

Sense of Place and New Urbanism:
Towards a Holistic Understanding of Place and Form

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ABSTRACT

New Urbanism is an all-encompassing term that refers to an increasingly popular set of design tenets that draw upon traditional urban forms in the creation or redevelopment of residential communities. Although design professionals are increasingly adopting these design tenets in the creation of new communities, there is no research that either supports or rejects New Urbanism's underlying assumption that neotraditional design tenets are capable of fostering a "sense of place." Therefore, this research explores how a "sense of place" arises for residents of a neotraditional neighborhood located in Blacksburg, Virginia. This research then investigates the influence physical form has on the development of a sense of place for the individuals living within this community.

In an attempt to answer these questions, this research project employs an existential-phenomenological approach to understand the specified people-place relationships. The transformation of space into place for the participants living within the study area was consistent with two distinct, existing theories regarding the development of a sense of place. Analysis indicates that social interaction in the form of un-structured chance encounters with neighbors heavily influences the transformation of mere space into place. Further analysis indicates that such encounters are not directly related to density. Rather, the proximity of the housing, the connection between the public and private realm, and the relationship of the housing to the un-built environment all emerge as key factors in encouraging such residential experiences. The results are discussed in the context of TND design tenets and a theory of neighborhood design is presented.

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CHAPTER 1: CONTEXT

1.1 Introduction

Since the late 1940s, the residential population of the United States has increasingly migrated from the urban core to the suburban fringes of our cities and towns (Bookout, 1992). This transition has been both accommodated and perpetuated by decentralized land-use that has been labeled suburban “sprawl.” This sprawling land-use pattern, which continues to dominate the American landscape, has been associated with a number of environmental, social, and economic costs. These costs include but are not limited to environmental deterioration, associated health concerns, excessive land consumption, inefficient transportation, fiscal disparities among communities, a decline of a “sense of community” and the rise of “placelessness” (Squires, 2002).

New Urbanism arose as a reaction against the perceived environmental, economic and social problems of suburban sprawl and the anti-humanistic architecture of modernism. As a late twentieth century urban design and planning movement, New Urbanism has been primarily associated with traditional neighborhood designs (TND), transit-oriented developments (TODs). Unlike previous planning movements that envisioned futuristic utopian ideals, this new theory of urban design draws upon pre-World War II development patterns to structure new claims of how we should design, construct and retrofit the human environment to better address the cost of sprawl development.

New Urbanist argue that a pedestrian oriented, mixed land-use pattern based on a traditional sensibility can foster a sense of community and enhance the sense of place among residents (Bookout, 1992; Day, 2003). The deterministic nature of this first claim that physical design is capable of creating a sense of community among TND residents has sparked a rash of recent academic research into the merit of this contention. However, the findings have produced conflicting reports and no consensus regarding the validity of this social claim.

On one side of the argument, a few studies have suggested that within New Urbanist developments there is a positive relationship between physical design and behaviors associated with a sense of community (Lund, 2003; Plas & Lewis, 1996). This is contrary to research that found traditional development patterns and New Urbanist subdivisions failed to increase a sense of community among residents (Brown & Cropper, 2001; Nasar, 2003; Talen, 2000). More recent research on the subject has suggested that typical neotraditional design features foster increased pedestrianism and thus physical design is only capable of indirectly generating a greater sense of community by increasing contact between residents (Kim & Kaplan, 2004).

Although there is much uncertainty within the existing academic research regarding New Urbanism’s social claim that a sense of community is an asset of its design doctrine, there is no research that either supports or rejects the second claim that New Urbanist design tenets are capable of combating the “placelessness” of suburban design. Edward Relph first recorded this criticism of suburban sprawl in 1976. Relph was concerned that we

neither experience nor create contemporary places with more than a superficial involvement. Therefore, the author called for a return to a more “authentic” means of place making that focused on each location’s “sense of place¹” (Relph, 1976).

Since that time research and discussion has generated a broad diversity of thought regarding the theoretical nature of a sense of place. However, as stated previously, there is still no research that suggests any design tenets including the New Urbanist more traditional patterns are capable of enhancing the “sense of place” as a means of combating the perceived placelessness of suburban development. Therefore, the purpose of this research is to first explore how and if a sense of place arises for residents of a neo-traditional community. And secondly, this research will investigate the relationship between physical design and the experiences found to be associated with a residential sense of place.

In an attempt to answer these questions, this study utilizes a two-phase inductive investigation of ‘sense of place’ and its relationship with physical design within a New Urbanist inspired community located in Blacksburg, Virginia. Specifically, an existential-phenomenological approach is followed throughout the first phase to uncover the collective residential experiences that residents attribute to their sense of place. Based on these findings, the second phase of this study utilizes the same approach to assess the relationships between physical form and the experiences of place. Conceptually, the investigation not only portrays the threads of coherence among the individual experiences of place, but also evaluates the underlying New Urbanist’s claims that physical form can enhance a community’s sense of place.

It is assumed that such research could present New Urbanism with an improved theoretical basis that may generate greater empirical support. However, as discussed latter, the selected study area is not a “pure” interpretation of all TND principles. Therefore this research is more specifically asking if the adaptation of some New Urban design elements in an automobile-oriented suburb is capable of combating the “placelessness” associated with more conventional suburban subdivisions.

1.2 An Overview of New Urbanism

Planning and design movements in the United States have often developed as a response to the dominant social, economic, political and environmental conditions of the time. As such, New Urbanism is the latest in a series of movements that stems from early nineteenth century reactions to the industrializing city. Today, two different models of development have been categorized under the heading of the “New Urbanism,” the latest in a series of urban design and planning movements.

The first model, traditional neighborhood developments (TNDs) are closely associated with architects Andres Duany and Elizabeth Plater-Zyberk. This model of development

¹ For Relph, an authentic sense of place is an intertwined relationship between the physical setting, the human activities that happen in that setting and the meaning associated with both the setting and those activities. More importantly, this relationship was interpreted as connecting individuals to place and thus the antithesis to placelessness (Relph, 1976).

follows a fairly prescriptive set of historically informed design considerations that center on land use, density, circulation and architectural character (Bookout, 1992). These design principles are discussed further in a number of sources (see, e.g., Christoforidis, 1996; Duany, Plater-Zyberk, & Speck, 2000; Katz, 1994).

TNDs can be distinguished from other New Urbanist models. Typically, TND developments have a greater focus on architectural details and street design, as well as social, economic and environmental goals. This model has also been referred to as “neotraditional design” due its use of historical precedents in the design and construction of new developments. However, Duany contends that neo-traditionalism is an apt term that refers to the simple, postmodern, eclectic use of historical forms and not the holistic vision of TND developments (Duany et al., 2000). Therefore, the term neotraditional design will be used throughout this study to refer to mainstream suburban adaptations that fail to achieve the mixed-use, diversity and sustainability requirements of TNDs.

The second model of development categorized under the heading of New Urbanism is transit-oriented development (TOD). Championed by architect and planner Peter Calthorpe, TODs or pedestrian pockets are compact developments of housing and commercial units centered on mass transit (Calthorpe, 1989, 1993). Unlike Duany and Plater-Zyberk’s work, TODs have a greater focus on the development’s transportation connections with the region and are less regulatory in nature.

Therefore, as an “umbrella” term, New Urbanism refers to an increasingly popular set of design tenets that draw upon traditional urban forms in the creation or redevelopment of residential communities. Although not all New Urbanists agree to a single set of design principles, Talen (1999) has pointed out five elements shared throughout this movement, which include historically informed architectural styles and regionally appropriate site design, an increased density related to a pedestrian scale, more compact streets designed as public space, the inclusion of neighborhood gathering spaces and an appropriate mixing of land uses (Talen, 1999).

The concepts embodied in the New Urbanism movement are not limited to the neighborhood level of design. Rather, the *Charter of the New Urbanism* (Congress for the New Urbanism, 2000) outlines the principles and beliefs the CNU promotes at the regional, neighborhood and block scales. These principles include but are not limited to the promotion of community, the inclusion of diversity, the support of mass transit and the reflection of the context in the design and construction of the urban fabric (Duany et al., 2000). The Charter further recommends that neighborhood design should reinforce the unique identity of each place (commonly referred to as a sense of place) by adopting a consistent and distinctive architectural style that draws on local history, culture, geography and climate (Congress for the New Urbanism, 2000).

