeed a difference in the experience of my informants that is due, in part, to the age of the environment. There are, however, far more commonalities than differences in the experience of these two places.

The discrete elements of the environment that engender attachment are largely derived from the landscape rather than buildings and do not appear to differ based on location. My informants were strongly affected by the presence of gardens, trees, fountains, iron fences, masonry walls, and gates. These elements were associated with perceiving the landscape as layers and the mental process of peeling back these layers to discover what lay beyond. A desire to discover the hidden and the mysterious drove my informants to explore their environments. These landscape elements were essential for hiding various aspects of the environment, including buildings, to prevent a rapid assessment of their character and content. As John Pickles (1985) describes, “often it is only when we fail to find something in its place that the region of the place becomes noticeable” (p. 162). For my informants these places were filled with elements that were unusual and unexpected and made historic Charleston and I’On places that had unique identities.

Where my informants mentioned buildings, only doors, windows, shutters, and especially balconies were important. Surprisingly the buildings themselves were rarely mentioned and when they were, only these elements from buildings appeared to be meaningful. One could make the argument that balconies are transitional elements between the landscape and the building, serving as an interface to the outside world. Certainly this is how my informants described their sponta-
neous fantasies about how balconies might have been used in the past. Therefore it is possible to ascribe balconies as part of the experience of landscape elements.

Age was responsible for several differences in how my informants experienced their respective environments. While both historic Charleston and I’On engendered fantasies, the quality and quantity of these responses were different. In I’On these fantasies were directed toward the future and displaced; places were important as seen through the eyes of one’s children at some point in the future. My informants in historic Charleston expressed spontaneous fantasies far more frequently than did my informants in I’On, however. These fantasies were always directed toward the past and were catalyzed by elements in the environment that either expressed great age or served as mnemonic devices about what might have existed in the past.

Lastly, of all of the aspects of experiencing these places, spontaneous fantasy played the largest part in creating the strongest levels of attachment. This result appears to be due to the additional cognitive effort expended in understanding the place. Thus, while attachment is both affective and cognitive, the cognitive process is far more important than perhaps many authors give credit. My informants in Charleston expressed greater attachment to their neighborhood than did my informants in I’On because the age of Charleston resulted in stronger feelings of mystery, intrigue, and more frequent expressions of fantasies about Charleston’s past. This role of spontaneous fantasy is place attachment is an intriguing result and one that deserves greater exploration as the literature does not address it to a significant degree.
CHAPTER SIX
QUANTITATIVE RESEARCH FINDINGS

6.1 Introduction

The quantitative data presented here is derived from an on-line survey instrument (see Chapter 4 for details on the survey design). The sample consists of respondents from historic Charleston and I’On during the period of November 2, 2008 to February 18, 2009. The total number of responses from Charleston is 105 while the number of responses from I’On is 94. Using an estimated population size for historic Charleston of 1,874 and for I’On of 1,200 (see Chapter 4 for details), the response rate is 5.6% for Charleston and 7.8% for I’On. This low response rate may impact the external validity of this study due to self-selection bias which will be discussed in Chapter 7.

The data consists entirely of nominal, interval, and ordinal variables; there are no continuous variables. This important characteristic requires the use of nonparametric statistics—chiefly the chi-square statistic and binary logistic regression which were used to analyze the data for this study. Both techniques work well with data that is non-linear and fails to adhere to a normal distribution. Typical statistical techniques, such as t-tests, ANOVA/MANOVA, and ordinary least squares regression, were not used in analyzing this data. While these techniques are very appropriate in situations where linear relationships and normal distributions exist, they cannot be used for this particular data because such conditions are not present.

The chi-square statistic ($X^2$) helps identify if two variables are independent; in other words, the null hypothesis assumes that the two variables are independent. Because residents of Charleston

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1. The sample frame for this study is the same as the population; see chapter 4.
and I’On answered the same questions (with different photo prompts), the chi-square statistic allows for a direct comparison of the responses of residents for each case to see if they are the same or different. Where the $p$ value is greater than 0.05, one can then fail to reject the null hypothesis and conclude that the variables are statistically similar. In this case, the conclusion is that residents of Charleston and I’On share very similar perceptions where a $p$ value is greater than 0.05 for a particular variable. Alternately where the $p$ value is 0.05 or less, one can fail to reject the null hypothesis and conclude that the two variables are independent or are statistically different from each other.

Binary logistic regression allows for a multivariate analysis where the dependent variable has only two states: 0 where the condition is false; and 1 where the condition is true. The independent variables can be dichotomous or continuous. It offers a way to see what the odds ratio is for a particular state of an independent variable; the odds are expressed through an exponentiated coefficient. For instance, an exponentiated coefficient of 2.0 means that the odds are twice as likely for a given condition when the dependent variable is true; conversely an exponentiated coefficient of 0.5 means that the odds are half as likely for a given condition. An exponentiated coefficient of 1.0 means that there is no difference in the odds. Akin to the $R^2$ value in ordinary least squares regression, the pseudo $R^2$ statistic provides information on the amount of variance or reduction in error explained by a particular model. The closer this number approaches 1.0, the more of the total variance in the data is explained.

This chapter will begin by describing the overall statistical model used to compare the perception of historic Charleston and I’On residents. A summary of the demographics followed by variables related to landscape, age value, and spontaneous fantasy will be explained. Finally, a statistical model is presented for how four measures of place attachment are dependent on landscape perception, age value, and spontaneous fantasy variables. The SPSS statistical software package for the Mac, version 16.0.1, was used for all data analysis.
6.2 Overall comparison model of Charleston and I’On

A primary goal of this research is to understand the difference in environmental perception between residents of historic Charleston and I’On. Returning to the research design of Chapter 4, revealing this difference is essential to understanding the nature of age value. One way to look at the degree of difference or similarity in variables related to environmental perception is through binary logistic regression. In order to accomplish the construction of this model, a dependent indicator variable representing residence in Charleston was created (i.e., 0 = a resident of I’On, 1 = a resident of Charleston). Additional independent demographic indicator variables were created to represent a respondent’s age in excess of 54 years, family gross income in excess of $150,000 per year, being a part-time resident (less than 12 months out of the year), and whether or not a respondent had lived in his or her neighborhood for greater than 6 years. Additional independent indicator variables representing environmental perception were also created: whether or not a respondent thought his or her neighborhood had a high level of mystery, unseen effort, and if the respondent experiences spontaneous fantasy in his or her neighborhood. Lastly, an independent indicator variable representing whether or not a respondent had a high level of place dependence was added into the model. With the exception of the demographics, these variables were chosen for their ability to reduce the model’s overall error (expressed through the pseudo $R^2$ statistic). In a step-wise fashion, Table 6.1 represents the results of this model. The final model explains nearly 60% of the variance in the respondent’s answers.
### Table 6.1: Factors related to residing in Charleston relative to I’On

<table>
<thead>
<tr>
<th>Factor</th>
<th>Baseline demographic model (1)</th>
<th>With landscape elements (2)</th>
<th>With spontaneous fantasy (3)</th>
<th>With place dependence (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 54 yrs.</td>
<td>3.172***</td>
<td>4.620***</td>
<td>5.009***</td>
<td>5.396***</td>
</tr>
<tr>
<td>Income &gt; $150K</td>
<td>2.121**</td>
<td>1.980*</td>
<td>2.185*</td>
<td>2.190**</td>
</tr>
<tr>
<td>Part-time resident (&lt; 12 mo./yr.)</td>
<td>3.008***</td>
<td>2.597**</td>
<td>2.134</td>
<td>2.033</td>
</tr>
<tr>
<td>Resided &gt; 5 yrs. in neighborhood</td>
<td>5.212***</td>
<td>4.946***</td>
<td>5.480***</td>
<td>5.316***</td>
</tr>
<tr>
<td>Neighborhood has high mystery</td>
<td></td>
<td>4.297***</td>
<td>3.173**</td>
<td>2.973**</td>
</tr>
<tr>
<td>Neighborhood has unseen effort</td>
<td></td>
<td>4.431***</td>
<td>3.807***</td>
<td>3.579***</td>
</tr>
<tr>
<td>Spontaneous fantasy in own neighborhood</td>
<td></td>
<td></td>
<td>5.363***</td>
<td>4.704***</td>
</tr>
<tr>
<td>High level of place dependence</td>
<td></td>
<td></td>
<td></td>
<td>2.162**</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.325</td>
<td>.505</td>
<td>.567</td>
<td>.580</td>
</tr>
</tbody>
</table>

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. N=199. * p < .1, ** p < .05, *** p < .01.

### 6.3 Demographic summary

Both samples (historic Charleston and I’On) represent predominately older, white, affluent populations with a median gross family income in excess of $150,000 per year and a median age of 55 to 64. Refer to Table 6.2 for descriptive statistics of the demographic variables. Overall, residents of historic Charleston are more than three times more likely to be older than 54 years of age and twice as likely to earn more than $150,000 per year in gross family income (refer to Table 6.1, model 1). While the majority of residents of both I’On and historic Charleston live the entire year in their neighborhoods, those individuals living in Charleston are three times more likely to reside in their neighborhood for less than twelve months out of the year. Lastly, residents of Charleston are five times more likely to have lived in their neighborhood for more than six years, a finding that is not surprising considering that the first house in I’On was finished in 1997. There is no statistical difference in the proportion of men and women who live in either sample location (Table 6.2). In summary, residents of Charleston are likely to be more wealthy, live part-time in their neighborhoods, and be older than their counterparts in I’On.
Table 6.2: Descriptive statistics for demographics

<table>
<thead>
<tr>
<th></th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75-84</th>
<th>85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>1.9</td>
<td>2.9</td>
<td>7.6</td>
<td>6.7</td>
<td>50.5</td>
<td>25.7</td>
<td>4.8</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>0.0</td>
<td>7.4</td>
<td>22.3</td>
<td>16.0</td>
<td>40.4</td>
<td>11.7</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < .001 (chi-square); Chas.: N=105, I’On: N= 94.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>41.7</td>
<td>58.3</td>
</tr>
<tr>
<td>I’On</td>
<td>47.9</td>
<td>52.1</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > .05 (chi-square); Chas.: N=103, I’On: N= 94.

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>African-American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Pacific Islander</th>
<th>Other</th>
<th>Two+ races</th>
<th>Prefer not to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>98.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
</tr>
<tr>
<td>I’On</td>
<td>96.8</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > .05 (chi-square); Chas.: N=105, I’On: N= 94.

<table>
<thead>
<tr>
<th></th>
<th>&lt; $25K</th>
<th>$25K to $49.9K</th>
<th>$50K to $74.9K</th>
<th>$75K to $99.9K</th>
<th>$100K to $124.9K</th>
<th>$125K to $149.9K</th>
<th>$150K +</th>
<th>Prefer not to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>0.0</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
<td>7.6</td>
<td>2.9</td>
<td>53.3</td>
<td>27.6</td>
</tr>
<tr>
<td>I’On</td>
<td>0.0</td>
<td>0.0</td>
<td>7.4</td>
<td>4.3</td>
<td>18.1</td>
<td>8.5</td>
<td>41.5</td>
<td>20.2</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < .05 (chi-square); Chas.: N=105, I’On: N= 94.

<table>
<thead>
<tr>
<th></th>
<th>12 months (entire year)</th>
<th>6 to 12 months</th>
<th>3 to 6 months</th>
<th>Less than 3 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>62.1</td>
<td>22.3</td>
<td>9.7</td>
<td>5.8</td>
</tr>
<tr>
<td>I’On</td>
<td>87.1</td>
<td>10.8</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < .001 (chi-square); Chas.: N=103, I’On: N= 93.

<table>
<thead>
<tr>
<th></th>
<th>&lt; 1 year</th>
<th>1 to 5 years</th>
<th>6 to 10 years</th>
<th>10 to 15 years</th>
<th>&gt; 15 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>3.8</td>
<td>26.9</td>
<td>22.1</td>
<td>17.3</td>
<td>29.8</td>
</tr>
<tr>
<td>I’On</td>
<td>10.9</td>
<td>56.5</td>
<td>30.4</td>
<td>2.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < .001 (chi-square); Chas.: N=104, I’On: N= 92.
6.4 Landscape perception

A look at the descriptive statistics for landscape perception (Table 6.3) indicates that the majority of residents of both Charleston and I’On view their neighborhoods as composed of layers and containing mystery, discovery, and unseen effort. In addition, the townscape was predominantly perceived as being atomistic versus holistic; the results were similar for building perception. Of the individual townscape elements, all features in both populations were highly valued with the exception of the road. In similar fashion, all elements of a building were also highly valued. A note of caution is warranted on the results of the individual townscape and building elements. Due to the design of the survey, only respondents who did not view their townscape holistically were presented with these questions. (A design, which in hindsight, may have been less than optimal.) The result is that the low number of responses for these categories may affect the generalizability of the results.

In the construction of the model in Table 6.1, four variables were found to be significantly different between respondents in Charleston and I’On: mystery, unseen effort, spontaneous fantasy, and place dependence. These variables agree well with the results of the chi-square tests which can be found in the descriptive statistics of Table 6.3. Using model 4 of Table 6.1, residents of Charleston in comparison to I’On are three times more likely to experience a high level of mystery, unseen effort, and spontaneous fantasy in their neighborhood. Of particular importance is that residents of Charleston are five times more likely than those in I’On to experience spontaneous fantasy—this factor is the largest difference between the two populations. In addition, residents of Charleston are twice as likely to report a high level of place dependence for their neighborhood.

There is no statistical difference between respondents’ view of their neighborhood as consisting of layers, and in viewing buildings holistically and not as individual elements (see Table 6.3). Respondents’ view of their townscape as holistic versus atomistic and a perception of their neighborhood as full of mystery and discovery are statistically different in Charleston and I’On. These effects
are most prominent in differences in how residents are attached to their neighborhoods (see section 6.7).

In the design of this study, “generic” suburban controls with equivalent photo prompts were selected to test the concepts of layered townscapes, mystery, discovery, and unseen effort and see if residents of Charleston and I’On would respond any differently to suburban landscapes versus their own neighborhoods (refer to Chapter 4 for details on this design). The residents’ responses are nearly a perfect inverse of the responses for their own neighborhoods (refer to Table 6.3). For example, Figure 6.1 shows the almost perfect inverse relationship between the perception of mystery in Charleston and the suburban control.

![Figure 6.1: Inverse relationship of perception of mystery in historic Charleston versus suburban control.](image)
Table 6.3: Descriptive statistics for landscape perception

<table>
<thead>
<tr>
<th>View townscape holistically or atomistically vs. location (%)*</th>
<th>Atomistic view of landscape</th>
<th>Holistic view of landscape</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>65.7</td>
<td>25.7</td>
<td>8.6</td>
</tr>
<tr>
<td>I’On</td>
<td>49.5</td>
<td>45.1</td>
<td>5.5</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < .005 (chi-square); Chas.: N=105, I’On: N= 91.

<table>
<thead>
<tr>
<th>Important and very important townscape elements vs. location (% out of 100% per column category)*</th>
<th>Walls, fences, gates</th>
<th>Fountains*</th>
<th>Trees</th>
<th>Gardens</th>
<th>Buildings*</th>
<th>Road</th>
<th>Sidewalk*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>91.0</td>
<td>71.5</td>
<td>98.7</td>
<td>97.4</td>
<td>97.3</td>
<td>41.9</td>
<td>91.0</td>
</tr>
<tr>
<td>I’On</td>
<td>80.0</td>
<td>90.0</td>
<td>98.0</td>
<td>98.0</td>
<td>87.7</td>
<td>60.4</td>
<td>91.4</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square)—significance reflects entire response distribution and not just the “important” and “very important” responses; N varies between 48 and 78, depending on category.

<table>
<thead>
<tr>
<th>View individual buildings holistically or atomistically vs. location (%)*</th>
<th>Atomistic view of a building</th>
<th>Holistic view of a building</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>52.9</td>
<td>43.3</td>
<td>3.8</td>
</tr>
<tr>
<td>I’On</td>
<td>59.3</td>
<td>40.7</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=104, I’On: N= 91.

<table>
<thead>
<tr>
<th>Important and very important building elements vs. location (% out of 100% per column category)*</th>
<th>Doors</th>
<th>Windows*</th>
<th>Shutters</th>
<th>Balcony</th>
<th>Roof</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>89.8</td>
<td>96.6</td>
<td>98.3</td>
<td>88.3</td>
<td>60.0</td>
</tr>
<tr>
<td>I’On</td>
<td>79.6</td>
<td>77.7</td>
<td>90.7</td>
<td>96.3</td>
<td>53.7</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square)—significance reflects entire response distribution and not just the “important” and “very important” responses; n varies between 54 and 59, depending on category.