Theoretically, this idea is based on the assumption that historically informed architectural styles and regionally appropriate site design informed by the existing context will foster a unique and contextually related experience for the residents and visitors of the site. Thus, New Urbanists argue that physical design is capable of enhancing the residents’

“awareness” and “bond” to the environment. However, this assumption is essentially a normative claim that presumes that good design (defined here as related to the five principles outlined above) can have a measurably positive effect on sense of place, which New Urbanists hold as essential to a healthy, sustainable society (Kelbaugh, 2002).

This normative claim is not new to planning theory. Both within and outside the New Urbanism movement, sense of place continues to be an important concept widely referred to in successful examples of community design and redevelopment (Hughes, 2002; Knack & Bunnell, 2003; Lee, 2000; Salvesen, 2002). Although such assumptions are consistent with much of the sense of place jargon, no empirical research supports the idea that New Urbanism principles are more capable of fostering a sense of place. In addition, there is no empirical research that has revealed the process by which a sense of place develops for residents in modern communities. Rather, the multiple and diverse understandings of a sense of place and its relationship to community design have remained theoretical assumptions based on anecdotal evidence.

1.3 An Overview of the Study

No research has evaluated whether neotraditional design tenets are capable of fostering a sense of place. Nor has any empirical research studied the development of a sense of place in a contemporary subdivision from the perspective of the residents. Therefore, utilizing an existential-phenomenological approach, this research identified the collective experiences that the residents in the Village at Tom’s Creek believe contribute to their sense of place. The Village at Tom’s Creek is a neo-traditional subdivision located on the fringe of Blacksburg, Virginia. Through in-depth interviews and the sub-sequential analysis this research also explores the relationship between physical design and the experiences of sense of place as identified by the residents of the village.

The significance of this study is its contribution to our current understanding of community design. Mainly, this study provides a basis for evaluating New Urbanism claims that traditional neighborhood forms can enhance the sense of place. This study also provides a preliminary understanding of the experiences involved in the development of a residential sense of place based on empirical data, as opposed to theoretical assumptions. In future studies, it is hoped that these same essential elements can be compared across multiple neighborhood typologies thus, revealing the existential variations and similarities.

It has been proposed that New Urbanists should tone down their social aspirations and declare that they are simply meeting the human requirements of physical design (Talen, 1999). Therefore, this research also desires to establish a new cornerstone from which the movement can begin to justify normative claims of neighborhood design. As such, I have conceptualized this project as the first step in evaluating New Urbanism’s ability to meet one human requirement of community design, namely, a residential sense of place. At this point, sense of place is simply defined as the transformation of mere space into place and contrasted with “placelessness,” which is distinguished by the lack of this residential process.

1.3.1 Problem Statement and Central Questions

“Placelessness” has been identified as one of the multiple costs associated with current decentralized suburban land-use and conventional sub-division design (Duany et al., 2000; Kunstler, 1993; Squires, 2002). Placelessness has been linked to increased mobility and globalization (T. Creswell, 2004). However, placelessness should be recognized as a primary design concern because the current development pattern it represents has generated a human environment that is less hospitable and healthy for the individual, less sensitive to the environment, and less economically feasible in the long run.

While placelessness maybe easy to recognize as look-alike landscapes that dominate the urban fringe and diminish the human environment, it is essential to recognize that the problem is an expression of a post-industrial attitude that makes it less and less possible to have a deeply felt sense of place (Relph, 1976). More importantly, as a “rooted” connection to the physical and social environment at a locale scale, sense of place has been argued as a cornerstone of sustainability within an increasingly mobile society (Hay, 1998b). Therefore, as a key to a healthy and sustainable environment, New Urbanist have proposed that their design tenets are capable of combating placelessness and fostering a greater sense of place.

This ideology may be agreeable and compelling however, no empirical research suggests that any design tenets are capable of fostering a sense of place. In fact, there is not even a consistency of academic thought regarding how a sense of place develops within any given context. Therefore, the purpose of this study is to identify and understand the common experiences of a ‘sense of place’ from the perspective of individual residents living in a New Urbanism inspired community.

Framed as a phenomenological study, this research asks: are common threads apparent throughout the residential experiences of place that allow us to develop a holistic understanding of a sense of place? From this foundation, the second stage of this research then asks: has the physical environment played a role in altering or enhancing those experiences and thus can the underlying New Urbanist claims that a more traditional and responsive style of community design fosters a sense of place be supported by empirical research?

This study describes the essence of sense of place² as a conscious experience interpreted by individual residents within the selected neo-traditional community. From a phenomenological perspective, the essence of a phenomenon is defined as the unified descriptions of an experience, which present themselves as threads of coherence among the multiple descriptive accounts (Moustakas, 1994). These descriptions are interpreted as essential if the object of study would not exist in the same capacity without the stated elements.

² From a phenomenological perspective, sense of place is understood as a perceivable experience therefore, no different than any other experiences, sense of place will not be distinguished within the remainder of this text with quotations, hyphens, or italic font.

1.4 Theoretical Context

Phenomenology, as a philosophical movement inaugurated by Edmund Husserl, is now over a hundred years old (Moran, 2000). Phenomenological research is currently enjoying a renaissance throughout many academic circles due to the increasingly critical stance of contemporary philosophy (Boss, Dahl, & Kaplan, 1996). In the simplest terms, phenomenology, as a research method, is an interpretative study that attempts to uncover the commonalities of human experiences (Seamon, 2000). However, phenomenological philosophy is not defined by a single doctrine, which all participants agree (Embree, 1998). Rather, phenomenology is a collection of diverse writings, each with a unique interpretation of central issues, philosophical understandings and theoretical assertions.

The foundational assumption of all phenomenological approaches relates to the way people are conceptualized in relationship to the world. Individuals and the world are perceived within a holistic relationship, which cannot be separated (Seamon 2000). Thus, it is argued that every phenomenon is comprised of both physical characteristics, which are experienced (*Noema*) and psychological characteristics, which are perceived (*Noesis*). Even though each set of characteristics can be conceptualized as distinct, Husserl's *intentionality of consciousness*³ unifies the two states of being into a single subjective reality (Moustakas, 1994).

Man is understood as the source of acts of intention, and it is only through the study of man's intentions that we can comprehend the world, for it is these acts that give meaning to man's behavior. The world is thus understood as being essentially subjective, and no empirical knowledge, however purged and 'objectified' can get away from this subjective matrix of all experience. (Relph, 1970 p. 194)

Based on this understanding of the world, which rejects the Cartesian division between the objective and the subjective, Husserl proposed transcendental phenomenology as a method of grasping the essence of consciousness in its *intentionality*. Ironically, Husserl does not reject the conception of objective interpretation but rather, conceptualizes "bracketing" as a technique for setting aside internal assumptions thus, allowing the researcher to describe the world from the viewpoint of a detached observer (Moran, 2000). This idealistic concept stems directly from Husserl and should be related only with transcendental phenomenology. This argument led many of his followers, including Martin Heidegger away from his writings.

Heidegger's existential phenomenology is a systematic return to "things themselves," which attempts to limit internal assumptions of reality, as much as humanly possible, by focusing on the experience of individuals (Moran, 2000). Heideggerian phenomenology recognizes that the observer cannot be separated but is rather immediately caught up in the taken-for-granted context of the everyday world. Thus, from this perspective, the

³ Husserl's Intentionality of consciousness refers to a central assumption that human consciousness is always oriented toward the world of emergent meaning. Thus, experiences can be studied based on their appearance to consciousness as identifiable objects (von Eckartsberg, 1998).

researcher is a participant engaged in an intersubjective reality with other participants. Within this context, understanding itself is considered an interpretation that cannot be separated from social and historical nature of human existence.

1.4.1 Assumptions and Limitations

Rejecting the possibility of objective, detached analysis, this research draws upon the philosophical underpinnings of Heidegger's existential phenomenology. Within this set of ontological and epistemological assumptions, sense of place is understood as an intersubjective lived-experience that is embodied in an individual's "vague and average understanding of everydayness" (Moran, 2000).

At this point in the analysis, sense of place is generally defined as an "individually based, but group informed, localized, personal means of relating to the world that transforms mere space into personal place" (Hay, 1988). Thus, sense of place is not conceived as a phenomenon immediately apparent or quantifiable rather, as the manifestation of something that lies hidden within an individual's experience of the environment. In short, it is assumed that sense of place is a subjective phenomenon that can be perceived by the residents of the study area.

The second foundational assumption of this research is the belief that the study community (The Village at Tom's Creek) does, in fact, possess a sense of place that residents have directly experienced. Based on my own experience within the neighborhood and informal conversations with residents, certain distinguishing environmental and social qualities presented themselves throughout this community. These qualities were reinforced by unique spatial elements, which defined the selected community from the surrounding neighborhoods.

It could be argued that unique attributes alone do not comprise a sense of place. However, defined simply as "transformation of space into place," sense of place is not conceptualized as an intrinsic value of certain locales, often referred to as a site's "genius loci." Rather, previous research has suggested that sense of place is a dynamic process that to some degree exists at the intersection of any cultural and spatial convergence (Beidler, 2002). Therefore, as a common human experience, a sense of place can be classified as a phenomenon or an object worthy of study and assumed to exist to some degree within the Village at Tom's Creek.

Third, the selected study area is not a "pure" interpretation of New Urbanism. Rather, the community remains an automobile dependent, neotraditional interpretation that has adapted some but not all of the traditional neighborhood design elements suggested by the literature. Therefore, this research is a measure of the specific New Urban design elements outlined in the following chapter. It is not an assessment of all New Urbanist principles.

With respect to this limitation, I would argue that the study area should not be disqualified as a part of the New Urban movement because it has responded to the pragmatic realities of the local jurisdiction and market forces. Rather, I would argue that

the study of mainstream interpretations, such as the one selected for this study, are more important because these adapted solutions are more typical of the new communities and neighborhoods being built in mass around the country. Furthermore, the study of these neotraditional interpretations allows us to ask if the selective barrowing of some New Urban elements are capable of combating the “placelessness” associated with suburban sprawl, even in an automobile oriented suburb.

Fourth, the neighborhood selected for this project was not fully constructed at the time of the study. As depicted in chapter three, phases one through four were complete. However, the second half of homes is currently being constructed in a scattered manner on a lot-by-lot basis with the entire neighborhood infrastructure now finished. This leaves open the question of how the neighborhood and the residents’ interpretations will be influenced when the development is completely “built out.”

Finally, as with all qualitative research, the findings are specific to the context of the study and cannot be generalized across populations. Therefore, the findings presented in chapter four pertain specifically to neotraditional adaptations of community design in the context of the suburban fringe. This context is not outside the scope of the New Urbanism movement. Rather, the findings pertain to the “T-3 Sub-Urban” zone of “Transect Planning.”⁴

⁴ Transect Planning is a New Urbanism concept that designates specific physical forms, land uses, and ecological patterns across the urban-rural continuum (see Duany & Talen, 2002).

CHAPTER 2: LITERATURE REVIEW OF THEORY AND METHODS

2.1 Introduction

The following literature review is divided into two sections. The first half details the historic development and multiple perspectives contained within the sense of place literature. The second half reviews the broad theoretical context of qualitative methods in general. After this review, specific phenomenological investigations of place are cited as a means of situating this study in the framework of the existing literature.

2.2 Sense of Place Literature

Over the last three decades, sense of place has been a topic of academic interest among numerous disciplines including geography, historic preservation, the social sciences, and the allied art and design professions. In addition, broad understandings of sense of place have developed outside the academic community. Specifically, sense of place continues to be an important concept widely referred to in successful examples of community design and redevelopment (Hughes, 2002; Knack & Bunnell, 2003; Lee, 2000; Salvesen, 2002).

Sense of place originally developed as a holistic concept embedded within the complexities of a humanistic understanding of the world. More recently, the sense of place literature has expanded to include positivistic interpretations based on quantitative analysis. The result has been the development of a vast body of knowledge that has produced a widely accepted construct with multiple interpretations and varying understandings. In fact, generalized concepts of sense of place are often vague and highly contested (Paradis, 2000).

Within this discourse, the majority of scholastic investigations of 'place,' as central to human activities, can be further categorized into three broad epistemological camps including, place interpretation, social construction of place and place perception (Sancar, 1994). Emphasizing interpretive knowledge, the first of these three categories, stresses the situated-nature of place experiences. The second orientation focuses on revealing the ongoing social processes and structure of a given locale. The place perception category is more typical of positivistic studies aimed at identifying attributes and affective responses.

Sense of place has been investigated from each of these distinct ways of knowing. Therefore, these three epistemological understandings provide a useful means of organizing the diverse understandings of a sense of place and framing the following literature review. In addition, the interpretivism, constructivism and positivistic frameworks can each be directly related to one of three different explanations regarding how a sense of place develops within a given context. Before discussing the distinct theoretical models associated with each epistemological understanding, it is important to discuss what is shared.

2.2.1 Shared Attributes of Place Theory

Associated with a phenomenological perspective, the first two epistemological categories understand place as being composed of three elements. These elements include: the physical setting, the human activity within the setting, and the meaning ascribed to the setting and activity (Relph, 1976). However, given the phenomenological context of human intentionality⁵, ‘meaning’ is conceptualized as being embedded and intertwined within the dimensions of ‘activity’ and ‘setting’ (Million, 1992).

Although using slightly different terminology, the third epistemological more positivistic category also shares a three-component view of place. From this perspective, a ‘place’ is composed of a physical setting, the human behaviors that occur there and human social and/ or psychological processes (Stedman, 2003a, 2003b). Specifically, it has been suggested within this framework that meaning attributed to place can be mapped around three poles of self, others and the environment (Gustafson, 2001). However, this ‘meaning’ is believed to be generated between the poles and thus emphasize other attributes such as atmosphere, social interaction and knowledge of place.

From this brief review, it is apparent that despite philosophical differences phenomenological and positivistic views conceptualize similar components of place. Specifically, it could be argued that the features of place are generally comprise by: the physical characteristics of the environment, the affects and meanings attributed to a place, the activities associated with a place, and the social interactions connected to a place, which can be viewed as a sub-category of activities (Turner & Turner, 2006). Although each model acknowledges to some degree the importance of each attribute, they widely disagree on which attribute is emphasized in the development of a sense of place.

2.3 Epistemological Foundations and Theoretical Models

As identified earlier, each epistemological understanding of place has given rise to a different model or theory for understanding a sense of place. The sections that follow discuss in detail the assumptions and ideas related to each model. However, before proceeding, it is first necessary to review the assumptions of each philosophical perspective.

The first epistemological category, place interpretation, assumes that interpretative knowledge is central to the experience of place. Working from this perspective, researchers tend to focus on a location’s ‘genius loci’ which is defined as the environmental ‘spirit of place’ (i.e. Green, 1999; Lewis, 1979; Norberg-Schultz, 1980). However, ‘genius loci’ is not conceptualized as different from a location’s sense of place rather, the terms and concepts are used interchangeably.

Due to the emphasis on the environment and meaning, this literature largely ignores other attributes of place including social interaction and activities associated with a given

⁵ Husserl’s Intentionality of consciousness proposes that human consciousness is always oriented toward the world of emergent meaning (von Eckartsberg, 1998). Thus, a basic assumption of phenomenology is that the more objective and subjective realms of consciousness are inherently intertwined and cannot be separated.

locale. Research in this tradition tends to concern itself with the symbolic value of the landscape as the primary source of one's sense of place. Therefore, existential 'sensing' and interpretation of the physical environment is vital to this philosophical framework.