<table>
<thead>
<tr>
<th>Viewing the townscape as composed of layers vs. location (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>22.1</td>
<td>53.8</td>
<td>13.5</td>
<td>4.8</td>
<td>0.0</td>
<td>5.8</td>
</tr>
<tr>
<td>I’On</td>
<td>29.7</td>
<td>51.6</td>
<td>7.7</td>
<td>6.6</td>
<td>0.0</td>
<td>4.4</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=104, I’On: N= 91.

<table>
<thead>
<tr>
<th>Viewing the townscape as containing mystery vs. location (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>52.9</td>
<td>33.7</td>
<td>10.6</td>
<td>1.9</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>I’On</td>
<td>15.6</td>
<td>54.4</td>
<td>18.9</td>
<td>10.0</td>
<td>1.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.001 (chi-square); Chas.: N=104, I’On: N= 90.
Table 6.3, continued.

**Viewing the townscape as a place to discover vs. location (%)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>39.0</td>
<td>39.0</td>
<td>17.1</td>
<td>3.8</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>I’On</td>
<td>33.7</td>
<td>58.4</td>
<td>4.5</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square); Chas.: N=105, I’On: N= 89.

**Viewing the townscape as containing unseen effort vs. location (%)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>62.9</td>
<td>31.4</td>
<td>3.8</td>
<td>1.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>23.3</td>
<td>45.6</td>
<td>23.3</td>
<td>6.7</td>
<td>1.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.001 (chi-square); Chas.: N=105, I’On: N= 90.

**Viewing suburban development as containing layers vs. location (%) — control**

<table>
<thead>
<tr>
<th>Location</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>0.0</td>
<td>13.5</td>
<td>31.7</td>
<td>30.8</td>
<td>19.2</td>
<td>4.8</td>
</tr>
<tr>
<td>I’On</td>
<td>1.1</td>
<td>5.6</td>
<td>17.8</td>
<td>38.9</td>
<td>33.3</td>
<td>3.3</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square); Chas.: N=104, I’On: N= 90.

**Viewing suburban development as containing mystery vs. location (%) — control**

<table>
<thead>
<tr>
<th>Location</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
<td>27.6</td>
<td>70.5</td>
<td>4.8</td>
</tr>
<tr>
<td>I’On</td>
<td>1.1</td>
<td>0.0</td>
<td>1.1</td>
<td>34.8</td>
<td>62.9</td>
<td>3.3</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N= 89.

**Viewing suburban development as a place to discover vs. location (%) — control**

<table>
<thead>
<tr>
<th>Location</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>0.0</td>
<td>0.0</td>
<td>2.9</td>
<td>31.4</td>
<td>65.7</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>1.1</td>
<td>1.1</td>
<td>6.7</td>
<td>30.0</td>
<td>61.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N= 90.

**Viewing suburban development as containing unseen effort vs. location (%) — control**

<table>
<thead>
<tr>
<th>Location</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>1.9</td>
<td>19.2</td>
<td>32.7</td>
<td>31.7</td>
<td>14.4</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>1.1</td>
<td>25.6</td>
<td>33.3</td>
<td>24.4</td>
<td>13.3</td>
<td>2.2</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=104, I’On: N= 90.
6.5 Age value

The independent variables that account for age value are the valuation of two kinds of masonry patina (pillar and wall) and the degree to which a respondent engages in reading the layers of age in the landscape. Overall, these variables accounted for very little reduction in error in the overall model (Table 6.1) and as such, are not included in this model. The descriptive statistics (Table 6.4) support the contention that residents of Charleston and I’On do not have different perceptions of these phenomena, based on the chi-square statistic.

Most of the respondents found both examples of masonry patina to be pleasant or strongly pleasant and engaged in reading the layers of age in the neighborhood’s landscape. All of these responses are positively skewed. Variables associated with age value are related to certain place attachment measures (see section 6.7) and to the experience of spontaneous fantasy (see section 6.6).

Table 6.4: Descriptive statistics for age value

<table>
<thead>
<tr>
<th>Masonry pillar patina valuation, example 1 (%)*</th>
<th>Strongly pleasant</th>
<th>Pleasant</th>
<th>Neither pleasant nor unpleasant</th>
<th>Unpleasant</th>
<th>Strongly unpleasant</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>19.0</td>
<td>41.9</td>
<td>23.8</td>
<td>12.4</td>
<td>2.9</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>12.2</td>
<td>43.3</td>
<td>16.7</td>
<td>22.2</td>
<td>4.4</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N=90.

<table>
<thead>
<tr>
<th>Masonry wall patina valuation, example 2 (%)*</th>
<th>Strongly pleasant</th>
<th>Pleasant</th>
<th>Neither pleasant nor unpleasant</th>
<th>Unpleasant</th>
<th>Strongly unpleasant</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>21.0</td>
<td>40.0</td>
<td>19.0</td>
<td>15.2</td>
<td>4.8</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>16.7</td>
<td>32.2</td>
<td>20.0</td>
<td>28.9</td>
<td>2.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N=90.

<table>
<thead>
<tr>
<th>Engage in reading the layers of age in the townscape (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>11.4</td>
<td>52.4</td>
<td>13.3</td>
<td>18.1</td>
<td>4.8</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>8.9</td>
<td>54.4</td>
<td>15.6</td>
<td>17.8</td>
<td>2.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N=90.
6.6 Spontaneous fantasy

Returning to the model in Table 6.1, the experience of spontaneous fantasy in a respondent’s own neighborhood was the largest difference between residents of Charleston and I’On with the former five times more likely to experience this phenomenon. An important question is what other variables are associated with the general phenomenon of spontaneous fantasy in historic places. In other words, do other elements of an environment seem to help catalyze spontaneous fantasy? To answer this question, two binary logistic models were built incorporating the independent indicator variables associated with finding masonry wall patina strongly pleasant and engaging in reading the layers of age in a landscape. These independent variables were chosen for their statistical significance and for the maximum reduction in error. The first model incorporates a dependent indicator variable that represents whether or not a respondent experiences spontaneous fantasy in any historic place (i.e., not specific to his or her particular neighborhood). The second model incorporates a dependent indicator variable that indicates whether or not a respondent experiences spontaneous fantasy when looking at a specific photo of historic Charleston chosen to elicit this phenomenon. The results of both models are in Table 6.5.

The results indicate that finding masonry wall patina strongly pleasant and engaging in reading the layers of age in a landscape increase the chances of experiencing spontaneous fantasy by a factor of between two and five, depending on the independent and dependent variables. Therefore, it is possible to conclude that the age value appears to be associated with the experience of spontaneous fantasy.

Table 6.5: Factors related to the experience of spontaneous fantasy

<table>
<thead>
<tr>
<th></th>
<th>In generic historic neighborhood (1)</th>
<th>Catalyzed by Charleston photo (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masonry wall patina strongly pleasant</td>
<td>4.871***</td>
<td>2.781**</td>
</tr>
<tr>
<td>Engages in reading the landscape</td>
<td>3.383***</td>
<td>2.463***</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.176</td>
<td>.101</td>
</tr>
</tbody>
</table>

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. N=199. * p < .1, ** p < .05, *** p < .01.
Descriptive statistics for spontaneous fantasy variables are located in Table 6.6. It is interesting to note that the general experience of spontaneous fantasy in historic places and as catalyzed by the photo from historic Charleston is not statistically different between residents of Charleston and I’On. Only the experience of spontaneous fantasy in a respondent’s own neighborhood is statistically different between the two samples.

Table 6.6: Descriptive statistics for spontaneous fantasy

<table>
<thead>
<tr>
<th>Previous experience of spontaneous fantasy in any historic place (%)*</th>
<th>Frequently</th>
<th>Somewhat frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Almost never</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>38.1</td>
<td>22.9</td>
<td>36.2</td>
<td>2.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>35.2</td>
<td>34.1</td>
<td>27.3</td>
<td>2.3</td>
<td>1.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N= 88.

<table>
<thead>
<tr>
<th>Experience of spontaneous fantasy in own neighborhood (%)*</th>
<th>Frequently</th>
<th>Somewhat frequently</th>
<th>Occasionally</th>
<th>Rarely</th>
<th>Almost never</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>32.7</td>
<td>22.1</td>
<td>34.6</td>
<td>8.7</td>
<td>1.9</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>2.2</td>
<td>11.2</td>
<td>33.7</td>
<td>34.8</td>
<td>18.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.001 (chi-square); Chas.: N=104, I’On: N= 89.

<table>
<thead>
<tr>
<th>Spontaneous fantasy catalyzed by photo of Charleston (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Historic Charleston</td>
</tr>
<tr>
<td>I’On</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=103, I’On: N= 88.
6.7 Place attachment correlations

Chapter 4 describes that an important goal of this research is to establish the relationship between place attachment as a dependent variable and the independent variables of environmental perception. In other words, what phenomena or elements is place attachment dependent upon? While it is not possible to establish a linear relationship between place attachment and environmental perception due to the nature of the data in this study, binary logistic regression offers a way to investigate this relationship and to determine if there are any significant correlations between these factors.

In order to answer this question, a model to represent which independent variables are associated with a high level of overall place attachment (Table 6.7) was created followed by four models representing independent variables associated with general place attachment, place dependence, place identity, and rootedness (Tables 6.8, 6.9, 6.10, and 6.11). Descriptive statistics for these models are in Table 6.12.

The first model in Table 6.7 uses a dependent indicator variable that represents the aggregate of all responses that are in the category of “strongly agree” for general place attachment, place dependence, place identity, and rootedness. The aggregation of place attachment measures resulted in the largest amount of error reduction for the model in comparison with examining each place attachment dimension individually. In addition to the same independent demographic variables used in the model for Table 6.1, indicator variables were created to represent whether or not a respondent experienced a high level of mystery, unseen effort, spontaneous fantasy in his/her neighborhood and catalyzed by a photo of historic Charleston, and whether or not masonry pillar patina was strongly pleasant. In Charleston, while a high level of mystery and the experience of spontaneous fantasy catalyzed by the photo are not statistically significant, the other independent variables are significant and represent factors between 8 and 10. Unseen effort is the only environmental perception variable that is significant for I’On. Of note is the fact that income is significant for both locations, although Charleston re-
spondents are 5.6 times more likely to have a high income, while a high income in I’On decreases the likelihood of a high level of place attachment by a factor of .358.

<table>
<thead>
<tr>
<th>Table 6.7: Factors related to high overall level of place attachment</th>
<th>Historic Charleston (1)</th>
<th>I’On (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 54 yrs.</td>
<td>2.441</td>
<td>2.129</td>
</tr>
<tr>
<td>Income &gt; $150K</td>
<td>5.603**</td>
<td>.358*</td>
</tr>
<tr>
<td>Part-time resident (&lt; 12 mo./yr.)</td>
<td>.425</td>
<td>1.971</td>
</tr>
<tr>
<td>Resided &gt; 5 yrs. in neighborhood</td>
<td>1.027</td>
<td>1.0</td>
</tr>
<tr>
<td>High level of mystery</td>
<td>1.513</td>
<td>2.259</td>
</tr>
<tr>
<td>High level of unseen effort</td>
<td>10.372**</td>
<td>2.673*</td>
</tr>
<tr>
<td>Masonry pillar patina strongly pleasant</td>
<td>8.057*</td>
<td>2.919</td>
</tr>
<tr>
<td>High spont. fantasy in own neighborhood</td>
<td>8.161*</td>
<td>1.0</td>
</tr>
<tr>
<td>Spont. fant. catalyzed by hist. Chas. photo</td>
<td>1.444</td>
<td>1.276</td>
</tr>
<tr>
<td>Pseudo R^2</td>
<td>.322</td>
<td>.259</td>
</tr>
</tbody>
</table>

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. Chas.: N=105, I’On: N=94. * p < .1, ** p < .05, *** p < .01.

The next step is to analyze the relationship between the four dimensions of place attachment and a variety of similar independent variables. As with the previous model, these models were constructed both for the significance of the independent variables as well as to reduce the overall error. Note that for all of these models, the R^2 value is indicative of a low amount of variation in how respondents answered the place attachment questions. In the case of a high level of general place attachment (see Table 6.8), significant variables for Charleston are a high age for an individual, the holistic perception of townscape, a high level of unseen effort, finding masonry patina strongly pleasant, the experience of spontaneous fantasy in a respondent’s neighborhood, and attributing a high value to buildings. For I’On, an individual’s age and a high level of unseen effort are significant, but none of the other independent variables.

For place dependence in Charleston (see Table 6.9) high age and finding masonry wall patina strongly pleasant are associated with a decrease in dependence while a high income, the perception of the townscape as holistic, a high level of spontaneous fantasy, and attributing a high value to trees are
all associated with a significant increase in place dependence. For I’On, a high income is associated with a decrease in place dependence while the experience of spontaneous fantasy catalyzed by a photo of historic Charleston are associated with an increase in dependence.

Table 6.8: Factors related to high level of general attachment

<table>
<thead>
<tr>
<th></th>
<th>Historic Charleston (1)</th>
<th>I’On (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 54 yrs.</td>
<td>4.120*</td>
<td>4.010**</td>
</tr>
<tr>
<td>Income &gt; $150K</td>
<td>1.538</td>
<td>.497</td>
</tr>
<tr>
<td>Part-time resident (&lt; 12 mo./yr.)</td>
<td>.959</td>
<td>1.970</td>
</tr>
<tr>
<td>Resided &gt; 5 yrs. in neighborhood</td>
<td>1.078</td>
<td>–</td>
</tr>
<tr>
<td>Townscape is holistic, not atomistic</td>
<td>3.857*</td>
<td>.931</td>
</tr>
<tr>
<td>Has sense of discovery</td>
<td>.497</td>
<td>3.289</td>
</tr>
<tr>
<td>High level of unseen effort</td>
<td>9.258**</td>
<td>2.726*</td>
</tr>
<tr>
<td>Masonry pillar patina strongly pleasant</td>
<td>8.559**</td>
<td>2.888</td>
</tr>
<tr>
<td>Spontaneous fantasy in own neighborhood</td>
<td>4.170*</td>
<td>–</td>
</tr>
<tr>
<td>Spont. fant catalyzed by hist. Chas. photo</td>
<td>2.634</td>
<td>.996</td>
</tr>
<tr>
<td>Buildings have high value</td>
<td>5.185**</td>
<td>.623</td>
</tr>
</tbody>
</table>

Pseudo R²: .327 .309

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. Chas.: N=105, I’On: N=94. * p < .1, ** p < .05, *** p < .01.

Table 6.9: Factors related to high level of place dependence

<table>
<thead>
<tr>
<th></th>
<th>Historic Charleston (1)</th>
<th>I’On (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 54 yrs.</td>
<td>.301*</td>
<td>.694</td>
</tr>
<tr>
<td>Income &gt; $150K</td>
<td>3.253**</td>
<td>.314*</td>
</tr>
<tr>
<td>Part-time resident (&lt; 12 mo./yr.)</td>
<td>.918</td>
<td>3.254</td>
</tr>
<tr>
<td>Resided &gt; 5 yrs. in neighborhood</td>
<td>.766</td>
<td>1.316</td>
</tr>
<tr>
<td>Townscape is holistic, not atomistic</td>
<td>2.973*</td>
<td>1.088</td>
</tr>
<tr>
<td>Has sense of discovery</td>
<td>1.821</td>
<td>1.093</td>
</tr>
<tr>
<td>Masonry wall patina strongly pleasant</td>
<td>.298*</td>
<td>.808</td>
</tr>
<tr>
<td>High spont. fantasy in own neighborhood</td>
<td>2.464*</td>
<td>.913</td>
</tr>
<tr>
<td>Spont. fant catalyzed by hist. Chas. photo</td>
<td>.777</td>
<td>3.576*</td>
</tr>
<tr>
<td>Trees have high value</td>
<td>3.027**</td>
<td>2.416</td>
</tr>
</tbody>
</table>

Pseudo R²: .240 .160

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. Chas.: N=105, I’On: N=94. * p < .1, ** p < .05, *** p < .01.
Table 6.10: Factors related to high level of place identity

<table>
<thead>
<tr>
<th></th>
<th>Historic Charleston (1)</th>
<th>I’On (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 54 yrs.</td>
<td>1.652</td>
<td>.774</td>
</tr>
<tr>
<td>Income &gt; $150K</td>
<td>2.488**</td>
<td>.317*</td>
</tr>
<tr>
<td>Part-time resident (&lt; 12 mo./yr.)</td>
<td>.775</td>
<td>2.297</td>
</tr>
<tr>
<td>Resided &gt; 5 yrs. in neighborhood</td>
<td>1.893</td>
<td>2.396</td>
</tr>
<tr>
<td>Masonry wall patina valued</td>
<td>.407**</td>
<td>.533</td>
</tr>
<tr>
<td>Engages in reading the landscape strongly</td>
<td>4.113**</td>
<td>1.799</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.175</td>
<td>.160</td>
</tr>
</tbody>
</table>

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. Chas.: N=105, I’On: N=94. * p < .1, ** p < .05, *** p < .01.

Place identity in Charleston is associated with a high income level while the valuation of masonry wall patina is associated with a decrease in dependence (see Table 6.10). For I’On, a high income level is associated with a decrease in place dependence with no other factors being significant.

Table 6.11: Factors related to high level of rootedness

<table>
<thead>
<tr>
<th></th>
<th>Historic Charleston (1)</th>
<th>I’On (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 54 yrs.</td>
<td>1.261</td>
<td>.583</td>
</tr>
<tr>
<td>Income &gt; $150K</td>
<td>2.144*</td>
<td>.350**</td>
</tr>
<tr>
<td>Part-time resident (&lt; 12 mo./yr.)</td>
<td>1.202</td>
<td>2.913</td>
</tr>
<tr>
<td>Resided &gt; 5 yrs. in neighborhood</td>
<td>2.723**</td>
<td>1.367</td>
</tr>
<tr>
<td>High level of unseen effort</td>
<td>1.972*</td>
<td>1.763</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.156</td>
<td>.096</td>
</tr>
</tbody>
</table>

1. Exponentiated coefficients, 1 = no impact, <1 = negative impact, > 1 = positive impact. Chas.: N=105, I’On: N=94. * p < .1, ** p < .05, *** p < .01.

Lastly, in Charleston rootedness is associated with a high income level, a greater time of residence, and a high level of unseen effort (see table 6.11). For I’On, as with place identity, only income is negatively associated with rootedness. No positive factors were located that were significant.
Table 6.12: Descriptive statistics for place attachment

<table>
<thead>
<tr>
<th>General place attachment (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>75.2</td>
<td>22.9</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>I’On</td>
<td>62.0</td>
<td>29.3</td>
<td>5.4</td>
<td>2.2</td>
<td>1.1</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations not significant with p > 0.05 (chi-square); Chas.: N=105, I’On: N= 92.

<table>
<thead>
<tr>
<th>Place dependence (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>52.4</td>
<td>20.0</td>
<td>18.1</td>
<td>6.7</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>I’On</td>
<td>23.9</td>
<td>25.0</td>
<td>29.3</td>
<td>19.6</td>
<td>2.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square); Chas.: N=105, I’On: N= 92.

<table>
<thead>
<tr>
<th>Place identity (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>43.8</td>
<td>36.2</td>
<td>14.3</td>
<td>2.9</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>I’On</td>
<td>18.5</td>
<td>37.0</td>
<td>29.3</td>
<td>10.9</td>
<td>3.3</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square); Chas.: N=105, I’On: N= 92.

<table>
<thead>
<tr>
<th>Rootedness (%)*</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historic Charleston</td>
<td>59.6</td>
<td>28.8</td>
<td>10.6</td>
<td>1.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>I’On</td>
<td>40.0</td>
<td>48.9</td>
<td>7.8</td>
<td>1.1</td>
<td>2.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Difference between locations significant with p < 0.05 (chi-square); Chas.: N=105, I’On: N= 92.
6.8 Summary

The analysis of the data presented here has explained a general model for understanding the differences between residents’ perception of historic Charleston and I’On, describing demographic differences, and exploring landscape perception, age value, and spontaneous fantasy. Lastly, five models for place attachment offered a way of exploring the ways in which the dimensions of place attachment are dependent upon a variety of landscape, age value, and spontaneous fantasy variables. A summary of these finding is presented in Table 6.13 and Table 6.14.

Table 6.13: Comparison of independent variables between historic Charleston and I’On

<table>
<thead>
<tr>
<th>Statistically similar</th>
<th>Statistically different (general description of how)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Age of individuals (older in Charleston)</td>
</tr>
<tr>
<td>Race</td>
<td>Gross family income (higher in Charleston)</td>
</tr>
<tr>
<td>Townscape elements</td>
<td>Months of residents out of the year (less in Charleston)</td>
</tr>
<tr>
<td>Holistic or atomistic view of building elements</td>
<td>Total length of residence (higher in Charleston)</td>
</tr>
<tr>
<td>Building elements</td>
<td>Holistic or atomistic view of townscape (more atomistic in Charleston)</td>
</tr>
<tr>
<td>Layering of landscape</td>
<td>Mystery (higher mystery in Charleston)</td>
</tr>
<tr>
<td>Suburban control questions</td>
<td>Unseen effort (higher in Charleston)</td>
</tr>
<tr>
<td>Valuation of masonry patina</td>
<td>Spontaneous fantasy in own neighborhood (much higher in Charleston)</td>
</tr>
<tr>
<td>Reading the layers of age in the landscape</td>
<td></td>
</tr>
<tr>
<td>Spontaneous fantasy in any historic place</td>
<td></td>
</tr>
<tr>
<td>Spontaneous fantasy catalyzed by Chas. photo</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.14: Independent landscape perception variables with significant impact (factor) on attachment

<table>
<thead>
<tr>
<th>Charleston (type of attachment)</th>
<th>I’On (type of attachment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income (overall, dependence, identity, rootedness)</td>
<td>High income (overall*, dependence*, identity*, rootedness*)</td>
</tr>
<tr>
<td>High age (general, dependence)</td>
<td>High age (general, dependence)</td>
</tr>
<tr>
<td>Unseen effort (overall, general)</td>
<td>Unseen effort (overall, general)</td>
</tr>
<tr>
<td>Spontaneous fantasy (overall, dependence)</td>
<td></td>
</tr>
<tr>
<td>Holistic perception of townscape (general, dependence)</td>
<td></td>
</tr>
<tr>
<td>Masonry pillar patina pleasant (overall, general)</td>
<td></td>
</tr>
<tr>
<td>Masonry wall patina pleasant (dependence*, identity*)</td>
<td></td>
</tr>
<tr>
<td>High value of buildings (general)</td>
<td></td>
</tr>
<tr>
<td>Trees have high value (dependence)</td>
<td></td>
</tr>
<tr>
<td>Reading the layers of age in landscape (identity)</td>
<td></td>
</tr>
<tr>
<td>Residing in neighborhood more than 6 years (rootedness)</td>
<td></td>
</tr>
</tbody>
</table>

*Negative correlation
CHAPTER SEVEN
DISCUSSION

7.1 Introduction

Chapter 1 introduced the research questions for this study, of which the primary question addressed the relationship between the physical age of a traditionally-designed urban neighborhood and the degree and character of place attachment. In order to answer this primary question, a group of secondary-level questions divided this research project into three areas in relation to place attachment: the physical characteristics of the neighborhoods, the appearance of physical age in these places, and spontaneous fantasy catalyzed by the environmental experience. This chapter will discuss the results of the analysis of the data from Chapter 6 in order to answer these questions and to reveal similarities and differences between historic Charleston and I’On. The compatibility of the qualitative and quantitative findings will also be discussed.

7.2 Comparison of qualitative and quantitative findings

In general, the results of the qualitative and quantitative data analysis were quite consistent with each other with the qualitative meanings providing important contextual information to help explain the quantitative results. Perhaps most importantly, none of the quantitative findings provided evidence to contradict the qualitative themes discussed in Chapter 5.
7.2.1 Physical characteristics of Charleston and I’On

The qualitative study exposed several important themes that focused on the individual elements of the townscape, including buildings and perception of a layered townscape full of discovery mystery, and unseen effort. Informants’ discussions failed to describe the townscape in a holistic sense—in other words, specific townscape elements were prominent and could easily be differentiated rather than blending together into a singular composition. Without prompting, the informants immediately jumped into describing discrete elements of their environment, literally dissecting the townscape into quanta of meanings. The meanings shared by informants from Charleston and I’On were quite consistent with each other and there was no pattern of differentiation based on the environment.

Table 7.1: Compatibility of qualitative and quantitative findings by location for physical elements

<table>
<thead>
<tr>
<th>Qualitative theme</th>
<th>Historic Charleston</th>
<th>I’On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of landscape is atomistic, not holistic</td>
<td>Majority of sample view landscape as atomistic</td>
<td>Even split between atomistic/holistic view of landscape*</td>
</tr>
<tr>
<td>Landscape elements are important, such as trees, foun-</td>
<td>High (&gt; 90% of sample) preference for trees, gardens, buildings, bounding elements,</td>
<td>High (&gt; 80% of sample) valuation of trees, gardens, fountains, build-</td>
</tr>
<tr>
<td>dants, and bounding elements</td>
<td>and sidewalk; moderate (70% of sample) preference for fountains; low (40% of sample)</td>
<td>ings, buildings, sidewalk, and bounding elements; moderate (60% of</td>
</tr>
<tr>
<td></td>
<td>valuation for road.</td>
<td>sample) valuation of road.</td>
</tr>
<tr>
<td>Building elements are important, such as doors, win-</td>
<td>High (&gt;88% of sample) valuation of shutters, doors, windows, and balconies;</td>
<td>High (&gt;90% of sample) valuation of balconies and shutters; moderate</td>
</tr>
<tr>
<td>dows, shutters, and balconies</td>
<td>moderate (60% of sample) valuation of roofs.</td>
<td>(&lt;80% of sample) valuation of doors, windows, and roof.</td>
</tr>
<tr>
<td>Neighborhood landscape consists of discrete layers</td>
<td>Majority of sample perceive neighborhood photo as layered</td>
<td>Majority of sample perceive neighborhood photo as layered</td>
</tr>
<tr>
<td>Neighborhood has a sense of discovery</td>
<td>Majority of sample think neighborhood photo has a sense of discovery</td>
<td>Majority of sample think neighborhood photo has a sense of discovery</td>
</tr>
<tr>
<td>Neighborhood is full of mystery</td>
<td>Majority of sample think neighborhood photo has mystery</td>
<td>Majority of sample think neighborhood photo has mystery</td>
</tr>
<tr>
<td>Neighborhood has high level of unseen effort</td>
<td>Majority of sample think neighborhood photo contains high degree of unseen effort</td>
<td>Majority of sample think neighborhood photo contains high degree of</td>
</tr>
</tbody>
</table>

* Result appears to contradict qualitative findings

Table 7.1 summarizes the results of the quantitative study in relation to the qualitative meanings from the earlier study. With the exception of a finding in I’On in regard to overall land-
scape perception, these quantitative results are all consistent with the qualitative meanings. Based on these results, it is possible to generalize that the populations of historic Charleston and I’On place a high value on trees, gardens, buildings, and bounding elements such as fences and gates. Moreover, these populations consistently perceive their neighborhood’s townscape as layered and full of discovery, mystery, and unseen effort. These latter results are reinforced by the suburban controls wherein respondents indicated that a typical suburban environment does not have layering, discovery, mystery, or unseen effort. Differences in perception of these physical elements of landscape can therefore be attributed to the environment’s design and form rather than differences in the population.

It is interesting that in I’On, however, there was an even split between respondents who thought of townscape as holistic versus atomistic (see Table 6.3). This difference could possibly be attributed to the photographs used for each area. While the landscapes of historic Charleston and I’On are very similar, they are not identical and thus the sample photos could not be made identical in appearance. Therefore, this finding indicates that people in Charleston view their landscape more atomistically or it is possible that the photograph used for the survey may have influenced holistic versus atomistic perception of landscape, or perhaps a combination of both factors.

While the quantitative results mostly show no statistical difference between the independent variables for historic Charleston and I’On, two variables did have significant differences. Respondents from Charleston thought that their neighborhood has more unseen effort and mystery than respondents from I’On by a factor of three or more (see Table 6.1). There are a number of reasons why this may be the case, including a slightly different demographic makeup in Charleston (people are older and more wealthy and have lived in the area longer) to physical differences between the two neighborhoods, chiefly in regard to age of the environment. This latter possibility will be explored in the next section.
7.2.2 Age value

The qualitative study revealed important differences between informants in historic Charleston versus I’On in regard to age value. Only informants from historic Charleston discussed the physical age of their neighborhoods (e.g., patina) and engaged in reading the layers of age in their neighborhood’s townscape. These results make sense because I’On does not have physical age—at least not the 100 or more years of patina created by the influence of time. For comparison, all respondents from I’On answered the same questions as those from Charleston. In the case of I’On residents, the photo prompts consisted of images from historic Charleston.

<table>
<thead>
<tr>
<th>Qualitative theme*</th>
<th>Quantitative findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patina a valuable part of the landscape, especially on masonry surfaces</td>
<td>Majority of sample positively value masonry patina in example photos from historic Charleston</td>
</tr>
<tr>
<td>Residents enjoy reading layers of age in the landscape</td>
<td>Majority of sample engages in reading layers of age in example photos from historic Charleston</td>
</tr>
</tbody>
</table>

* Theme is unique to historic Charleston.
** Included here for comparison; I’On does not have patina and informants from I’On did not discuss patina.

The quantitative results indicate that residents from both locations positively value masonry patina and engage in reading the layers of age from the sample photo from Charleston, with no statistical difference between locations (see Table 6.4 and Table 7.2). The similarity between locations suggests that as far as age value is concerned, differences in perception and valuation are due to environmental factors and not necessarily to the characteristics of the individual population.

7.2.3 Spontaneous fantasy

As with age value, the qualitative study indicated that only informants from historic Charleston revealed the phenomenon of spontaneous fantasy. The quantitative study confirmed that indeed, residents of historic Charleston experience spontaneous fantasy in their own neighborhoods to
a high degree; this phenomenon was not entirely absent in I’On, but less than 15% of the respondents indicated that they experienced spontaneous fantasy on a frequent basis compared to over 50% for residents from historic Charleston (see Table 6.6). Refer to Table 7.3 for a comparative summary of the qualitative and quantitative studies.

**Table 7.3: Compatibility of qualitative and quantitative findings by location for spontaneous fantasy**

<table>
<thead>
<tr>
<th>Qualitative theme*</th>
<th>Quantitative findings Historic Charleston</th>
<th>Quantitative findings I’On*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience of neighborhood landscape catalyzes spontaneous fantasy</td>
<td>Majority of sample experiences spontaneous fantasy in own neighborhood</td>
<td>Majority of sample does not experience spontaneous fantasy in own neighborhood</td>
</tr>
<tr>
<td></td>
<td>Majority of sample experiences spontaneous fantasy when looking at sample of photograph from historic Charleston</td>
<td>Majority of sample experiences spontaneous fantasy when looking at sample of photograph from historic Charleston</td>
</tr>
</tbody>
</table>

* Theme is unique to historic Charleston.
** Included here for comparison; informants from I’On did not discuss spontaneous fantasy.

The important factor that relates to the experience of spontaneous fantasy is the environment and not the individual, based on the result that residents of Charleston and I’On responded in statistically identical ways to the same photo prompt from historic Charleston. In fact, the response to the photo prompt by residents of both neighborhoods is strikingly similar (see Table 6.6). In addition, both groups of residents reported a statistically identical tendency to experience spontaneous fantasy in any historic environment.

As explained in section 6.6, the factors that correlate with spontaneous fantasy are exclusively those that relate to age value—namely the positive valuation of patina and the tendency to engage in reading the layers of age in a landscape. That this relationship exists should not be surprising as spontaneous fantasy is related to the experience of physical age in an environment. Therefore, spontaneous fantasy can be divided into two primary factors: 1) an individual must have a positive valuation of the patina in an environment and 2) be cognitively engaged in “reading” this environment.
7.2.4 Overall results of the mixed-methodological approach

The original goal for this research was to use a sequential mixed-methodological approach to first understand the phenomena in historic Charleston and I’On and then use a reduction method to measure key indicators of these phenomena. In this study a phenomenology provided essential qualitative meanings while a survey methodology provided the quantitative results as a basis for generalizability. The intent was to pair strengths with weaknesses; what qualitative research designs do not necessarily provide in terms of results a quantitative research design can provide and vice versa. The high degree of compatibility between the qualitative and quantitative results in this study speaks to the strengths of this mixed-methodological approach. With few exceptions, the quantitative results could be explained within the framework of the qualitative study. Moreover, in the absence of the qualitative study, many of the quantitative results would be difficult to explain.