The second epistemological orientation focuses on the social construction of a sense of place, as opposed to, the environmental attributes emphasized in the first category. The authors associated with this philosophical framework look towards the experiences, human behaviors and activities that begin to explain how individuals and groups construct a sense of place (i.e. Jackson, 1994; Relph, 1976; Tuan, 1974, 1977, 1980). For them, the construction of place relies heavily on the meaning unknown space acquires through the daily routines of its inhabitants. Therefore, within this category the environmental and affective dimensions of place are still considered important however, activities in terms of human experiences are central to their conception of a sense of place.

Finally, unlike the first two models that draw heavily upon phenomenology in their investigations of place, the place perception camp looks towards more positivistic environmental-behavior methodologies. Generally, researchers working within this framework conceptualize sense of place as an multidimensional attitude towards a spatial setting (Jorgensen & Stedman, 2001, 2006). This understanding has generated much discussion and research into what is believed to be the affective dimensions of a sense of place (see Hummon, 1992) and the means of quantifying these spatial responses (Shamai, 1991; Shamai & Ilatov, 2005).

This epistemological perspective has developed specific theories regarding single variables believed to contribute to the multiple dimensions of a sense of place. The result has been the development of a vast literature on related concepts, such as, place attachment (Altman & Low, 1992), place identity (Proshansky, Fabian, & Kaminoff, 1983), and place dependence (Pretty, Chipuer, & Bramston, 2003) in environmental psychology. However, in the simplest terms these models are still based on a cause and effect understanding of reality that conceptualize meanings, activities, and the physical environment as independent variables.

2.3.1 Genius Loci – The Place Interpretation Model

Focused on the interpretation of the physical environment, the first theory proposes that a sense of place develops as a response to significant features found in the local landscape. This modern conception is inaccurately based on the Latin term 'genius loci' which referred to the belief that a "locality derived much of its unique quality from the presence or guardian ship of a supernatural spirit" (Jackson, 1994 pg. 157). Currently translated as the 'spirit of place,' the conception of 'genius loci' now focuses on unique characteristics derived from the physical environment and activities that occur there, not the supernatural.

In "Genius Loci: Towards a Phenomenology of Architecture," Norberg-Schulz (1980) argued that sense of place, defined as genius loci, represents the sum of all physical as well as symbolic values found in a given cultural and natural environment. Specifically,

the author points towards four elements which include the topography of the earth's surface, the cosmological light conditions, buildings, and the symbolic and existential meanings in the cultural landscape (Norberg-Schultz, 1980). These elements are proposed as the key features in defining the *genius loci* and emphasize the role of the physical environment in fostering the symbolic meaning thus, distinguishing it from the more poetic “spirit of place.”

Within this framework, sense of place has also been conceptualized as a connection with the local environment (Hough, 1990), a regional authenticity (Kelbaugh, 2002), and an environmental quality that allows a landscape to be directly experienced, intimately known, and passionately loved (Lewis, 1979). In each case, sense of place is conceptualized as an inherent and reciprocal relationship between the built and un-built landscape that guides our understanding of place (Lewis, 1979). However, not all authors within this tradition are predominantly concerned with the natural environment's role in defining the character of *genius loci*.

Green's (1999) interpretation of sense of place is primarily associated with the physical features of existing man-made structures, which may or may not have been spatially influenced by surrounding landscape. Common to these interpretations is an underlying assumption that some places possess a more pronounced spatial character than others and thus a more recognizable sense of place. Therefore, authors working from this perspective often refer to preserving or maintaining the local vernacular and unique features in developing or preserving a sense of place (Hester, 1993; Lewis, 1979; Pocius, 1991).

As a result, this first understanding of a sense of place is perhaps best conceptualized as an aesthetic and spatial quality tied to physical environment of a specific locale. Other than the actual physical construction, social activity is never taken into account. Rather, “the interpretation” of the physical environment is central to this perspective because the ‘*genius loci*’ is understood as instilled in the meanings evoked by the setting itself.

Stedman (2003a) translated this conception of sense of place into a quantitatively “testable” model. Stedman hypothesized the affective dimensions of sense of place (understood as place attachment and place satisfaction) would correlate perfectly with each other because within this understanding, there are no mediating effects of meaning. The ‘direct-effects’ model proposes that the defined affective dimensions of sense of place could be understood as a function of the setting (Stedman, 2003a). Stedman's empirical research rejected this model as a poor fit with his collected data. It is important to note that conceptions of attachment and satisfaction are never raised in this literature; thus allowing us to question if Stedman was ever really testing the concept of *genius loci* are put forth by these authors. This finding suggests that as an interpreted aesthetic quality, the concept of *genius loci* may simply be too abstract and complex to be tested by current statistical analysis.

2.3.2 *The Existential Model*

The second understanding of sense of place largely developed out of a humanistic perspective within cultural geography (i.e. Buttner, 1980; Jackson, 1994; Relph, 1976; Tuan, 1974). Tuan (1971) and Relph (1970) were pioneers in the field, critiquing positivistic science as an inappropriate paradigm for the study of people/place relationships. Authors working from this framework shared the phenomenological perspective favored by the “genius loci” camp. These authors reinforced the importance of ‘lived experience,’ as opposed to purely innate environmental qualities in their understanding of a sense of place.

Research prescribing to this epistemological assumption can be further categorized into two groups based on differences in methodological approaches. First, early sense of place research was largely developed from a first-person phenomenological approach. This group used either personal reflections to develop generalized theories or first hand experiences to describe specific qualities of a sense of place. Later phenomenological research, which also favored a social construction perspective, gravitated towards an existential approach and evaluated sense of place in terms of experiences of its participants.

From a first-person phenomenological approach, Jackson (1994) identified three essential qualities of a sense of place: the lively awareness of a familiar environment, ritual repetition that reinforces the conception of place, and a sense of fellowship based on a shared experience. These three qualities echo the components of place identified earlier. This theory proposes that a sense of place is socially constructed and not an innate quality of certain locales. In fact, Jackson’s specific ideas contend that sense of place is something we ourselves create in the course of time.

What brings us together with people is not that we live near each other, but that we share the same timetable: the same work hours, the same religious observances, the same habits and customs. That is why we are more and more aware of time, and of the rhythm of the community. It is our sense of time, our sense of ritual, which in the long run creates our sense of place, and of community. (Jackson, 1994 p. 160)

Not all authors working from this perspective agree that time plays a key role in the construction of a sense of place. Tuan’s (1981) theory envisioned “rootedness” which, develops from having lived in one place over a long period of time, as distinct from a community’s sense of place. Defined as being at home in an unself-conscious way, rootedness was seen as a function of time. Tuan argued that sense of place is more of an awareness, achieved through distancing oneself from the context in order to appreciate the place. If an individual is rooted in place, this theory proposes that their sense of place lies hidden within their vague and average understanding of everydayness and time may therefore conceal their awareness of people/place relationships.

This early literature established a sense of place as a theoretically rich concept vaguely understood due to the complexities of human reality. Generally, sense of place was

understood as a social phenomenon influenced by environmental awareness, human activities and shared meanings. It was agreed that components such as time and rootedness were important, however there was no consensus regarding their role. Therefore, there was no single accepted definition; rather a collection of insights based on introspective, observational, and theoretical writings not specific to any one location.

Up to this point, this type of theoretical writing based largely upon personal reflection was typical of a first-person phenomenological inquiry. Later first-person inquiries of a sense of place examined the author's firsthand experiences to reveal the phenomenon's characteristics and qualities within a specific location (see Chaffin, 1989; Meinig, 1979; Ryden, 1993; Seamon, 1990; Violich, 1985).

Within this genre, Violich's (1985) phenomenological reading of four Dalmatian towns identified three basic sources from which a sense of place develops within the given region. First, the character of the natural environment (the geology, soils, climate and ecology) was interpreted as an important underlying determinant of the spatial and social structure. Second, the built environment was seen as facilitating communication. Finally, people and social activities were understood as the foundation of a cultural identity. The author defined Sutivan's sense of place as "deriving from its own particular structural pattern of major and minor circulation routes, their relationship to the varying human activity centers and the contrast between the components, as well as, the way these set in a frame of landscape and seafront" (Violich, 1985 p. 85). Such research is echoing a three-component view of place including, the physical environment, activities, and meaning.