7.3 Answering the study’s questions: Attachment to environmental and behavioral factors

Table 7.4: Answering the study’s questions: place attachment correlations with environment and behavior

<table>
<thead>
<tr>
<th>Question</th>
<th>Quantitative findings</th>
<th>Historic Charleston</th>
<th>I’On</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What physical characteristics of this place positively and negatively affect attachment?</td>
<td>General attachment: Buildings, unseen effort, holistic view of townscape</td>
<td>General attachment: Unseen effort</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place dependence: Trees, holistic view of townscape</td>
<td>Place dependence: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place identity: none</td>
<td>Place identity: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rootedness: unseen effort</td>
<td>Rootedness: none</td>
<td></td>
</tr>
<tr>
<td>2. How is attachment influenced by the age of this place?</td>
<td>General attachment: patina</td>
<td>General attachment: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place dependence: patina*, reads landscape</td>
<td>Place dependence: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place identity: none</td>
<td>Place identity: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rootedness: none</td>
<td>Rootedness: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place dependence: spontaneous fantasy</td>
<td>Place dependence: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place identity: none</td>
<td>Place identity: none</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rootedness: none</td>
<td>Rootedness: none</td>
<td></td>
</tr>
</tbody>
</table>

* Negative correlation

Returning to the original questions asked for this study, the correlation between environmental and behavior factors will now be explored (see Table 7.4 for a summary). The first question asked,
“What physical characteristics of this place positively and negatively affect attachment?” In the qualitative study, buildings, while mentioned, were not as important to the informants as landscape features, such as trees, gardens, or fences. Buildings performed valuable roles in layering a landscape, for instance, but dropped into the background as far as overall importance. The quantitative results (see section 6.7), however, indicate otherwise as high levels of general place attachment positively correlate with placing a high value on buildings, but only for Charleston. Place dependence, on the other hand, is associated with a high value for trees in Charleston.

Place dependence is related to the substitutability of one environment for another (Williams & Roggenbuck, 1989). A high level of place dependence equates to a respondent thinking that his or her neighborhood is unique, and that no other neighborhood could substitute. For Charleston respondents, the correlation of valuing trees with increased place dependence can be interpreted as meaning that the trees in Charleston help to make this neighborhood more unique than others. This result, however, is somewhat contradictory as I’On also has similar trees, but not nearly in as great an abundance.

Other factors that positively correlate with general attachment and rootedness in Charleston include perceiving the townscape as embodying a high amount of unseen effort. (The highest factor for rootedness is overall length of residence, as would be expected.) In I’On, no correlations were found with the environment in regard to any of the four dimensions of attachment, except for unseen effort. As with Charleston, unseen effort is positively correlated with an increase in general attachment.

Even though the majority of respondents in Charleston viewed their neighborhood’s landscape as atomistic, there is a strong, positive correlation between a holistic view of landscape and general attachment as well as place dependence. Understanding this result is somewhat difficult, but a possible explanation comes from place attachment theory, especially in regard to the phenomenological experience of being in certain places. Merleau-Ponty (Merleau-Ponty, 1962) writes about “am-
biguous perceptions” in an environment; places for which we have a strong emotional attachment tend to defy attempts to categorize environmental features in a systematic way (p. 281). In this fashion, the more invested emotionally one is in a particular place, the more difficult it may be to view landscape in an atomistic fashion. “Feelings,” therefore can be very difficult to articulate into objectively discrete packets of meaning. If, for instance, one can objectify an environment, by definition, one will have less of an ability to have a subjective, emotional experience with it. How, for instance, can the feeling of “love” be dissected into objective parts? If such a goal is achievable, surely the end result would be the destruction of the emotions associated with love. Psychologists, for instance, instruct patients to objectify the reasons why they feel hatred towards others in order to ameliorate the negative feelings (Cloud, 2007, p. 162).

The second question asked, “How is attachment influenced by the age of this place?” The qualitative study revealed that the appearance of aged surfaces—patina—was important as well as a desire to read the layers of age in the townscape, but only in Charleston as I’On lacks depth of physical age. The quantitative results support this finding as there is a strong, positive correlation between valuing masonry patina and general attachment. Curiously, there is an inverse relationship between place dependence and place identity and the valuation of masonry patina. If patina is viewed negatively—as something to “fix,” for instance—then attachment could certainly be reduced to the neighborhood. In the qualitative study, some informants expressed a distaste for surfaces with excessive patina and connected cleaning the patina from brass door plates, for instance, with pride in their neighborhood; in other words, a clean neighborhood instilled pride. If this same concept can be extended to the qualitative results, then perhaps pride in one’s neighborhood, which is connected to place identity (Low & Altman, 1992, p. 10; Hay, 1998, p. 24), could be associated with a desire to make sure the neighborhood looks clean and well-kept. The inverse correlations for place dependence could be explained in a similar fashion.
Lastly, place identity is positively correlated with a tendency to engage in reading the layers of age in a landscape. Returning to the qualitative study, many informants described the process of reading the layers of age in a landscape as quite cognitively intense. As place identity is a cognitive valuation of self in relation to place (Brown & Perkins, 1992, p. 281), environmental prompts which encourage a process of thought and reasoning through interactions with the townscape should result in higher levels of place identity.

The third, and last question asked, “How does the experience of spontaneous fantasy influence place attachment?” For this question it is necessary to look at which place attachment dimensions are associated with spontaneous fantasy. Spontaneous fantasy is a phenomenon unique to historic Charleston and is only correlated with general attachment and place dependence. Based on the results of the qualitative study, it would be reasonable to conclude that spontaneous fantasy, catalyzed by the appearance of patina and reading the layers of age in the townscape, increases general attachment and place dependence, but is not related to place identity or rootedness.

7.4 Limitations

7.4.1 Internal validity

The results of this study are framed within the literature review covered in Chapter 2. As such, all results are contextualized within discrete theoretical assumptions. This situation is probably the most important limitation of this study: that it is framed using urban design and place attachment theories. It is possible that if the qualitative and quantitative data was analyzed using a different theoretical framework, divergent results may be uncovered. It is also possible that under different theoretical assumptions, a new analysis may contradict the findings presented herein. Based on the consistency of the findings, however, it is probable that the existing theoretical assumptions are appropriate for the data under investigation. The author is also confident of the fit of the theoretical assumptions with the stated research questions.
Much of the relevance of this study rests on the ability of the qualitative meanings that have been captured to accurately inform the development of the survey instrument. Randal Mason (2002), for instance, explains that “by their very nature, some kinds of values resist being compared or scaled” (pp. 15). In her research on linking place to cultural systems, Linda Kruger (1996) takes a similar stance that the “objectification, reductionism, and other aspects of many scientific approaches obscure the relationships and experiences which define places” (p. 35). There is also little doubt that quantitative data has less depth of meaning, or as Clifford Geertz (1973) refers to it, less “thickness,” than qualitative data. On the other hand Kyle et al. (2004) and Williams and Vaske (2003) have made strong arguments that their quantitative research designs have accurately measured the subjective dimensions of place attachment. Ultimately, all methodologies and methods have limitations and by pairing disparate research tools, as has been done in this study, new dimensions of meaning can be uncovered. For instance, in this study the phenomenology provides a holistic perspective on the experience of place, while the survey looks at very thin slices of reality in more detail. In total, both perspectives lead to a greater understanding of the person/place experience. While it is not realistic to directly convert meaning into a variable, it is essential to understand the meaning behind what is actually being measured. In the absence of meaning, quantitative data is essentially meaningless and therefore, not useful (Dey, 1993, p. 24).

A potential problem with the internal validity for this study, therefore, is the process in which the phenomenology informed the wording of individual survey questions. There is a possibility that what is actually being measured is not the same concept that was revealed in the qualitative study. On the other hand, the results of the survey appear to be congruent with the results of the phenomenology, thus establishing a reasonable likelihood that the meaning behind the concept that is being measured is valid.

A more important issue, and one which is difficult to address, is the increased difficulty in establishing cause-and-effect relationships from the variables collected in the survey, at least as com-
pared to other quantitative methodologies. Ideally, an experimental design allows for the elimination of extraneous and confounding variables, but within the context of this study, an experimental design was not a realistic option. It is understood, therefore, that the cause-and-effect relationships that are established in this research cannot be made with the same level of confidence as would be possible with an experimental design (Singleton & Straits, 2005, p. 227).

The type of data collected for this study lends itself to non-parametric statistical techniques, limiting the ways in which the quantitative data could be analyzed. Practically speaking, this meant that only binary logistic regression and chi-square tests could be used in analyzing the data. Logistic regression is sensitive to missing values, but this situation was not a problem in the analysis of the data for this study as there were very few such instances, and where the did occur did not amount to more than four or five missing values.

Lastly, the analysis of the data uncovered relationships between certain demographic measures and place attachment, namely income and age. Increased income and increased age were associated with higher levels of place attachment. The factor analysis should have controlled for these demographics, but there is still a potential that the resulting data analysis may in part, represent demographic differences as far as place attachment measures are concerned.

7.4.2 External validity

Generally speaking, a technique used with qualitative data acquisition is to continue to gather data until no new meanings are uncovered. This process is refereed to as “theoretical saturation” (Auerbach & Silverstein, 2003, p. 102). In the case of this study, interviews were conducted until no new meanings could be uncovered. It is possible, however, that important meanings were not revealed for some people living in Charleston and l’On. As the goal of qualitative research is to gather meanings and not to achieve statistical significance, this is an acceptable limitation. Moreover, there were few findings from the quantitative study that could not be explained in context with the qualita-
tive meanings. If it is therefore accurate to conclude that many important meanings were collected, but that in no way were all meanings collected from Charleston and I’On.

The most important issue with external validity in the quantitative portion of this study is the possibility of self-selection bias due to low response rates. Conventional wisdom is that a researcher should always strive for a 100% response rate, but the problem is that survey response rates have been steadily declining for many years (Krosnick, 1999, p. 539; Dillman, 2007), and what constitutes an “acceptable” rate has correspondingly been reduced. Babbie (1990), for instance, indicates that anything more than a 50% response rate is acceptable, a significant decrease from the 75% or higher rates deemed as acceptable prior to the 1990s; published survey research in the built environment disciplines often has much lower response rates to surveys. A review of literature that addresses surveys of individual neighborhoods, for instance, reveals a chronic problem with achieving response rates that exceed 25% (e.g., Steptoe and Feldman (2001)) or even rates that exceed 15% (e.g., Sugiyama et al. (2007), Sugiyama, Thompson, and Ward (2009), and McGuire (1997)).

Jon Krosnick (1999) questions the need for “high” response rates and even suggests that the effort to achieve high rates may actually introduce an unintended bias into the data by over-representing certain population segments. He concludes that “recent research has shown that surveys with very low response rates can be more accurate than surveys with much higher response rates” (p. 540). Low response rates, therefore, are not always correlated with self-selection bias or nonresponse error (ibid.). In surveys that address public administration, Sarmistha Majumdar (2008) advises that the lack of a high response rate will not necessarily impair the potential contributions of a study, nor make the results “inaccurate” (pp. 250, 251). With some kinds of surveys, when a researcher does everything possible to increase response rates, but yet the rate does not improve, the only reasonable step is to accept the results (Krosnick, 1999).

Increasing response rates is tied to reducing coverage error and non-response error through a process in which every respondent in a sample is solicited repeatedly (Dillman, 2007, pp. 9-14).
solicitation process for reaching potential respondents in this study employed a multi-tiered approach in which a potential respondent may have been contacted as many as five times. After the data collection phase had been in place for a couple of months, the author noted that some individuals exhibited a hostility upon being asked to participate and indicated that they had already done so and were beginning to be bothered with the repeated solicitations. In this scenario, it is not too difficult to imagine some respondents taking the survey twice or not taking the time to accurately answer the survey’s questions, thereby adding bias to the data.

One way to assess the validity of the quantitative results of this study is to compare the survey’s demographics with census data. If the demographics match or are close to the data in the 2000 census, for instance, then it becomes easier to accept the possibility that the results may be generalizable. It is possible to use this technique with the data from historic Charleston, but unfortunately, not for I’On. Because most of I’On was still under construction during the 2000 census, the available data will not be representative of the existing population. Tangential measures, such as comparing the family incomes of Charleston and I’On with property values can be used to establish general patterns, however.

A comparison of the age of respondents to the survey in Charleston with Census 2000 data (Table 7.5, Figure 7.1) shows that while there is a general congruence between the survey and census in that most people are in the 45-64 age group, the survey data has a clear bias toward slightly older respondents. Note, however, that the general shape of the age plots are similar (Figure 7.1).

1. When the author was distributing flyers in Charleston and I’On, he would often encounter previous or potential respondents on the sidewalk.
Table 7.5: Survey and Census 2000 data for age (from table P8, only age 18+)

<table>
<thead>
<tr>
<th>Age</th>
<th>Tract 1, block group 2</th>
<th>Tract 1, block group 3</th>
<th>Tract 2, block group 1</th>
<th>Tract 2, block group 2</th>
<th>Total</th>
<th>Census % (Chap. 6)</th>
<th>Survey %</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>51</td>
<td>208</td>
<td>14</td>
<td>44</td>
<td>317</td>
<td>10.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td>25-34</td>
<td>42</td>
<td>160</td>
<td>44</td>
<td>86</td>
<td>332</td>
<td>11.2%</td>
<td>2.9%</td>
</tr>
<tr>
<td>35-44</td>
<td>128</td>
<td>168</td>
<td>64</td>
<td>105</td>
<td>465</td>
<td>15.6%</td>
<td>7.6%</td>
</tr>
<tr>
<td>45-54</td>
<td>175</td>
<td>168</td>
<td>150</td>
<td>125</td>
<td>618</td>
<td>20.8%</td>
<td>6.7%</td>
</tr>
<tr>
<td>55-64</td>
<td>99</td>
<td>89</td>
<td>155</td>
<td>213</td>
<td>556</td>
<td>18.7%</td>
<td>50.5%</td>
</tr>
<tr>
<td>65-74</td>
<td>74</td>
<td>55</td>
<td>90</td>
<td>164</td>
<td>383</td>
<td>12.9%</td>
<td>25.7%</td>
</tr>
<tr>
<td>75-84</td>
<td>23</td>
<td>66</td>
<td>43</td>
<td>60</td>
<td>192</td>
<td>6.5%</td>
<td>4.8%</td>
</tr>
<tr>
<td>85+</td>
<td>14</td>
<td>27</td>
<td>9</td>
<td>61</td>
<td>111</td>
<td>3.7%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>606</td>
<td>941</td>
<td>569</td>
<td>858</td>
<td>2974</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Figure 7.1: Comparison of age of survey respondents to Census 2000 data

Both the survey and the census data indicate that there are slightly more women than men in historic Charleston, although the survey data slightly over-estimates the percentage of women (see Table 7.6, Figure 7.2). Overall, the data is quite consistent with each other, however.

Table 7.6: Survey and Census 2000 data for sex (from table P8, only age 18+)

<table>
<thead>
<tr>
<th>Sex</th>
<th>Tract 1, block group 2</th>
<th>Tract 1, block group 3</th>
<th>Tract 2, block group 1</th>
<th>Tract 2, block group 2</th>
<th>Total</th>
<th>Census % (Chap. 6)</th>
<th>Survey %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>286</td>
<td>447</td>
<td>291</td>
<td>413</td>
<td>1437</td>
<td>48.3%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Female</td>
<td>320</td>
<td>494</td>
<td>278</td>
<td>445</td>
<td>1537</td>
<td>51.7%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Total</td>
<td>606</td>
<td>941</td>
<td>569</td>
<td>858</td>
<td>2974</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The census and survey data are identical as far as race is concerned; both data sources indicate that the vast majority (over 98%) of people living in historic Charleston are white (see Table 7.7, Figure 7.3).

**Table 7.7: Survey and Census 2000 data for race (from table P5, only age 18+)**

<table>
<thead>
<tr>
<th>Race</th>
<th>Tract 1, block group 2</th>
<th>Tract 1, block group 3</th>
<th>Tract 2, block group 1</th>
<th>Tract 2, block group 2</th>
<th>Total</th>
<th>Census % (Chap. 6)</th>
<th>Survey %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>658</td>
<td>843</td>
<td>555</td>
<td>783</td>
<td>2839</td>
<td>98.1%</td>
<td>98.1%</td>
</tr>
<tr>
<td>Non-white</td>
<td>5</td>
<td>35</td>
<td>6</td>
<td>8</td>
<td>54</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total</td>
<td>663</td>
<td>878</td>
<td>561</td>
<td>791</td>
<td>2893</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Historic Charleston is an affluent area with both the census and survey data indicating that the majority of families earn over $150,000 per year. The survey data over-estimates the number of high-income families, while under-estimating lower-income groups. The general trend, however, is consistent between the census and survey data (see Table 7.8, Figure 7.4), especially in respect to the shape of the graph in Figure 7.4. Note that income data is incomplete for the survey as 28% of the respondents chose to not answer the question, which is typical for this kind of high-threat question. Because of the presence of this filter option (i.e., “prefer not to say”), the reliability of data reported by respondents for income is likely to be higher. Typically in surveys, people are uncomfortable with reporting income and without a filter, there is a high probability such a respondent will incorrectly report their family income, biasing the data. The missing data, however, could explain the discrepancy between the survey and census data.

<table>
<thead>
<tr>
<th>Family income</th>
<th>Tract 1, block group 2</th>
<th>Tract 1, block group 3</th>
<th>Tract 2, block group 1</th>
<th>Tract 2, block group 2</th>
<th>Total</th>
<th>Census %</th>
<th>Survey % (Chap. 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $25K</td>
<td>19</td>
<td>12</td>
<td>22</td>
<td>16</td>
<td>69</td>
<td>7.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>$25K to $49.9K</td>
<td>24</td>
<td>28</td>
<td>36</td>
<td>33</td>
<td>121</td>
<td>13.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$50K to $74.9K</td>
<td>20</td>
<td>25</td>
<td>9</td>
<td>65</td>
<td>119</td>
<td>13.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$75K to $99.9K</td>
<td>23</td>
<td>32</td>
<td>25</td>
<td>21</td>
<td>101</td>
<td>11.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$100K to $124.9K</td>
<td>26</td>
<td>14</td>
<td>27</td>
<td>26</td>
<td>93</td>
<td>10.2%</td>
<td>7.6%</td>
</tr>
<tr>
<td>$125K to $149.9K</td>
<td>15</td>
<td>12</td>
<td>11</td>
<td>21</td>
<td>59</td>
<td>6.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$150K+</td>
<td>79</td>
<td>75</td>
<td>68</td>
<td>128</td>
<td>350</td>
<td>38.4%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td>198</td>
<td>198</td>
<td>310</td>
<td>912</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Comparing results for length of residence between the census and survey data is difficult because of a nearly ten-year gap between the data sets, thereby skewing the responses. Even taking this into consideration, the two data sets are remarkably similar with the exception of data for the length of residence less than a year (see Table 7.9, Figure 7.5).

Table 7.9: Survey and Census 2000 data for length of residence (from table H38, owners and renters)

<table>
<thead>
<tr>
<th>Length of residence</th>
<th>Tract 1, block group 2</th>
<th>Tract 1, block group 3</th>
<th>Tract 2, block group 1</th>
<th>Tract 2, block group 2</th>
<th>Total</th>
<th>Census %</th>
<th>Survey % (Chap. 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td>80</td>
<td>174</td>
<td>47</td>
<td>105</td>
<td>406</td>
<td>24.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>1 to 5 yrs.</td>
<td>114</td>
<td>144</td>
<td>113</td>
<td>133</td>
<td>504</td>
<td>29.8%</td>
<td>26.9%</td>
</tr>
<tr>
<td>6 to 10 yrs.</td>
<td>58</td>
<td>72</td>
<td>80</td>
<td>37</td>
<td>247</td>
<td>14.6%</td>
<td>22.1%</td>
</tr>
<tr>
<td>&gt; 10 yrs.</td>
<td>115</td>
<td>119</td>
<td>115</td>
<td>187</td>
<td>536</td>
<td>31.7%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Total</td>
<td>367</td>
<td>509</td>
<td>355</td>
<td>462</td>
<td>1693</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Because of the problem with the lack of accurate and complete census data for the I’On development, it is not possible to locate a data set to compare against the survey demographic variables. Family income, however, tends to be strongly related to the purchase price of homes. The average sale price of homes in historic Charleston, south of Broad Street in the first quarter of 2009 was $1,682,500. In comparison, for the same period in I’On, the average sale price of homes was $959,000. Homes in I’On, therefore, sold for 57% of the price of homes in historic Charleston. In comparison, the survey data indicates that twice as many people in I’On have a family income of less than $125,000 than people in historic Charleston. While any correlation between family income and average sales prices of homes is rough at best, this example helps to support the contention that the survey data from I’On may be generalizable.

While the census data is not perfectly congruent with the survey data in historic Charleston, it is generally close, if not very close in some instances. The discrepancy in family income, however, indicates that there is likely some level of self-selection bias in the survey data, but not to such a high

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2. Data from Trulia.com market trends for the “South of Broad” neighborhood in Charleston, South Carolina.
degree as to conclude that generalization is not possible. Based on these results, it is possible to state that generalization of the data is probable, but some caution is warranted. Because of the difficulty in finding comparable demographic data for I’On, it is difficult to clearly determine that there is no self-selection bias for this second case. While the home sales data is generally congruent with family income, one can not indicate with the same degree of certainty that the data is generalizable to the same degree as historic Charleston. On the other hand, the same method was employed in I’On as in historic Charleston for the solicitation of respondents. Assuming that all other factors are similar, if it is reasonable to conclude that the results of historic Charleston may be generalizable, then it would follow that the results for I’On may also be generalizable.

7.5 Summary

The qualitative and quantitative data presented in this study are compatible with each other, with few contradictions. Quantitative findings can be contextualized with the qualitative meanings and the qualitative meanings provide useful explanations for specific quantitative results. Moreover, both types of data support the contention that while physical elements of historic Charleston and I’On are similar, place attachment measures are quite different for each location. Generally speaking, place attachment correlates with far more environmental and behavioral factors in Charleston than in I’On. The natural conclusion is that attachment in Charleston is a more complex and nuanced experience than in I’On.

The three research questions posed for this study that addressed the physical characteristics of historic Charleston and I’On, the appearance of physical age in these places, and spontaneous fantasy catalyzed by the environmental experience in relation to place attachment could all be answered with the data analyzed in Chapter 6. In Charleston, buildings, unseen effort, and a holistic view of the townscape correlate to increased general attachment while place dependence is associated with trees and a holistic view of the townscape, and rootedness is associated with unseen effort. The physical
age of Charleston, as evidenced by the appearance of masonry patina, correlates to an increase in general attachment and a decrease in place dependence and place identity. Place identity is positively correlated with reading the physical layers of age in a landscape. Lastly, spontaneous fantasy correlates to increased general attachment and place dependence. With the exception of unseen effort being associated with an increase in general attachment, place attachment was not correlated with any other factors in I’On.

Self-selection bias is a significant limitation in the quantitative portion of this study. Comparison of demographic data with the Census 2000 data for historic Charleston, however, indicates sufficient congruence to warrant the claim that the results are likely to be generalizable within the case study. Because the same method for solicitation was employed in I’On, it follows that the results for I’On are also likely to be generalizable.
CHAPTER EIGHT
CONCLUSION

8.1 Introduction

An important goal for research in the built environment is to influence practice in a way that benefits certain groups of people or perhaps society as a whole. Such is the case with this research as the hope is that the results of this study may help to improve the practice of historic preservation as well as urban design to improve human flourishing. On a fundamental level, perhaps this study may help lead the way toward redefining the nature of “research” in the discipline of historic preservation by showing that one need not be limited solely by interpretive research methodologies and questions rooted in historiography.

This chapter will explain how the results of this study may help benefit historic preservation and urban design practice and present suggestions for integrating these two disciplines in a way that serves to refocus their collective effort on the conservation of place. Lastly, suggestions for further research will be explored, including using this study to help redefine how “historic” places are identified.

8.2 Methodological contribution for natural and built environment disciplines

Today, economic and scientific principles dominate the discussion of how different natural and built environments are assessed and valued. While these values are certainly not unimportant, their influence makes the achievement of an integrated, holistic assessment of environmental significance difficult to achieve because subjective values are either ignored or relegated to a subservient
role. Within natural resource conservation, for instance, ecological values tend to drive decision-making processes such as in the management of outdoor recreation and the focus on ecological impacts of visitors on particular sites (Hammit & Cole, 1998, p. 228-254). Of equal importance, however, is understanding what motivates users of particular spaces so as to achieve the dual goals of visitor satisfaction and resource conservation. Outdoor recreation research is therefore concerned with understanding why some users prefer some places, but not others. These behaviors are driven by personal, subjective and experiential values such as Williams and Roggenbuck (1989), Williams et al. (1995), and Williams and Vaske (2003) have discovered.

Certainly the built environment professions, such as architecture, landscape architecture, and planning are also concerned about the personal, experiential values that people ascribe to places. Architecture has an established history of using phenomenology to understand the person/place experience (e.g., Norberg-Schulz (1980)), but has not tried to use phenomenology within a broader mixed-methodology framework to establish the generalizability of specific, identified phenomena to a significant degree. Landscape architecture has brought phenomenology via geography into its practice, but again has not really applied this qualitative methodology within a mixed-methodology framework. Planning, on the other hand, tends to be driven by quantitative methods with qualitative methods relegated to a secondary role, if at all.

The mixed-methodology approach utilized in this study may have much to offer all of these disciplines—in fact any discipline in which the holistic valuation of environments is important should benefit. While economic valuation approaches, such as hedonics^1^, touch on the personal motivations of individuals, these purely quantitative methodologies employed are notorious for producing results that are difficult to explain (Shiller, 1993, pp. 129-131). Alternately, purely qualitative approaches are often difficult to apply to certain situations because of their lack of generalizability. By integrating a

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1. Hedonics is particularly important in real estate research where correlations between personal preferences and economics are used to increase investment revenue.
qualitative methodology before the quantitative methodology in mixed-methodology research, it becomes easier to understand disconcerting results because these results can be described within a known context. The particular value of using a phenomenology comes into play where the phenomenon has emotional roots and cannot be easily explained through higher-order cognitive processes.

The importance of a mixed-methodological approach comes from the way it pairs a strength with a weakness. For instance, quantitative methodologies are bereft of meaning. The statistical analysis of survey results generates numbers that must then be interpreted; the numbers themselves are meaningless outside of an interpretive context. On the other hand, qualitative methodologies focus exclusively on meanings and begin with an interpretive act. If a qualitative study addresses the same unit of analysis it can therefore provide important, if not essential, meanings with which to interpret quantitative results. Rather than relying on the potentially narrow perspective of the researcher, statistical results can then be framed within the *emic* meanings of individuals. What once was confusing and inexplicable results often become easily explainable within this broader context.

Alternately, a commonly stated issue with qualitative research is that its results cannot be generalized; moreover an inaccurate criticism is that qualitative research lacks external validity. Validity in qualitative research comes from the ability of a researcher to justify his or her results through careful procedures, such as intercoder reliability. The goal is to not generate data that is generalizable, but meanings that are transferable to similar situations. Thus the primary function of qualitative methodologies is to understand why certain phenomena might exist rather than to explain causality. There are situations, however, in which generalizability and predictability are useful goals, such as understanding to what extent a population might experience a particular phenomenon. A qualitative study can reveal the presence and nature of a phenomenon while a later qualitative study can then use key indicators of that phenomenon through a reduction process to measure the degree to which people may experience these associated indicators.
The use of a sequential mixed-methodology in research is certainly not new, nor is it novel. Its use within many environmental disciplines, however, has been quite limited (Bryman, 2008, p. 262). The reason for this situation is not precisely known, but a likely possibility stems from the research methodologies taught to burgeoning graduate students. Each discipline has its own methodologies and save for a few interdisciplinary programs, venturing into another discipline and borrowing its methodologies is by far an exception rather than the rule. Graduates of some built environment disciplines—architecture for instance—may receive no exposure at all to research methodologies.²

While this study focuses on the problems inherent in historic preservation practice and secondarily in urban design, the sequential mixed-methodology employed in this research could readily be adapted and used by many other disciplines. What this particular study shows is that it is possible to use a phenomenology to inform a quantitative survey methodology and produce compatible and congruent results. Many other disciplines would likely find that this study’s design is transportable to many other research areas.

### 8.3 Implications for historic preservation and the design professions

Much of accepted preservation practice has little or no empirical justification for its existence. (See Chapter 1 for a review of the problem area for this research.) As John Pendlebury (2009) laments, “much of what passes for conservation research seeks uncritically to affirm predetermined outcomes” (p. 222). This study is designed to break from this pattern and to understand the fundamental reasons why people value the historic environment to provide a better basis of understanding the holistic assessment of historical significance. Because of the interdisciplinary nature of this research, it also has the potential to inform urban design as well as the other built environment professions.

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² The lack of education in research methodologies may be one explanation for the slow adoption of “evidence-based” design in architecture as well as other design fields.
Planners, landscape architects, and architects increasingly use social science methodologies—even outside the academe—to assess what is valuable to local populations in order to help plan interventions, yet historic preservation still relies on a predetermined set of valuation routines based solely on expert opinion to declare what is or is not valuable and worth saving. The use of social science methodologies to gather values from a local population for historic preservation activities—at least within the United States—is relatively unknown outside ethnographic studies by the National Park Service and the occasional (usually unpublished) academic study. Even if such an endeavor were to be undertaken on a regular basis, the “historic” places identified would likely not be able to be protected under existing preservation laws as Randy Hester (1985) discovered in his work in Manteo, North Carolina. In this study, gravel parking lots and ordinary parks were important to the community’s heritage while Andy Griffith’s (a well-known actor) house was not.

While a few academic papers and books advocate that sociocultural and phenomenological values need to be guiding preservation practice, preservation practice at the local, state, and national level in the United States continues to use the National Register nomination and the Secretary of the Interiors Standards unquestioningly. These documents, while perhaps revolutionary during their inception in the 1960s and 1970s, are burdened by their rejection of all sociocultural values and most phenomenological values; only expert values need apply under their epistemologically antiquated regime. Researchers have been exploring and using sociocultural values in preservation planning for at least the past decade and a half, but as far as the author is aware, this study is the first of its kind that is meant to inform the phenomenological framework for assessing authenticity through a better understanding of place attachment.

The results of this study provide evidence for the importance of place attachment in defining historical significance for the average resident in historic Charleston. Compared to I’On, place attachment is more complex with relationships to patina, mystery, and especially spontaneous fantasy that are entirely missing in I’On. Table 8.1 summarizes the differences in place attachment between
Charleston and I’On by abstracting the factor analysis in Chapter 6 into relative “strength” bars. (The more circles in these bars that are highlighted, the stronger the association.) The age of the environment in Charleston also increases place dependence for residents, meaning that residents of this neighborhood believe that their neighborhood is more unique and ultimately, not so easy to replace or duplicate. There is, therefore, a need to assess the character and degree of place attachment for residents of historic places and relate these place attachment measures to elements and behavior in the environment.

<table>
<thead>
<tr>
<th><strong>Table 8.1: Strength of relationships between perception/behavior and place attachment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General attachment</strong></td>
</tr>
<tr>
<td>Positive valuation of buildings</td>
</tr>
<tr>
<td>Positive valuation of trees</td>
</tr>
<tr>
<td>Perceive townscape as having “unseen effort”</td>
</tr>
<tr>
<td>Holistic perception of townscape</td>
</tr>
<tr>
<td>Positive valuation of masonry patina</td>
</tr>
<tr>
<td><strong>Negative valuation of masonry patina</strong></td>
</tr>
<tr>
<td>Desire to “read the layers of age” in the townscape</td>
</tr>
<tr>
<td>Experience spontaneous fantasy in own neighborhood</td>
</tr>
</tbody>
</table>

*Green = historic Charleston, blue = I’On, empty = no correlation for Charleston or I’On. Scale (by factors): A factor of 1 to 2 = 1 circle; a factor of 2 to 3 = 2 circles; a factor of 3 to 4 = 3 circles; a factor of 4 to 7 = 4 circles; a factor > 7 = 5 circles.*

Infill development in historic environments ought to be carefully considered for its impact on either impairing or assisting spontaneous fantasy, or ideally, not impacting it at all. This recommendation is potentially problematic because it could lead to the “Disneyfication” of an historic landscape that could ruin its constructed if not phenomenological authenticity. The preservation world has traditionally dealt with this problem through the ethical principle of making sure all new construction is “of its time” so that the “new” can be clearly differentiated from the “old.” Critics of this approach, however, point to items nine in the Secretary of the Interior’s Standards for Rehabilitation and the
Venice Charter\(^3\) that codify this requirement as being responsible for spreading bad design across the western world. Léon Krier (1998), for instance, attacks this directive because it “advocates the destruction of the organic unity of ancient buildings” and results “in a degradation of the concept of conservation itself” (p. 81). What Krier and others\(^4\) have done is expose the relationship of Modernism to historic preservation: both movements embody the same highly moralistic underpinning along with “a stress on authenticity and honesty of expression, and truth to structure and materials” (Pendlebury, 2009, p. 22). In essence, perhaps we should considered the practice of historic preservation without its Modernist core. After all, contemporary design practice now makes it legitimate to design buildings to “deceive” (p. 167). Paradoxically, in 2009, the directive to differentiate old from new in historic preservation may actually be engendering design that is not of its time.