Other authors working within this framework began to employ an existential-phenomenological approach in the research of people/place relationships (e.g. Million's (1992) study of displacement, Nogue' i Font's (1993) investigation of landscape experience, and Seamon's (1979) geographic interpretation of the lifeworld). Broadly termed existential-phenomenological research, this approach investigates specific experiences of individuals and groups involved in actual situations (Seamon, 2000). As a result, this type of phenomenological approach no longer centers on the experience of the researcher within the studied situation. Rather, it attempts to balance the researcher's own interpretations with that of the participant's. Theoretically, this approach seems more consistent with this framework that assumes sense of place is heavily influenced by social factors but not directly generated by larger social norms as contended by more critical theories (see Egoz, Bowring, & Perkins, 2006).

Based on a study of participant experiences, Eyles (1985) presents "the place-identity-material existence relation" as the consistent mechanism that determines an individual's sense of place. Within this process, place is weighted less than material-existence and identity-in-place as influential factors. However, in the end, the author proposes that sense of place itself is simply a mechanism that helps individuals better deal with the complexity of the world.

An individualistic explanation of sense of place is not being suggested. Sense of place becomes manifested at the level of the individual, and individual senses of place vary and are a product of a unique mixture of location, personal characteristics, circumstances, place-in-the-world and place in the social and economic orders. (Eyles 1985 p.137)

One of the most cited studies of a sense of place from an existential approach was Hay's studies of indigenous cultures in New Zealand (Hay, 1988, 1998a, 1998b). Hay's definition of a rooted sense of place contrasted Tuan's earlier observations of the conceptual division between the two concepts.

Among Banks Peninsula communities, both Maori and Pakeha, everyday forms of rootedness are important toward developing a rooted sense of place. In a general sense, utilizing rooted as a descriptor with 'sense of place' helps provide an orientation that emphasizes place more than sensing; hence the term becomes more geographic than aesthetic. The Maori remind us of the importance of community and ties to the land that continue over many generations, extending to ethical relationships with nature that has supported them. (Hay 1998b p. 263)

Hay describes sense of place as including both sensing and bonding elements. The former is consistent with Tuan's conception of sense of place as a level of awareness. While, the later argues that sense of place requires a level of attachment that is deepened by a rooted experience. Specifically, it is proposed that a more "indigenous" sense of place requires long residency and an "inside" connection to the social fabric and one's own ancestry.

It [sense of place] is an individually based, but group informed, localized, personal means of relating to the world, transforming mere space into personal place. Together with people's feelings for their homeland, the aforementioned factors [intimate knowledge, insideness (the subconsciously familiar), social belonging, rootedness, bondedness, and cultural structures] combine to form sense of place, which mirror particular place settings and societies in certain eras of time. (Hay 1988 p. 160-161)

Hay (1998b) concludes, based on his interpretation of a tribal culture's relationship with the land, that a rooted sense of place could provide the foundation for a more sustainable society. Hay's work, focused only on indigenous cultures, leaves open the question of how a sense of place develops for modern cultures especially, within the contemporary American residential experience. My own research attempted to fill this gap and presented an understanding of a sense of place in an early American automobile suburb as a continual process of transformation, influenced by both the foundational environmental attributes and social experiences individual residents encountered within the neighborhood (Beidler, 2002).

This discussion has demonstrated that this conception of sense of place has evolved over time. Early generalized theories were based largely on the components of place

(environment, activities and meaning) and questioned the role of rootedness. Later existential approaches describe sense of place as a more personalized means of relating to the environment that stressed being “at-home” in an unself-conscious way and role of social interaction.

By the nature of the epistemological foundations, none of these studies present the “final word” but rather an understanding from the process of research itself. More importantly, this body of literature draws out the importance of experience and interaction with the environment as the central feature in developing a sense of place.

Stedman has described this understanding of a sense of place in an experiential model. The idea is simply that our experiences with a certain physical landscape creates a lens through which humans attribute meanings to a place (Stedman, 2003a). In contrast to the previous model, this understanding of a sense of place hypothesizes that our experiences of the physical landscape and not the physical environment itself influences the affective dimensions of our sense of place. Stedman’s empirical tests of this model indicated an unsatisfactory fit, although barely so.

Theorists prescribing to this model would argue that such a test is not valid because it is impossible to distinguish the complexities of a socially constructed reality and the subjective nature of the phenomenon into a quantifiable equation. Rather, the complexity and intertwined nature of a sense of place must be understood in a holistic fashion. In addition, the environmental attributes, human experiences and subjective meanings that transform mere space into place are specific to a given locale. Therefore, this conception of a sense of place cannot be generalized across time, space, or populations.

2.3.3 The Meaning-Mediated Model - Place Perception

The focus of the final category is to identify the dimensions of sense of place in hopes of better understanding the facets of community experience. From a positivistic framework, this category depicts sense of place as an umbrella term encompassing several human-environment relationships (Hummon, 1992; Shamai, 1991). These relationships have been divided into three dimensions and have been largely studied individually by researchers in environmental psychology (i.e. Altman & Low, 1992; Lalli, 1992; Pretty et al., 2003; Shamai & Ilatov, 2005).

The first of these relationships is defined within the cognitive domain (beliefs and perceptions of place) and includes variables such as “place identity.” The second domain includes affective dimensions of place (emotions and feelings) and includes variables such as “place attachment.” Finally, the last dimension of a sense of place is conceptualized within the conative domain (behavior and commitment to place) and is measured in terms of “place dependence.” Thus, sense of place is conceptualized as a multidimensional attitude towards a spatial setting (Jorgensen & Stedman, 2006). This framework again echoes the three-component view of place. Activities (the conative dimension), meaning (cognitive and affective dimensions) and the physical environment are all assumed to be independent variables of a sense of place.

Emphasizing the physical environment in their findings, recent research in this tradition suggests a meaning-mediated model, which attempts to identify the relationship between key environmental attributes and the associated meaning that is developed within one's sense of place (Jorgensen & Stedman, 2001; Stedman, 1999, 2001, 2003a). Specifically, the authors suggest that sense of place is slightly more affect-based than either conative or cognitive-based (Jorgensen & Stedman, 2001).

The 'meaning-mediated' model is really an extension of the genius loci model whereas, the physical environment is believed to provoke symbolic meanings of the landscape which, in turn, influences the affective dimensions of a sense of place (Stedman, 2003a). The distinction between this model and conceptions of "genius loci" is the inclusion of a cognitive perspective, representative of Kevin Lynch's work (Lynch, 1960). However, unlike Lynch, Stedman is not concerned with the orientation aspects of environmental cognition. Rather, the author is concerned with defining which meaning-related aspects affect an individual's sense of place.

Although Stedman (2003) did find that this understanding of sense of place was the only model not rejected by statistical analysis, the body of literature stemming from an environmental psychology perspective has not clearly articulated the distinctions between the affective dimensions of a sense of place. Rather, statistical research has found a high degree of commonality amongst the affective dimensions of sense of place such as community satisfaction and sentiment (Pretty et al., 2003). In fact, there is not even consistent agreement about which psychological dimensions of experiencing place should be included in any given study.

In Stedman's (2003) research, the author used place attachment and place satisfaction as his affective dimensions of sense of place. However, when measured as an attitude, a homeowner's positive emotion to their property (satisfaction) was the most explanatory dimension of a sense of place (Jorgensen & Stedman, 2001). Overall, this body of literature, based on a meaning-mediated model, has pointed to several means of assessing the dimensions of a sense of place. Nevertheless, there is not a single agreed upon model to measure the construct. Rather, studies such as Pretty et al. indicate the utility of assessing sense of place dimensions as separate, but related, constructs only when sense of place can be defined as a single and perhaps a separate idea (i.e., community identity).