Compared to historic preservation, urban design does not suffer from a lack of researchers, published studies, and guidance on how the the nascent discipline should improve itself. A commonly identified problem with the practice of urban design is that it is too often approached in a “cosmetic” fashion after major landmarks have been designed; in less enlightened perspectives, the role of the urban designer is to attempt to patch together these disparate environment objects in an attempt to make a unified whole. Such efforts usually fail and instead create what Roger Trancik (1986) calls “unshaped antispace” where “buildings are isolated objects [and] spaces between them are vast and formless, without the coherent structure of historically evolved streets and squares” (pp. x, 1). A number of authors (e.g., Alexander, 2007/1979; Jacobs & Appleyard, 2007/1987) attribute this problem to the rise of modernism and its attendant rational design paradigm. As a result, consensus is building around the idea that we can learn a good deal from the way cities have been built in the past to inform their future.

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3. Coincidence or by design? Item 9 in both the Secretary of the Interior’s Standards and the Venice Charter state the same intent: the old must be differentiated from the new.

4. A new edited work based on an international conference that explores the contemporary ramifications of the Venice Charter is applicable to this discussion, but it was not yet published at the time this manuscript was being prepared: M. Hardy. (2009). *The Venice Charter revisited: Modernism, conservatism and tradition in the 21st century*. Newcastle: Cambridge Scholars.
how we design cities today. Or as Francis Tibbalds directs, as if talking to Le Corbusier himself, “thou shalt have the humility to learn from the past and respect thy context” (qtd. in Parfect & Power, 1997, p. 111).

The study of historic Charleston in context with I’On provides a unique opportunity to apply this mantra. The results reinforce what authors such as Cullen (2007/1961), Bell (1999), and Smith (2003) have written in regard to traditional urban design’s perceived complexity and sense of discovery and the contention of Kaplan et al. (1998) and Herzog and Miller (1998) that layered landscapes foster intrigue and invite exploration. A larger question is how to encourage urban places that not only retain, but add this sense of complexity and layering. Alexander et al. (1987) put forth a theory for urban design that is based on slow adaptive improvements to the existing fabric in order to “fix” bad design over time. This process, described by Michael Mehaffy (2008) as “generative design,” is part of a broader movement to foster the kind of organic design process that happened naturally in the pre-modern era. According to Mehaffy, a key weakness in the process of fostering an organic townscape is getting at stakeholder’s values—in charrettes, for instance, “outside experts’ disproportionately influence the process” of urban design (p. 67). In a similar fashion, the reliance of new urbanism on static design codes may serve to inhibit the natural, dynamic qualities necessary to implement Alexander’s “new theory” (p. 69). The issue at hand appears to be the difficulty with which urban designers and planners have in accessing and understanding people’s subjective values of an urban landscape. Simply put, the over-reliance on the objective values of experts in the application of Alexander’s theory cripples the success of generative design. The methodology presented here may be a way at getting at those values.

8.4 Integration of the historic environment and urban design: place-based conservation

A movement that has been underway in Europe and in some Latin American countries (e.g., Brazil) since the 1970s focuses on “integrated urban conservation” (i.e., conservation of the historic
and not natural environment). Integrated urban conservation requires the interdisciplinary involvement of built environment, economic, and social science specialists in an attempt to conserve urban areas in a holistic way that considers an array of stakeholder values. As well as traditional objective values focusing on history, sociocultural values are also important in guiding planning and intervention activities. The primary goal is to manage “human development” through sustainable practices that emphasize the “conservation of the physical and spatial aspects” of urban centers while giving priority to cultural values (Zancheti, Kulikauskas, Sa Carneiro & Lapa, 2004).

In the United States, municipalities typically implement urban conservation, or as it is more commonly known, “landmarks preservation,” or simply “historic preservation” (applied to urban areas), as balkanized programs within planning departments. Historic preservation activities are not integrated across all planning activities, but rather are only called into play where local ordinances or state or federal law require their consideration. The vast majority of municipalities (mainly smaller towns) across the country have no resident preservation expertise at all and rely on outside consultants or the state historic preservation office for guidance. There are many possible reasons for this situation, including the fact that historic preservation planning is considered a specialization under the broad category of city planning; planners interested in historic preservation must go out of their way to receive additional education and practice in the field.

Most experts in urban design—a field related to both planning and architecture, and as I will argue, historic preservation—consider historic preservation as peripheral to their activities, as John Lang (2005, p. 173) explains in his influential text on urban design. In fact, most works⁵ that address urban design spend little space discussing historic preservation, yet the topics that are discussed, such as the historical development of cities, the importance of placemaking, and the social and cultural

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⁵ A good example is Larice and Macdonald’s *Urban Design Reader* (Routledge, 2007), which contains many useful readings in urban design spanning more than a century, but only includes a single article addressing historic preservation. The index does not even include a listing for “historic preservation.”
dimensions of cities, are also essential to historic preservation. The two disciplines even share similar seminal figures, such as Jane Jacobs and Robert Moses. The central argument is that historic preservation is part of urban design, even if it is not widely recognized as being so; the inverse is also true and one could make a similar argument that historic preservationists fail to acknowledge the role of urban design in their own work.

The blending of urban design and historic preservation in this study, therefore, is no coincidence as both specialties share mutual interests and aims that chiefly distill down to placemaking endeavors. For this reason, it is disingenuous to urban stakeholders to artificially separate planning and interventions in the urban environment into either historic preservation or urban design; rather, we ought to be focusing on an integrated approach of historic preservation and urban design centered around placemaking. Such an activity could then be referred to as “place-based conservation” or simply “place conservation” (see Low (1994)) with the aim of conserving all three elements of authenticity in an urban environment through the conservation of fabric, sociocultural values, and the phenomenological experience. Historic preservation focuses on the conservation of building and landscape fabric while place-based conservation would also focus on conserving dimensions of the social, cultural, and phenomenological experiences. In other words, it would be integrated urban conservation focusing on the complete range of stakeholder values.

Lastly, the methodology presented here offers a way to inform the design of the built environment in a way that contributes to placemaking. For instance, Cari Goetcheus (2008b) laments about how difficult it is to “deconstruct” genius loci “into useable design elements for ‘placemakers’” (p. 196). This study clearly identified discrete elements of the landscape that are important for place attachment such as trees, fences, and unseen effort. With the identification of these elements, it becomes possible to begin to build a picture of what sense of place in any particular environment

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6. This term is already in use in the United States, but only as applied to natural resource conservation.
actually means. Such work could move *genius loci* from a vague description to a concept with known dimensions of significance that could then guide the work of designers as well as conservationists.

### 8.5 Specific recommendations

These recommendations are largely based upon the correlations between place attachment and the perception and valuation of the environment. In order to make the relationship more clear, the factor analysis in Chapter 6 has been abstracted into relative “strength” bars. The more elements in these bars that are highlighted, the stronger the association. The descriptive statistics presented in Chapters 6 and 7 are also used to substantiate these recommendations.

#### 8.5.1 Recommendations directly supported by findings

The following recommendations are unambiguously substantiated in the findings presented in Chapters 6 and 7.

**Recommendation 1:**

*Protect masonry patina to increase general attachment, but do so judiciously as too much patina (decay) can decrease place identity and rootedness.*

<table>
<thead>
<tr>
<th>Relationship between levels of place attachment and patina valuation</th>
<th>General attachment</th>
<th>Place dependence</th>
<th>Place identity</th>
<th>Rootedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive valuation of masonry patina</td>
<td><img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative valuation of masonry patina</td>
<td><img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /></td>
<td><img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /></td>
<td><img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /></td>
<td><img src="image1" alt="Green circles" /> <img src="image1" alt="Green circles" /></td>
</tr>
</tbody>
</table>

*Green = historic Charleston, blue = I’On, empty = no correlation for Charleston or I’On. Scale (by factors): A factor of 1 to 2 = 1 circle; a factor of 2 to 3 = 2 circles; a factor of 3 to 4 = 3 circles; a factor of 4 to 7 = 4 circles; a factor > 7 = 5 circles.*

The positive valuation of patina is strongly correlated with increased levels of general attachment, but paradoxically is *negatively* correlated with place dependence and place identity. These findings make not make sense until a comparison is made with the qualitative portion of the study. In interviews with my informants, many people expressed how they valued patina, but only to a certain degree; too much patina was perceived as negatively impacting the appearance of the neighborhood.
What my informants were expressing is that there needs to be just enough patina present to convey the age of the neighborhood, but not so much as to make the neighborhood look run down. The quantitative findings support these meanings as place dependence and identity are typically associated with pride in one’s neighborhood.

**Recommendation 2:**

*Protect masonry patina to engender spontaneous fantasy and increase general attachment and dependence.*

### Relationship between levels of place attachment and spontaneous fantasy

<table>
<thead>
<tr>
<th></th>
<th>General attachment</th>
<th>Place dependence</th>
<th>Place identity</th>
<th>Rootedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience spontaneous fantasy in own neighborhood</td>
<td>● ● ● ● ●</td>
<td>● ● ● ○ ○</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Relationship between age-related perception and behavior and spontaneous fantasy*

<table>
<thead>
<tr>
<th></th>
<th>Experience spontaneous fantasy in any historic neighborhood</th>
<th>Experience spontaneous fantasy from historic Charleston photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive valuation of masonry patina</td>
<td>● ● ● ● ●</td>
<td>● ● ● ○ ○</td>
</tr>
<tr>
<td>Desire to “read the layers of age” in the townscape</td>
<td>● ● ● ○ ○</td>
<td>● ● ● ○ ○</td>
</tr>
</tbody>
</table>

*Populations of historic Charleston and I’On combined.

**Green** = historic Charleston, **blue** = I’On, empty = no correlation for Charleston or I’On. Scale (by factors): A factor of 1 to 2 = 1 circle; a factor of 2 to 3 = 2 circles; a factor of 3 to 4 = 3 circles; a factor of 4 to 7 = 4 circles; a factor > 7 = 5 circles.

Patina is a pre-requisite for spontaneous fantasy and for increased levels of attachment. In historic Charleston, there is a definite relationship between an aesthetic preference for patina and the experience of spontaneous fantasy. Residents who experience spontaneous fantasy frequently have higher levels of general attachment and place dependence. The direct implication for preservation practice is to incorporate greater measures for the identification and retention of patina in historic environments. The identification process should largely rely on residents’ perceptions and not expert opinion, where possible, especially in an environment where patina does not occur on masonry due to the lack of masonry building materials.
**Recommendation 3:**

*Increase the amount of townscape features that represent unseen effort, such as “hidden” gardens in order to increase place attachment.*

### Relationship between levels of place attachment and unseen effort

<table>
<thead>
<tr>
<th></th>
<th>General attachment</th>
<th>Place dependence</th>
<th>Place identity</th>
<th>Rootedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceive townscape as having <strong>“unseen effort”</strong></td>
<td>● ● ● ● ●</td>
<td>● ● ● ● ●</td>
<td>● ● ● ● ●</td>
<td>● ○ ○ ○ ○</td>
</tr>
</tbody>
</table>

*Green = historic Charleston, blue = I’On, empty = no correlation for Charleston or I’On. Scale (by factors): A factor of 1 to 2 = 1 circle; a factor of 2 to 3 = 2 circles; a factor of 3 to 4 = 3 circles; a factor of 4 to 7 = 4 circles; a factor > 7 = 5 circles.*

Perhaps the most important contribution that this study can provide to the practice of urban design and historic preservation is the relationship between place attachment and unseen effort. Both historic Charleston and I’On residents reported a strongly positive correlation between their perception of unseen effort and general place attachment. Only in historic Charleston was unseen effort associated with rootedness. The natural conclusion is for developers to include townscape features that embody a high amount of unseen effort into their designs as well as encouraging residents to incorporate these kinds of features, such as “hidden” gardens, in their own properties. The downside to this approach, of course, is likely to be increased cost—both in terms of time and effort.

### 8.5.2 Recommendations indirectly supported by findings

The following recommendations require some conjecture to come to conclusions, although they are partly based on the findings presented in this study.

**Recommendation 4:**

*Older buildings and trees increase general attachment or dependence; avoid demolishing older buildings and removing older trees.*

### Relationship between levels of place attachment and valuation of (older) buildings and trees

<table>
<thead>
<tr>
<th></th>
<th>General attachment</th>
<th>Place dependence</th>
<th>Place identity</th>
<th>Rootedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive valuation of buildings</td>
<td>● ● ● ● ●</td>
<td>● ● ● ● ●</td>
<td>● ● ● ● ●</td>
<td>● ○ ○ ○ ○</td>
</tr>
<tr>
<td>Positive valuation of trees</td>
<td>● ● ● ● ●</td>
<td>● ● ● ● ●</td>
<td>● ● ● ● ●</td>
<td>● ○ ○ ○ ○</td>
</tr>
</tbody>
</table>

*Green = historic Charleston, blue = I’On, empty = no correlation for Charleston or I’On. Scale (by factors): A factor of 1 to 2 = 1 circle; a factor of 2 to 3 = 2 circles; a factor of 3 to 4 = 3 circles; a factor of 4 to 7 = 4 circles; a factor > 7 = 5 circles.*
The positive valuation of buildings and trees is correlated with an increase in general attachment and place dependence, respectively, but only in historic Charleston. No such correlation was found in I’On, which of course has much newer buildings and, generally speaking, newer trees. One could argue that removing these buildings and trees would probably result in a reduction in the level of place attachment to historic Charleston. A logical conclusion is that it may be because of the age of these buildings and trees that they are valuable, although the study does not provide data to unambiguously support this claim.

8.5.3 Conjectural recommendations

**Recommendation 5: The assessment of the significance of places should be based on a balance of expert/objective values, sociocultural values, and phenomenological values; this assessment should look at the historic environment in holistic terms.**

One of the issues identified in Chapter 1 is that the accepted methods for the valuation of historic places are almost exclusively based on objective/expert values to the exclusion of sociocultural and phenomenological values. This study has shown that there is a rich complexity to how people in historic Charleston value their neighborhood; surely this evidence lends itself to the recommendation that the assessment of historical significance should be based on residents’ values as well as expert values. There should be a balance between the two as Alanen and Melnick (2000) advocate. There are elements to the historic environment in Charleston that are not even considered in traditional assessment methods, especially in regard to landscape elements. Perhaps it is time to think about opening the National Register nomination process to incorporate sociocultural and phenomenological values. Paradoxically, while this change would result in the incorporation of the values of residents for the first time, more experts would be required to make this assessment and these experts would require training in social science methodologies. Today, there are very few historic preservation profession-
als with training in the social sciences as it is not considered to be important to preservation work; the only research methodology taught in undergraduate and graduate historic preservation programs is the interpretive/historic research methodology. On the other hand, there are very few social scientists with training or practice experience in historic preservation. Therefore, the professional infrastructure to support this change does not yet exist and could prove to be problematic.

Lastly, the landscape (or in the case of Charleston, the townscape) is essential to place attachment and the valuation of the historic environment. The results of this study reinforce what many landscape preservation professionals have been saying for a number of decades: that the spaces in between the buildings are as important—if not more so, in some cases—than the buildings themselves. The layered quality of the landscape in historic Charleston helps to create a sense of discovery and mystery which lead to increased levels of place attachment. While preservation practice is slowly moving toward incorporating a holistic view of landscape, the identification and protection mechanisms are still based on buildings as the primary units of significance. An interesting ramification of this study is to dispense with buildings altogether as unilateral symbols of historic significance and require all identification and treatment plans to address the historic environment in toto rather than only focusing on individual elements of the townscape.

8.6 Recommendations for further research

Research that employs a case study design, such as this one, naturally lends itself to additional case studies in similar and disparate environments. For instance, much of this research is predicated on the assumption that people perceive urban and suburban environments differently; certainly there is empirical research that lends credence to this claim, including the results of this study for suburban

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however, most nominations are prepared by professionals with training in historical research such as historians or historic preservationists. It is common for National Register nominations prepared by a lay individual to be rejected by state historic preservation offices due to poor research quality.
controls. It would be particularly useful to conduct a third case study on a “typical” suburban neighborhood to see how residents of this kind of environment perceive and are attached to their neighborhoods and then compare the results with the two extant case studies of I’On and historic Charleston. Additional case studies might also include other new urbanist communities—especially those with modernist architectural design instead of neotraditional design. In this case, the results would be useful to help understand to what extent neotraditional versus modern design impacts place attachment where other factors related to layering are similar to I’On.

A recommendation from this study is to focus on the identification and protection of townscape elements that engender spontaneous fantasy. While the qualitative study identified a few of the kinds of these elements that may engender spontaneous fantasy, a complete study could be developed that would only address the relationship of townscape elements to spontaneous fantasy. Such a study could ideally have a quantitative component in order to make generalizations that could potentially be used to help preservation planning in other communities. It is only known at this point that patina is connected with spontaneous fantasy and that both houses and landscapes also promote spontaneous fantasy. Much more detail is needed making this a particularly interesting and fruitful area for research.

A finding that was consistent across both historic Charleston and I’On was that high levels of unseen effort is correlated with increased levels of attachment. Research identified in Chapter 2, for instance, indicates that people often associated factors related to unseen effort in terms of safety and comfort which could certainly relate to place attachment. Could an economically justifiable argument be made to create townscape with increased levels of unseen effort in order to maximize place attachment? What kinds of unseen effort (e.g., gardens) are maximally connected with place attachment? These are questions to which many developers would likely want answers as places that have higher levels of unseen effort would seem to warrant higher asking prices.
The most widely-recognized system for the identification of “historic” properties in the United States is the National Register nomination. This chapter in particular has identified some rather serious deficiencies in the ability of this process to actually identify buildings and places that have a full range of objective, sociocultural, and phenomenological values. What would it take to change the National Register nomination process to accommodate these additional values? What sorts of research methodologies would be necessary? Who would be able to conduct this research? And lastly, how could this system be implemented in a way that justifies cost/benefit ratios? All of these questions need answers and could form independent research projects on their own.

Moving to a much greater time span, it would be very interesting to revisit I’On at its 25th, 50th, and 75th anniversaries and conduct the same study and see how the perception and attachment variables differ over time; repeating the qualitative portion of the study would also provide additional context to shed light on changes over time. The hypothesis would be that, over time, I’On measures would begin to look more like historic Charleston, especially in regard to the diversification on place attachment measures and an increase in spontaneous fantasy that hopefully could be correlated to an increase in environmental patina.

8.7 Summary

The results of this research hold promise to benefit the practice of historic preservation and urban design, but more importantly these results point to the need to integrate the practice of preservation and urban design into a new focus on place-based conservation akin to the integrated urban conservation model employed in parts of Europe and Latin America. The balkanization of these two relatively nascent disciplines do not necessarily serve to benefit the people for whom preservationists and urban designers purportedly serve.

In particular these results point to a need to continue to develop an understanding of phenomenological authenticity and the values associated with it, as well as with sociocultural values. This
study has hopefully added important information to our understanding of the phenomenological values of age, attachment, and spatial value which can then be used to improve the practice of how professionals preserve and plan for interventions in urban residential environments. Table 8.2 summarizes these recommendations.

**Table 8.2: Study recommendations for preservation and urban design practice**

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Protect masonry patina to increase general attachment, but do so judiciously as too much patina (decay) can decrease place identity and rootedness.</td>
</tr>
<tr>
<td>2. Protect masonry patina to engender spontaneous fantasy and increase general attachment and dependence.</td>
</tr>
<tr>
<td>3. Increase the amount of townscape features that represent unseen effort, such as “hidden” gardens in order to increase place attachment.</td>
</tr>
<tr>
<td>4. Older buildings and trees increase general attachment or dependence; avoid demolishing older buildings and removing older trees.</td>
</tr>
<tr>
<td>5. The assessment of the significance of places should be based on a balance of expert/objective values, sociocultural values, and phenomenological values; this assessment should look at the historic environment in holistic terms.</td>
</tr>
</tbody>
</table>

The results of this study invite a number of additional studies that should be conducted to build upon these initial findings. Such studies could incorporate the same methodological framework, but applied to different new urbanist and suburban cases for additional comparisons. Looking at how I’On changes over the next seventy-five years may also provide interesting comparative results. More research needs to be done on the factors that make townscape elements engender spontaneous fantasy and lead to increased levels of unseen effort.

Lastly, this study adds to the growing chorus of discontent with the existing systems for identifying “historic” properties that rely exclusively on expert values. The consensus in the preservation world is that this system should change in such a way to incorporate the wide-range of stakeholder values in tandem with expert values. This study certainly provides many important suggestions for incorporating phenomenological values to this end. The last question is if and how this change can happen for maximal benefit to all stakeholders, including professionals who may be uncomfortable with a radical shift in the status quo.
APPENDIX A: TERMINOLOGY OF HISTORIC PLACES

The terminology used in context with historic places is not consistent and varies dramatically between different countries. This appendix is intended to clarify this terminology with respect to nouns and verbs used with historic places. Practitioners and researchers in the United States generally prefer the term “preservation” to refer to the basic set of activities that address historic places, while the rest of the world uses the term “conservation.” This can lead to confusion where an international term that is meant to address the built environment, such as “conservation practice,” is misconstrued in the United States to only apply to natural resource conservation. In this manuscript, the word “conservation” will always apply to built environments or human-modified landscapes and not exclusively to “natural” landscapes.

Table A.1: Nouns used to describe historic places

<table>
<thead>
<tr>
<th>Term</th>
<th>Domain</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural landscape</td>
<td>U.S. and international, usually within an archaeological context, but not always.</td>
<td>In the 1970s, archaeologists coined this term to apply to any landscape in which there was human intervention. In practice, however, “cultural landscape” usually implies a landscape in which changes have taken place over many decades or more. In the broadest sense, a cultural landscape can refer to any human-modified landscape, regardless of its age.</td>
</tr>
<tr>
<td>Cultural resource</td>
<td>U.S. and international, usually within an archaeological context, but not always.</td>
<td>Human-made or modified objects (moveable or immovable) in a landscape. As with “cultural landscape,” common usage of “cultural resource” implies that the object has some degree of physical age to it, but in the broadest sense, this does not have to be the case.</td>
</tr>
<tr>
<td>Historic landscape</td>
<td>U.S. and international</td>
<td>Often used interchangeably with “cultural landscape,” but the word “historic” implies that some kind of historical significance is officially recognized. The implication is that human-made changes to the landscape happened in the distant past.</td>
</tr>
<tr>
<td>Historic environment</td>
<td>U.K. primarily</td>
<td>Essentially equivalent to historic landscape, but usually with connotations of a significant built environment component.</td>
</tr>
<tr>
<td>Historic site</td>
<td>U.S. and international</td>
<td>Refers to a bounded place with historical significance; in common use it can be equivalent to an historic building or a collection of historic buildings.</td>
</tr>
<tr>
<td>Built heritage</td>
<td>U.K. and international primarily</td>
<td>Equivalent to historic buildings and structures.</td>
</tr>
</tbody>
</table>
Table A.2: Verbs used to describe activities in historic places

<table>
<thead>
<tr>
<th>Term</th>
<th>Domain</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>historic preservation</td>
<td>U.S. only</td>
<td>Activities that seek to maintain the historical authenticity of aged objects (moveable or immovable) through managed change. In the broadest sense, this term can apply to objects in museums as well as historic buildings and landscapes. In common usage, “historic preservation” is understood to only apply to the built environment and cultural landscapes.</td>
</tr>
<tr>
<td>heritage conservation</td>
<td>International, especially Canada and East Asia (e.g., Hong Kong); rare in the U.S.</td>
<td>Equivalent to historic preservation.</td>
</tr>
<tr>
<td>historic environment</td>
<td>U.K.</td>
<td>Coined in the U.K. to address the need for a term that is equivalent to heritage conservation, but with an explicit concern for only immovable objects and landscapes.</td>
</tr>
<tr>
<td>conservation</td>
<td></td>
<td>In the U.S. this term is understood to specifically apply to the conservation of the materials of historic buildings through scientific processes. Internationally, it takes on a much broader scope of any work that maintains the historical authenticity of buildings including planning.</td>
</tr>
<tr>
<td>architectural conservation</td>
<td>U.S. and international</td>
<td>In the U.S. this term only usually applies to the conservation of natural landscapes; in international usage it can mean the conservation of natural landscapes or cultural landscapes or a combination of both.</td>
</tr>
<tr>
<td>landscape conservation</td>
<td>U.S. and international</td>
<td>The preservation of natural landscapes or a combination of both; equivalent to landscape conservation in international contexts.</td>
</tr>
<tr>
<td>landscape preservation</td>
<td>U.S.</td>
<td></td>
</tr>
</tbody>
</table>

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APPENDIX B: TOWNSCAPE TYPOLOGY

B1: Elements of the townscape

Bounding elements (walls, fences, or gates)

I’On

Charleston

Fountains

Trees

Gardens

Buildings

(All photos taken by informants; see Chapter 5.)
B1: Elements of the townscape, cont.

I'On Charleston Road
  
Sidewalk
  
B2: Elements of buildings

I'On Charleston
  
Doors
  
Shutters

(All photos by the author except the photos on the right of the door and shutters, which are by informants.)
B2: Elements of buildings, cont.

Windows

Balcony

Roof

(All photos by the author except the middle right photo, which is by an informant.)
B3: Layers and patina

I’On Charleston

Layers

Patina

(All photos taken by informants)

B4: Density, morphology, layering

I’On Charleston

Density and morphology

Layering

(Drawings by the author.)
APPENDIX C: EXAMPLES OF SOLICITATION MATERIALS FOR SURVEY

How Do You Like Your Neighborhood?

To participate in this study, please take a 15-minute web survey at neighborhoodstudy.com

You will not be asked for any information that could personally identify you, such as your name or your address.

If you have already taken this survey, thank you. There is no need to take it again.

The purpose of this study is to look at how people are attached to the physical characteristics of their neighborhoods. The results will be released to your local homeowners association and the city’s planning department. It is intended to help improve how places like your neighborhood are designed, planned, and preserved. If you have any questions, please feel free to contact the study designer, below.

Jeremy Wells
Doctoral candidate in Planning, Design, and the Built Environment
(Formerly Environmental Design and Planning)
College of Architecture, Art, and Humanities
Clemson University
118 Lee Hall
Clemson, SC 29634-0511
jeremyw@clemson.edu

Figure C.1: Example of solicitation flyer used in both historic Charleston and I’On.
If you live in historic Charleston south of Broad Street, your participation is needed in a Clemson University study to help understand how people value the design of their neighborhoods. To participate, please take a 15-minute web survey at http://www.neighborhoodstudy.com. Your identity will remain confidential: information that could personally identify you, including your name, will not be collected. The purpose of this research is to understand how people value different physical characteristics of their neighborhoods to help improve the practice of urban design, planning, and historic preservation. The neighborhood in historic Charleston south of Broad Street has been selected as part of a case study comparing a new and an old neighborhood. The results of this study will be released to the Charlestowne Neighborhood Association. Thank you for helping to improve how places like your neighborhood are designed, planned, and preserved. If you have any questions, please feel free to contact me.

- Jeremy Wells
Doctoral candidate, Environmental Design and Planning
jeremyw@clemson.edu
(864) 508-2548
Environmental Design and Planning Program
College of Architecture, Art, and Humanities
Clemson University
118 Lee Hall
Clemson, SC 29634-0501

Figure C.2: Excerpt from an e-mail sent from the Charlestowne Neighborhood Association to its members.

A research study to tell others how you feel about living in I’On!

I’On Residents, your participation is needed in a Clemson University study to help understand how people value the design of their neighborhoods.

To participate, please take a 15-minute web survey at www.neighborhoodstudy.com.

Your identity will remain confidential: information that could personally identify you, including your name, will not be collected.

The purpose of this research is to understand how people value different physical characteristics of their neighborhoods to help improve the practice of urban design, planning, and historic preservation. I’On has been selected as part of a case study comparing a new and an old neighborhood.

The results of this study will be released to the I’On Trust, the I’On Assembly, and the I’On Group.

Figure C.3: November 2008 ad in the Living in I’On newsletter distributed by the homeowner’s association in I’On.
APPENDIX D: QUESTIONNAIRE

This online survey was administered using the SurveyMonkey.com web site which allows for skip patterns based on the answer to previous questions. The primary skip pattern used in this survey directed historic Charleston residents to questions that featured images from south of Broad Street and to direct I’On residents to images of the I’On development. The screen shots represented in the figures approximate what respondents saw when they answered the questions.

(All photos were taken by my informants with the exception of D.8, D.10, D.18, D.26, D. 27, D. 28, D.29 by the author.)
D.1 Demographics: all respondents answer these questions

### How People Value Old and New Urban Residential Neighborhoods

#### Demographics - 1

Before you begin the survey, we'd like to collect some basic demographic information.

**What is your age?**
- ☐ Less than 18
- ☐ 18 to 24 years
- ☐ 25 to 34 years
- ☐ 35 to 44 years
- ☐ 45 to 54 years
- ☐ 55 to 64 years
- ☐ 65 to 74 years
- ☐ 75 to 84 years
- ☐ 85 years or older

**Figure D.1: Age filter**

### How People Value Old and New Urban Residential Neighborhoods

#### Must be 18 or older

Thank you for your interest in this survey, but you must be at least 18 years of age in order to participate.

**Figure D.2: Survey skip logic: if not 18 years or older, then exit the survey.**
## How People Value Old and New Urban Residential Neighborhoods

### Demographics - 2

**What is your gender?**
- Male
- Female

**What is your race?**
- White
- African American
- American Indian
- Asian
- Native Hawaiian or other Pacific Islander
- Other
- Two or more races
- Prefer to not say

**Are you Hispanic or Latino?**
- Yes
- No
- Prefer to not say

**What is your yearly gross family income?**
- Less than $25,000
- $25,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $124,999
- $125,000 to $149,999
- More than $150,000
- Prefer to not say

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**Figure D.3: Demographic variables**
How People Value Old and New Urban Residential Neighborhoods

**Location - 1**

* Where do you live in the Charleston or Mt. Pleasant area?
  - Historic Charleston, south of Broad Street
  - I’On
  - Other

Figure D.4: Location of residence (used for skip logic)

How People Value Old and New Urban Residential Neighborhoods

**Outside study area**

We thank you for your interest in this study, but you must be a resident of either I’On or Historic Charleston, south of Broad Street, to participate.

Figure D.5: Survey skip logic: if not a Charleston or I’On resident, exit the survey; otherwise go to Charleston or I’On sections

D.2 Charleston variables: Only charleston residents answer these questions

How People Value Old and New Urban Residential Neighborhoods

**Location - Charleston**

How many months out of the year do you typically reside in Historic Charleston, south of Broad Street?
  - 12 months (the entire year)
  - Between 6 to 12 months
  - Between 3 and 6 months
  - Less than 3 months

How long have you lived in Historic Charleston, south of Broad Street?
  - Less than 1 year
  - 1 to 5 years
  - 6 to 10 years
  - 10 to 15 years
  - More than 15 years

Figure D.6: Residence patterns
How People Value Old and New Urban Residential Neighborhoods

<table>
<thead>
<tr>
<th>Attachment - Charleston</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please tell us the extent to which you agree or disagree with the following statements about Historic Charleston, south of Broad Street.</td>
</tr>
</tbody>
</table>

**My neighborhood in Historic Charleston means a lot to me.**

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

**No other neighborhood could substitute for my Historic Charleston neighborhood.**

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

**I feel that Historic Charleston, south of Broad Street, is a part of me.**

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

**I have many pleasant memories about experiences I have had in Historic Charleston, south of Broad Street.**

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

*Figure D.7: Place attachment measures*
How People Value Old and New Urban Residential Neighborhoods

The following questions pertain to how you perceive and value specific aspects of your neighborhood.