2.4 Summary of Sense of Place Literature

Over the last four decades, the three epistemological frameworks discussed above have produced diverse theories regarding the nature of a sense of place. First, early theoretical writings equated sense of place with conceptions of "genius loci." This theory argued that a sense of place was essentially embedded in the physical qualities of a location and thus simply an environmental attribute perceived by inhabitants and visitors alike. Second, existential theories argued that sense of place was not simply an environmental quality but rather, an individually and socially constructed process that transforms mere space into place. Finally, recent positivistic theories propose that a sense of place is a multidimensional human response to the physical environment and tend to focus on the meaning associated with an individual or group's sense of place.

To a large extent, all of the epistemological foundations acknowledge the three widely cited components of place (the physical environment, activities, and meaning). The only difference between the interpretations is which component is emphasized as the most significant in the development of a sense of place. As an innate environmental quality, the physical environment is central to genius loci model. As transformative process, heavily influenced by both social and lived experience, activities are the focus of the existential sense of place theory. Or, as a multidimensional attitude, the meaning and affects generated by the environment is central to positivistic interpretations. However, this discussion has also highlighted one additional distinction.

The various sense of place theories also disagree on the role length of residency plays in the development of a sense of place. Several authors feel a “rooted” long-term bond with the physical setting and/or the community in that setting is necessary. Others argue that a level of positive attachment or a more acute awareness of the environment is important in the development of a sense of place. Much of this variation is explained by the context in which the authors are studying or using as examples. Generally, the literature points out that a “rooted” sense of place is more typical of indigenous cultures whereas, contemporary and modern communities demonstrate a less ‘taken-for-granted’ attitude towards place (See Fig. 2.1).

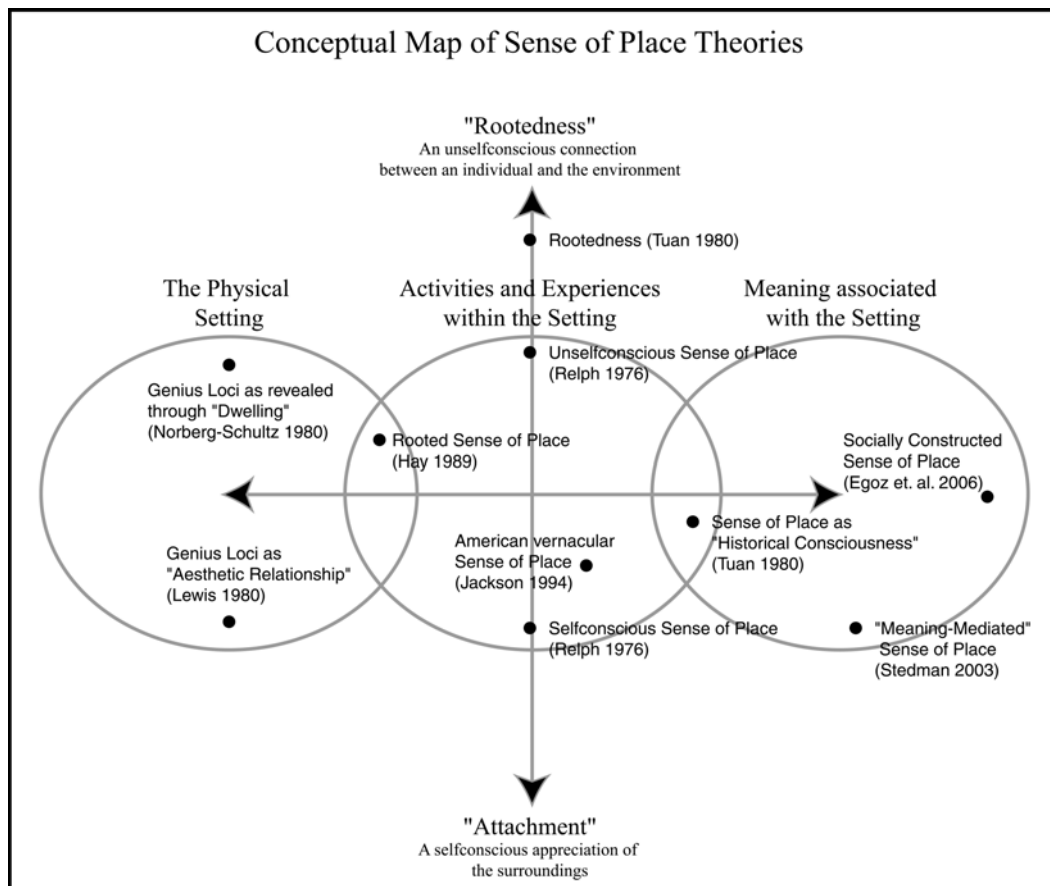


Fig. 2.1. Conceptual map of existing sense of place theories. Developed by the author.

As the figure above depicts, there is little consistency or even a cluster of academic explanations regarding the development of a sense of place. However, there is a single similarity across this complex continuum of theoretical thought. All authors are describing a process in which mere space is transformed into place, whether that is described as *genius loci*, an existential sense of place or a meaning mediated model. Due to this underlying similarity, this research project on the transformation of space into place for residents in the Village at Tom's Creek can be situated and draw from this context of existing theory.

Based on my own epistemological biases and philosophical understanding of reality, the existential model speaks to my current interpretations of the phenomenon. However, this research project does not assume that one interpretation is "correct" nor, will this project attempt to test one theory. Rather, it has been demonstrated that sense of place theory is uncertain at best (especially in the context of modern American neighborhoods) and the phenomenon is not easily quantifiable due to its subjective nature.

2.5 Methodological Justification

Without committing to one single model for theoretically understanding a sense of place, it is possible to argue that a qualitative model for understanding a sense of place is a more appropriate means for deciphering how a sense of place emerges in modern American communities because the concept, which is conceptually rich, remains somewhat controversial and diversely understood. Despite the increased interest in positivistic understandings of a sense of place, this form of quantitative analysis used to explain people's behavior, does not contribute much to an understanding of the meaning of the experience of living in a place (Hay, 1998a). Specifically, a phenomenological approach seems ideally situated at this point in time to investigate the diverse understandings of a sense of place because residential interpretations of place are inherently contained within the realm of more subjective knowledge (Relph, 1970, 1981, 1984; Seamon, 2000; Tuan, 1979).

It is possible to also argue that a qualitative model for this study seems to be a more appropriate method of investigation based on Creswell's (1998) reasons for conducting qualitative research. First, the nature of the research question asks *how* the phenomenon develops, as opposed to asking *why* or establishing a relationship between specific variables. Second, the topic needs to be *explored* because the concept, which is conceptually rich, remains somewhat controversial and diversely understood. Third, this research will present a *detailed view* of the phenomenon within a specific setting rather than broad generalizations across populations. Fourth, this project attempts to decipher how a sense of place emerges for residents in their *natural setting*. And finally, this research emphasizes the *participants' experiences* and views, as opposed to conceptualizing my own role as that of an "expert."

2.6 Methodological Literature Review

Qualitative research is a umbrella term that includes a wide array of research traditions and paradigms concerned with multiple ways of knowing (J. Creswell, 1998; Flick,

1998). Generally, I would define three characteristics as central themes that can be traced across the diversity of qualitative traditions. First, qualitative methods are inductive in nature (Hammersley, 1992; Taylor & Bogdan, 1998). Second, qualitative methods investigate the meaning of the experiences for the participants of the study (Hammersley, 1992; Taylor & Bogdan, 1998). And finally, these inductive investigations of meaning are interpreted within the milieu of the “natural setting” (J. Creswell, 1998; Miles & Huberman, 1994). Therefore, for the context of this study, qualitative research is broadly defined as a humanistic commitment to the study of the social world, from the perspective of the interacting individual (Denzin & Lincoln, 2000).

Within this broad definition, phenomenology has been classified as a single qualitative tradition of inquiry that fulfills each of the criteria outlined above (see J. Creswell, 1998; Patton, 2002). More importantly, David Seamon (1984; 1989; 2000) has proposed that a phenomenological approach is an appropriate alternative to positivistic investigations within environment-behavior research. Specifically, this tradition seeks to describe underlying essential qualities of a given phenomenon, where phenomenon refers to any object or human experiences. “Any object, event, situation or experience that a person can see, hear, touch, smell taste, feel, intuit, know, understand, or live through is a legitimate topic for phenomenological investigation” (Seamon 2000 p.158).