Look at the photo below:

When you look at this photograph, are some parts of the scene that feel more significant to you than other parts?

- Yes, there are parts of this photograph that feel more significant than others.
- No, everything blends together; no part feels more significant than another part.
- Not sure.

Figure D.8: Holistic landscape
How People Value Old and New Urban Residential Neighborhoods

Townscape - Charleston

Which parts of the scene depicted in this photo are more important than others?

Rank the importance of each part using the provided scale:

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Somewhat important or unimportant</th>
<th>Somewhat unimportant</th>
<th>Not important at all</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gardens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walls, fences, or gates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The sidewalk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The road</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fountains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure D.9: Townscape elements
How People Value Old and New Urban Residential Neighborhoods

Building - Charleston

Look at the photo below:

When you look at this photograph, are there some parts of the building that feel more significant to you than other parts?

- Yes, there are parts of this building that feel more significant than others.
- No, everything blends together; no part feels more significant than another part.
- Not sure.

Figure D.10: Holistic building
How People Value Old and New Urban Residential Neighborhoods

Building - Charleston

Which parts of this building are more important than others?

Rank the importance of each part using the provided scale:

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Neither important or unimportant</th>
<th>Somewhat unimportant</th>
<th>Not important at all</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Shutters</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Roof</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Balcony</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Windows</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Figure D.11: Building elements
How People Value Old and New Urban Residential Neighborhoods

Layers - Charleston

Look at the photo below:

To what extent do you agree with this statement: “Some parts that make up this photograph contrast and obscure other parts to form a series of layers.”

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.12: Layers
How People Value Old and New Urban Residential Neighborhoods

Mystery - Charleston

Look at the photo below:

To what extent do you agree with this statement: "This place has mystery and intrigue."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.13: Mystery
To what extent do you agree with this statement: "I want to explore the place depicted in this photograph."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.14: Discovery
How People Value Old and New Urban Residential Neighborhoods

Unseen effort - Charleston

Look at the photo below:

To what extent do you agree with this statement: "People take meticulous care of this place because there's evidence that a lot of unseen effort went into making it look like it does."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.15: Unseen effort

D.3 Charleston variables: Only charleston residents answer these questions

How People Value Old and New Urban Residential Neighborhoods

Location - I'On

How many months out of the year do you typically reside in I'On?
- 12 months (the entire year)
- Between 6 to 12 months
- Between 3 and 6 months
- Less than 3 months

How long have you lived in I'On?
- Less than 1 year
- 1 to 5 years
- 6 to 10 years
- More than 10 years

Figure D.16: Residence patterns
# How People Value Old and New Urban Residential Neighborhoods

## Attachment - I’On

Please tell us the extent to which you agree or disagree with the following statements about I’On.

**My I’On neighborhood means a lot to me.**
- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

**No other neighborhood could substitute for my I’On neighborhood.**
- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

**I feel that I’On is a part of me.**
- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

**I have many pleasant memories about experiences I have had in I’On.**
- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

---

**Figure D.17: Place attachment measures**
### How People Value Old and New Urban Residential Neighborhoods

**Townscape - I’On**

The following questions pertain to how you perceive and value specific aspects of your neighborhood.

Look at the photo below:

![Townscape - I’On](image)

When you look at this photograph, are there some parts of the scene that feel more significant to you than other parts?

- [ ] Yes, there are parts of this photograph that feel more significant than others.
- [ ] No, everything blends together; no part feels more significant than another part.
- [ ] Not sure.

**Figure D.18: Holistic townscape**
How People Value Old and New Urban Residential Neighborhoods

**Townscape - I’On**

Which parts of the scene depicted in this photo are more important than others?

Rank the importance of each part using the provided scale:

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Neither important or unimportant</th>
<th>Somewhat unimportant</th>
<th>Not important at all</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The road</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Walls, fences, or gates</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Trees</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The sidewalk</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Buildings</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Fountains</td>
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<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Figure D.19: Townscape elements
<table>
<thead>
<tr>
<th>Building - I’On</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Look at the photo below:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When you look at this photograph, are there some parts of the building that feel more significant to you than other parts?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes, there are parts of this building that feel more significant than others.</td>
</tr>
<tr>
<td>☐ No, everything blends together; no part feels more significant than another part.</td>
</tr>
<tr>
<td>☐ Not sure.</td>
</tr>
</tbody>
</table>

**Figure D.20: Holistic building**
How People Value Old and New Urban Residential Neighborhoods

**Building - I’On**

Which parts of this building are more important than others?

![Building Image]

**Rank the importance of each part using the provided scale:**

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Neither important or unimportant</th>
<th>Somewhat unimportant</th>
<th>Not important at all</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shutters</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Balcony</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Door</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Windows</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Roof</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

*Figure D.21: Building elements*
How People Value Old and New Urban Residential Neighborhoods

Layers - I’On

Look at the photo below:

To what extent do you agree with this statement: "Some parts that make up this photograph contrast and obscure other parts to form a series of layers."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.22: Layers
How People Value Old and New Urban Residential Neighborhoods

**Mystery - I’On**

Look at the photo below:

![Photo](image-url)

To what extent do you agree with this statement: “This place has mystery and intrigue.”

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

Figure D.23: Mystery
How People Value Old and New Urban Residential Neighborhoods

Look at the photograph below:

To what extent do you agree with this statement: "I want to explore the place depicted in this photograph."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.24: Discovery
How People Value Old and New Urban Residential Neighborhoods

Look at the photo below:

To what extent do you agree with this statement: "People take meticulous care of this place because there's evidence that a lot of unseen effort went into making it look like it does."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.25: Unseen effort
D.4 Suburban controls: all respondents answer these questions

### How People Value Old and New Urban Residential Neighborhoods

**Layers - sub**

Look at the photo below:

![Photo of suburban neighborhood](image)

To what extent do you agree with this statement: "Some parts that make up this photograph contrast and obscure other parts to form a series of layers."

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

Figure D.26: Layers
How People Value Old and New Urban Residential Neighborhoods

Mystery - sub

Look at the photo below:

![Photo of a residential neighborhood](image)

To what extent do you agree with this statement: "This place has mystery and intrigue."

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither agree nor disagree
- [ ] Disagree
- [ ] Strongly disagree
- [ ] Not sure

Figure D.27: Mystery
How People Value Old and New Urban Residential Neighborhoods

<table>
<thead>
<tr>
<th>Discovery - sub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look at the photograph below:</td>
</tr>
</tbody>
</table>

To what extent do you agree with this statement: "I want to explore the place depicted in this photograph."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.28: Discovery
How People Value Old and New Urban Residential Neighborhoods

Look at the photo below:

To what extent do you agree with this statement: "People take meticulous care of this place because there's evidence that a lot of unseen effort went into making it look like it does."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.29: Unseen effort
D.5 Patina, reading age, spontaneous fantasy: all respondents answer these questions

**How People Value Old and New Urban Residential Neighborhoods**

<table>
<thead>
<tr>
<th>Patina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look at the photo below:</td>
</tr>
</tbody>
</table>

*How would you describe the overall feelings that the aging of the masonry in this photograph evokes?*

- ☐ Strongly pleasant
- ☐ Pleasant
- ☐ Neither pleasant nor unpleasant
- ☐ Unpleasant
- ☐ Strongly unpleasant
- ☐ Not sure

**Figure D.30: Masonry patina 1**
How People Value Old and New Urban Residential Neighborhoods

Look at the photo below:

How would you describe the overall feelings that the aging of the masonry in this second photograph evokes?

- Strongly pleasant
- Pleasant
- Neither pleasant nor unpleasant
- Unpleasant
- Strongly unpleasant
- Not sure

Figure D.31: Masonry patina 2
How People Value Old and New Urban Residential Neighborhoods

Reading the landscape

Look at the photo below:

To what extent do you agree with this statement: "When I look at this photo, I start to analyze how different parts of this place have evolved over many, many years."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

Figure D.32: Reading the layers of age in a landscape

How People Value Old and New Urban Residential Neighborhoods

The following questions relate to how frequently you experience a particular phenomenon.

When you are walking in an historic place, how often do you find yourself thinking about images or stories that might have happened in the distant past in this place?

- Frequently
- Somewhat frequently
- Occasionally
- Rarely
- Almost never
- Not sure

When you are walking in your neighborhood, how often do you find yourself thinking about images or stories that might have happened in the distant past in the places you pass by?

- Frequently
- Somewhat frequently
- Occasionally
- Rarely
- Almost never
- Not sure

Figure D.33: Spontaneous fantasy
How People Value Old and New Urban Residential Neighborhoods

Please tell us the extent to which you agree or disagree with the following statement.

**Look at the photo below:**

To what extent do you agree with this statement: "When I look at this photo, I find that my mind creates images or stories that might have happened in the distant past in this place."

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not sure

**Figure D.34: Spontaneous fantasy**
<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please use this space to share any comments or concerns about this survey:</td>
</tr>
</tbody>
</table>

Figure D.35: Comments
This study required two IRB (Institutional Review Board) applications in order to assure the protection of human subjects involved in this research:

- Application # IRB2007-196: A qualitative study (phenomenology employing interviews) titled “The Meanings of Age Value and the Built Environment” that received IRB approval under the “expedited” category on August 17, 2007.

- Application # IRB2008-309: A quantitative study (survey methodology employing an online survey instrument) titled: “Attachment to the Physical Age of Urban Residential Neighborhoods: A Comparative Case Study of Historic Charleston and I’On” that received approval under the “exempt” category on October 8, 2008.

Copies of the informed consent materials for these two applications are included in the following pages.

1. Alternate title for the informational letter is “How People Value Old and New Residential Neighborhoods.”
The Meanings of Age Value and the Built Environment

IMPORTANT INFORMATION ABOUT THIS STUDY AND THE INTERVIEW PROCESS

Principal investigator: Elizabeth Baldwin, Ph.D.
271 A Lehotsky Hall
Clemson University
(864) 656-5357
ebaldwin@clemson.edu

Co-investigator: Jeremy Wells
(primary contact)
(864) 508-2548
jeremyw@clemson.edu

If you have any questions or concerns regarding your rights as a research participant, please contact Clemson University’s Institutional Review Board toll free at (866) 297-3071 or by e-mail at irb@clemson.edu.

Purpose
The purpose of this study is to help understand how age value is defined by people living in new and old built environments. This information will be analyzed for common patterns to interpret how the built environment influences the creation of age value. Information will be gathered through in-depth personal interviews with people who live and/or work in the J’On development in Mount Pleasant and in the historic area of the city of Charleston.

How this research will be used and expected benefits
This study will form the basis for the co-investigator’s dissertation at Clemson University. Information gathered for this study will be shared with other researchers and professionals through a paper submitted to an academic journal and through conference presentations. This research will be used to inform historic preservation, urban planning, and architectural design through a better understanding of stakeholder values and how people perceive their environment.

How you can participate
There are two parts to this study: with your permission, the co-investigator will provide you with a disposable camera and a description of the geographical boundaries of the study. You will be instructed to take photographs of the parts of buildings or landscapes that are important or meaningful to you; this photography should begin within five days of consenting to participate in this study. When all the photographs have been taken (approximately 27 pictures), you will then mail the disposable camera back to the co-investigator using a provided postage pre-paid envelope. The co-investigator will then schedule an interview with you to discuss the photographs you have taken. The interview will take approximately one-half hour to an hour to complete.

Confidentiality
The researchers involved in this project will do everything they can to protect your confidentiality, which includes not revealing your participation to others, not recording your name as part of the collected data, or revealing information that could be harmful to you, although there is a very small possibility that someone may discover that you participated in this study.

In rare cases, this research may be evaluated by an oversight agency, such as the Clemson University Institutional Review Board or the federal Office for Human Research Protections, that would require that we share the information we collect from you with these agencies. If this happens, the information would only be used to determine if we conducted this study properly and adequately protected your rights as a participant.
Risks and discomforts
There are certain risks or discomforts associated with this research. They include a small privacy risk inherent in storing interview data on computers. Any data with personal identifiers will be protected with AES 128-bit encryption. Personal identifiers will not physically be stored in context with interview data. Only individuals directly involved in this study will have access to the interview data. The researchers have every expectation of full effectiveness of security measures.

Voluntary participation
Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study. If you choose to withdraw from this study, you may request that all data and audio of your interviews be erased.

Type of information that will be recorded
With your permission, the audio of your interview will be recorded. The recording of the interview is not necessary for you to participate; you may request that the audio recorder be turned off at any point in the interview. The co-investigator may also take written notes. Only the co-investigator will have access to the recorded audio and will be the only person that will transcribe the audio. The recorded audio will be stored as password protected, AES 128-bit encrypted computer files on the co-investigator’s computer. Federal regulations require that the co-investigator retain these files for a minimum of three years. Your recorded interviews will not be used for any research outside the scope of this project without your permission.

Waiver of documentation of informed consent
The researchers believe that this study presents no more than minimal risk of harm to you and involves no procedure for which written consent is normally required outside of the research context. We believe that your participation in this research study will not adversely affect your rights or your welfare.

Some kinds of research require that participants sign a form indicating that they understand the nature of the study and document their agreement to participate. The researchers believe that this process is intimidating for participants and impedes the establishment of rapport between the researcher and the participant. The success of this study depends on establishing an environment in which you feel that you are in a position to “teach” us. It is our obligation as researchers to make this process as comfortable for you as possible.

For these reasons, the researchers have requested a waiver of an official documentation of consent; instead your consent will be obtained by your continued participation in this study. Withdrawal of your consent to participate will occur should you wish to no longer participate in this study.

Wherever appropriate, you will be provided with additional information after you have participated in this study.
Application # IRB2008-309: “Attachment to the Physical Age of Urban Residential Neighborhoods”

Welcome to "How People Value Old and New Urban Residential Neighborhoods"

The purpose of this study is to understand how people value different physical characteristics of their neighborhoods to help improve the practice of urban design, planning, and historic preservation. The two case studies for this research are FONs, in Mt. Pleasant, SC and Historic Charleston, south of Broad Street. If you are a full-time or part-time resident of either of these areas, you are invited to participate in this study.

Please click here to indicate your consent to participate and to start the 15-minute survey.

Your identity will remain confidential; information that could personally identify you, including your name, will not be collected.

This research study is being conducted by Jeremy Wells, a doctoral candidate in Environmental Design and Planning at Clemson University. The survey design and implementation is being overseen by Dr. Dina Battisto from the School of Architecture at Clemson University.

Confidentiality statement and contact information:

How People Value Old and New Urban Residential Neighborhoods

CONFIDENTIALITY STATEMENT

RISKS AND DISCOMFORT
There are certain risks or discomforts associated with this research. They include a small privacy risk inherent with transmitting and storing survey data on computers. Data will be kept on a secure web server, and survey results will be aggregated to protect privacy before release. We will not ask for any personal identifiers such as your name, address, or phone number. The researchers have every expectation of full effectiveness of security measures. Only individuals directly involved in the study will have access to the survey data.

POTENTIAL BENEFITS
This study has the potential to improve the practice of urban design and historic preservation by helping to better understand how people value the design and age of their built environment.

PROTECTION OF CONFIDENTIALITY
We will do everything we can to protect your privacy. We will not ask for your name or contact information. Your answers to survey questions are strictly confidential. No raw or record level data will be released. No data will be shared in any individually identifiable way. Your privacy will be maintained in all published and written data resulting from the survey.

VOLUNTARY PARTICIPATION
Your participation in the research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

CONTACT INFORMATION
If you have any questions or concerns about this study or if any problems arise, please contact Jeremy Wells at 864-982-8440 or Dr. Dina Battisto at 864-687-2000. If you have any questions or concerns about your rights as a research participant, please contact the Clemson University Office of Research Compliance at 864-687-0420.

Thank you again for your participation.

Co-Investigator (primary contact)
Jeremy Wells, doctoral student
Environmental Design and Planning Program
Clemson University
118 Lee Hall
Clemson, SC 29634-1901
Email: jwells@arch.clemson.edu
Tel: (864) 656-9148 (home)
Fax: (864) 656-8763

Principal Investigator
Dina Battisto, Ph.D.
School of Architecture
Clemson University
137 Lee Hall
Clemson, SC 29634-1901
Email: dbattiste@arch.clemson.edu
Tel: (864) 656-6800
Fax: (864) 656-9934

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