From this tradition, researchers rely on either their experiences with the object of study or experiential descriptions provided by participants of the study. This process of data collection is not the goal of the research. Rather, the aim of phenomenology is to discover the underlying commonalities that mark the essential core of these existential descriptions (Seamon 2000). In short, phenomenology is the interpretive study of human experience. However, this oversimplified definition does not capture the full range of phenomenological inquiry. Based on varying philosophical underpinnings, phenomenology includes several different methodological approaches. Therefore, the following sections will first discuss the various philosophical orientations within phenomenology and then outline the corresponding methodological approaches.

2.7 Philosophical Orientations within Phenomenology

Phenomenology, as a philosophical movement, is not defined by a single doctrine on which all participants agree (Embree, 1998). Rather, phenomenological philosophy is a collection of diverse writings that range from the transcendental or “pure” phenomenology of Edmund Husserl to the existential phenomenology of Martin Heidegger. Each perspective contains unique interpretations of central issues, philosophical understandings and theoretical assertions. As a result, any attempt to justify a single phenomenological approach based on broad philosophical generalizations leads to inherent contradictions. As Schwandt (2001) notes:

The use of the term phenomenology in contemporary versions of qualitative inquiry in North America tends to reflect a subjectivist, existentialist, and non-critical emphasis not present in the Continental tradition of phenomenology represented in the work of Husserl and Heidegger. The latter viewed the phenomenological project, so to speak, as an effort to get beneath or behind

subjective experience to reveal the genuine, objective nature of things and as a critique of both taken-for-granted meanings and subjectivism. Phenomenology, as it is commonly discussed in accounts of qualitative research, emphasizes the opposite: It aims to identify and describe the subjective experiences of respondents. It is a matter of studying everyday experience from the point of view of the subject, and it shuns critical evaluation of forms of social life. (Schwandt, 2001 p. 192)

This contradiction demands that researchers working from a phenomenological perspective must first draw out which specific set of philosophical assumptions has informed their work. Fortunately, Husserl's transcendental interpretations and Heidegger's existential orientation can be directly linked to distinct approaches within a phenomenological tradition.

2.7.1 Framing Husserl's Epistemology

Husserl's writings can be divided into three or four stages of evolution depending on your philosophical interpretation of his work (Moran, 2000). In his last stage of writing, Husserl proposes transcendental phenomenology as a method of grasping the essence of consciousness in its "intentionality." Husserl's "intentionality of consciousness" refers to a central assumption that human consciousness is always oriented toward the world of emergent meaning and thus it is impossible to distinguish between the objective and subjective nature of anything. Based on this philosophical assumption experiences are interpreted as identifiable objects and these experiences can be studied based on their appearance to consciousness (von Eckartsberg, 1998).

The development of an actual method for grasping the fundamental essence of the spirit in its intentionalities, and for constructing from there an analysis of the spirit that is consistent *in infinitum*, led to transcendental phenomenology. It overcomes naturalistic objectivism and every sort of objectivism in the only possible way, namely, through the fact that he who philosophizes proceeds from his own ego, and this purely as the performer of all his validities, of which he becomes the purely theoretical spectator. (Husserl, 1970 p.298)

Husserl does not reject the conception of objective interpretation but rather, by radically rethinking the Cartesian Dualism, Husserl hopes to identify how objectivity gets constituted in subjective consciousness (Moran, 2000). Therefore, transcendental phenomenology first demands that a philosopher place him or herself at a distance from previously held theories by "bracketing the naturalistic attitude."⁶ Husserl proposes that this bracketing process reveals the conditions for having that experience, which is conceptualized as neither the object of the experience nor the subject having that experience. Next, by rationally questioning the essence of consciousness via "phenomenological reduction," the non-participating observer investigates his or her own

⁶ "Bracketing" is a transcendental phenomenological concept that requires the researcher to set aside all prejudgments and rely on intuition, imagination, and universal structures to obtain a picture of the experience.

experiences to explore the universal structures of consciousness (Stewart & Mickunas, 1974).

Husserl's aim was for a science of pure abstract thought that arrives at truth about the *a-temporal* essences of things. From our experience of the phenomenon, Husserl supposed that we must somehow intuitively know the genuine, lasting character of what truly persists through all. Thus, for Husserl, human consciousness remains supremely important as the unique source of all knowledge.

As a method of investigation, transcendental phenomenology has been criticized for conceptualizing "bracketing" as a technique for setting aside internal assumptions thus, allowing the researcher to describe the world from the viewpoint of an detached observer. This idealistic concept stems directly from Husserl and should be related only with transcendental phenomenology. The notion of investigation without presuppositions is in fact a presupposition itself. Husserl attempts to argue that the ego is able to transcend the single objective/subjective reality via his phenomenological method. This argument led many of his followers away from his writings.

2.7.2 Framing Heidegger's Ontology

Heidegger's phenomenology can be conceptualized as transformation of Husserlian phenomenology in that it replaces the study of intentional structures of consciousness with the more fundamental study of the Dasein⁷ and Being itself (Moran, 2000). Heidegger's move away from transcendental idealism centers on two philosophical critiques. First, Heidegger argued that the concept of a transcendental consciousness, representative of a detached and objective observer, ignored the historical and temporal nature of human reality. This critique leads to the second assertion that all description inherently involves interpretation because human reality is contextually situated. Thus, Heidegger argued that the basic structure of consciousness could not be removed from presuppositions nor was objective description possible. Rather, Heidegger's phenomenology focused on empirical descriptions of the particular in order to reveal underlying universal meaning.

From the investigation itself we shall see that the methodological meaning of phenomenological description is *interpretation*. ...Phenomenology of Dasein is hermeneutics in the original signification of that word, which designates the work of interpretation. (Heidegger, 1993 p. 84)

Also in contrast with Husserl, Heidegger is averse to directly dealing with epistemology because the foundations of being are considered rudimentary to questions regarding knowledge and our relationship to what can be known. Heidegger argued that before we deal with knowledge, we need to consider the nature, or the being, of the object known (Inwood, 1997). For Heidegger, human reality is inherently situated in an interdependent

⁷ Heidegger refers to human reality as Dasein or "being-there" to emphasize the situatedness of human reality in the world. Dasein is not a thing among other things, rather Dasein is an "openness" in which entities are revealed in light of their Being (Stewart & Mickunas, 1974).

spatial world (being-in-the-world) where ‘truth’ reveals itself out of the concealment of everyday experiences.

This conception of reality echoes Husserl’s re-conceptualization of the Cartesian Dualism in which subject and object are not distinct. However, Heidegger’s existential conceptions of being-in-the-world (vs. Husserl’s *lebenswelt*⁸) situate human reality in a concrete world-context from which it cannot be removed. Thus, Heidegger’s phenomenology is essentially existential because for him the study of contextual experience is an understanding of meaning. Ultimately, Heidegger’s phenomenology is an analysis of encounters with the particular, with hopes of shedding light on the universal, which can never be fully known only partially revealed within a given context.

2.7.3 Interpretivism vs. Philosophical Hermeneutics

In ‘Three Epistemological Stances for Qualitative Inquiry,’ Schwandt (2000) discusses two broad epistemological frameworks that highlight the contrast within phenomenological philosophy. The first category labeled “interpretivism” revolves around the philosophical assumption that it is possible to transcend the social and historical context during the process of interpretation. Aligned with the philosophical underpinnings of Husserl’s transcendental phenomenology, interpretivists argue that it is possible to understand the meaning of human action in an objective manner. “Method, correctly employed, is a means that enables interpreters to claim a purely theoretical attitude as observers” (Schwandt 2000 p.193).

Schwandt labels the second epistemological framework “philosophical hermeneutics.” Tied to the writings of Gadamer and Heidegger, this framework concludes that there can never be a final or correct interpretation. Rather, understanding itself is an interpretation that cannot be separated from social and historical nature of human being. As opposed to interpretivism, “the goal of philosophical hermeneutics is philosophical - that is, to understand what is involved in the process of understanding itself” (Schwandt 2000 pg.196).

Thus, Schwandt’s epistemological frameworks make clear two foundational contrasts between Husserlian and Heideggerian phenomenology. In short, Husserlian phenomenology assumes that the objective analysis of consciousness can reveal the universal meaning of experiences if, specific methods of bracketing and reduction are employed. Heideggerian phenomenology assumes that meaning and experiences can never be separated from the context and the process of interpretation. Therefore, Heidegger’s phenomenology calls for the study of specific experiences within a given context with the assumption that the process of investigation can reveal essential themes of the given phenomenon as a part of the ongoing development of knowledge.

⁸ Husserl conceptualized the *lebenswelt* or lived-world as the *background* for all human endeavors. This provided a point of departure for existential philosophers who conceptualized human activity as being caught up in the world context or being-in-the-world (Stewart & Mickunas, 1974).

2.8 Specific Phenomenological Methods

In the context of environmental design research, David Seamon distinguishes three specific approaches to phenomenological inquiry (Seamon, 2000). These approaches include first-person, existential and hermeneutical methods. More importantly, each of these phenomenological approaches is specific to the philosophical assumptions of either Husserlian interpretivism or Heideggerian hermeneutics.

2.8.1 A First-person Approach

Seamon describes first-person phenomenological inquiry as a process of examining your own firsthand experiences to reveal the phenomenon's characteristics and qualities (Seamon, 2000). Seamon cautiously notes first-person approaches must find ways to involve the understandings of others. However, this approach is typical of interpretative "readings" from the perspective of a single researcher. Therefore, this approach is directly related to Husserl's philosophical assumptions. That is, a first-person phenomenological approach is justified on the assumption that it is possible for the interpreter to transcend their historical circumstances in order to understand an 'objective' or universal meaning of a phenomenon.

2.8.2 A Hermeneutical Approach

Seamon ties hermeneutic-phenomenological inquiry to the interpretation of text, broadly conceived. Seamon notes that because the creator of the text is not typically available, the hermeneutic researcher attempts to discover meaning through the text itself. This phenomenological approach in the context of environmental design research has allowed researchers to investigate abstract concepts such as "landscape" by interpreting it as a text to be read. "Shopping centers, suburbs and new towns all cater to utilitarian ends but they also aspire to something more, to images that reflect communal values and ideas, to a kind of visibility that demands attention rather than use" (Tuan 1979 pg.99). However, this raises the question if this approach could also be considered a first-person methodology.

I would argue that the distinction between first-person and hermeneutical approaches rest on their separate philosophical underpinnings. A hermeneutic-phenomenological approach does not attempt to transcend the historical context of interpretation, nor does such an approach try to put forth a universal meaning of a phenomenon. Rather, as Seamon notes, the key aspect of all hermeneutical work is that there are many ways to interpret a text, thus this approach is drawing from Heidegger's existential orientation within phenomenology.

2.8.3 An Existential Approach

Finally, I consider the existential-phenomenological approach as the most 'radical' of the three approaches discussed here. I classify it as such, because it is the only approach that attempts to interpret the specific experiences of other people. Drawing from the work of Heidegger, an existential approach is concerned with understanding the particulars of a given phenomenon from a defined social and historical context. The process of interpreting these experiences is presented as one contextual understanding. There are no

claims of universal knowledge. Rather ‘meaning’ is conceptualized as relative to the context of interpretation and is concealed within the realm of everyday experiences.

Within the context of this research, an existential-phenomenological approach is preferred because it is the only phenomenological approach that attempts to interpret the specific experiences of other people, as opposed to, my own interpretations or experiences (Seamon, 2000). Therefore, the following section reviews three existential-phenomenological studies as appropriate precedents for this study.

2.9 Precedent Studies

This section presents three specific existential phenomenological approaches as precedents for this research. These studies include Million’s (1992) investigation of involuntary displacement, Nogue’ i Font’s (1993) investigation of landscape, and Seamon’s (1979) geographic interpretation of the lifeworld. All three studies center on investigations of multiple experiences within a defined spatial context.

Guided by an existential approach, Million (1992) presented a phenomenology of place and involuntary displacement as illustrated through the experience of 18 individuals in Southwestern Alberta. Specifically, the author uncovered several themes and structures through a process of experiencing the landscape, interviewing residents, and writing.

Million concluded that “existential insideness” or being-in-place’ emerged through such structures as habit, journey, and time. This concept of insideness, or belonging to a lifeworld also involved activities of ‘work-in,’ ‘pleasure-in,’ ‘name-in,’ and ‘living-within’ a particular geographic setting. Therefore, the author argued that for the participants of this study, place develops out of an ontological need⁹, essential to being human yet, shows itself with no specific end (e.g. being at home and being loved).

Consequently, the most that we can conclude is that place, although it may in part emerge by way of empirical distinctions such as legal ownership, daily living-with, or being born and raised within, does not necessarily enjoy a one to one correspondence with any one or a combination of empirical distinctions. Place embodies the qualitative, or experiential, dimension of a physical setting, which, before all else and like any lived phenomenon, presents itself to us as a matter of the heart. (Million 1992 p.101)

Nogue’ i Font (1993) followed a similar existential phenomenological approach in her investigation of landscape. The author’s specific method involved a ‘joint exploration’ of first-hand and intersubjective experiences of twenty participants within the Garrotxa region of Spain. However, in contrast to Million’s (1992) research, this investigation compared experiences and interpretations of the landscape across two separate groups of residents.

⁹ An ontological need is defined as something that is essential to being human yet shows itself with no specific end (e.g. being at home and being loved). Therefore, Million’s claim is that place emerges out of an essential and continual human need. (Million 1992)

In her findings, the author concluded that there existed two separate but non-exclusive phenomenologies of landscape. In the first interpretation, the phenomenology of landscape was understood as particular to individual and group experiences. The second regional understanding of the landscape presented five spatial themes as taken-for-granted elements of the participant's lifeworld. However, all of the themes were identified as 'inside' experiences that give meaning to the landscape for the participants of the study. (Nogue' i Font 1993).

As the above interpretation illustrates, the experience of the Garrotxa landscape is in some ways different for farmers and painters. There are, however, certain environmental qualities and experiences of Garrotxa that are shared, and these similarities indicate that a phenomenology of landscape in its own right exists. (Nogue' i Font 1993 p.178)

The final precedent study, Seamon's (1979) phenomenological investigation of the lifeworld, also employed an existential approach. The author's research was guided by several intersubjective conversations with participants of three focus groups. Throughout these conversations, three themes or "parts" presented themselves as essential elements of everyday environmental experience. These elements included concepts of movement, rest, and encounter, which, Seamon proposed, could be conceptualized within 'triads of openness and habituality.'

Outside of the direct intersubjective investigation, Seamon also argued that Jacobs' (1961) concept of a 'place ballet' provides a foundation from which individuals could begin to understand the temporal and spatial dimensions of the proposed 'triad of habituality.' In short, the study of 'place ballets' enables internal and external investigations of place to recognize the inherent order of 'people-in-place' as human existence grounded in an environment.

...such an understanding (of the person-place bond), provides a tool whereby environmental designers and policy makers might discover a new perspective and approach for tackling projects and plans for specific places and environments. (Seamon 1979 p.10)

These three studies begin to provide a methodological framework from which this existential phenomenological investigation of sense of place can stem. Specifically, Million's (1992) and Seamon's (1979) work reinforces that an existential-phenomenological approach is an appropriate tool to investigate environmental experiences and conceptions of place embedded within individual life-worlds of each participant. In addition, Nogue' i Font's (1993) study of landscape demonstrates that there exists common threads throughout these existential experiences of place and thus, can be understood across the multiple descriptive accounts of spatial experiences within a given locale.

CHAPTER 3: METHODS

3.1 Site Selection

Located northwest of Blacksburg's highway by-pass, the Village at Tom's Creek is perhaps best described as a neotraditional "greenfield" subdivision. The village provides a mixture of 196 residential units, as well as four community service lots, and was influenced by the design principles of historic, small Virginia settlements and the New Urbanism movement (see Fig. 3.1).

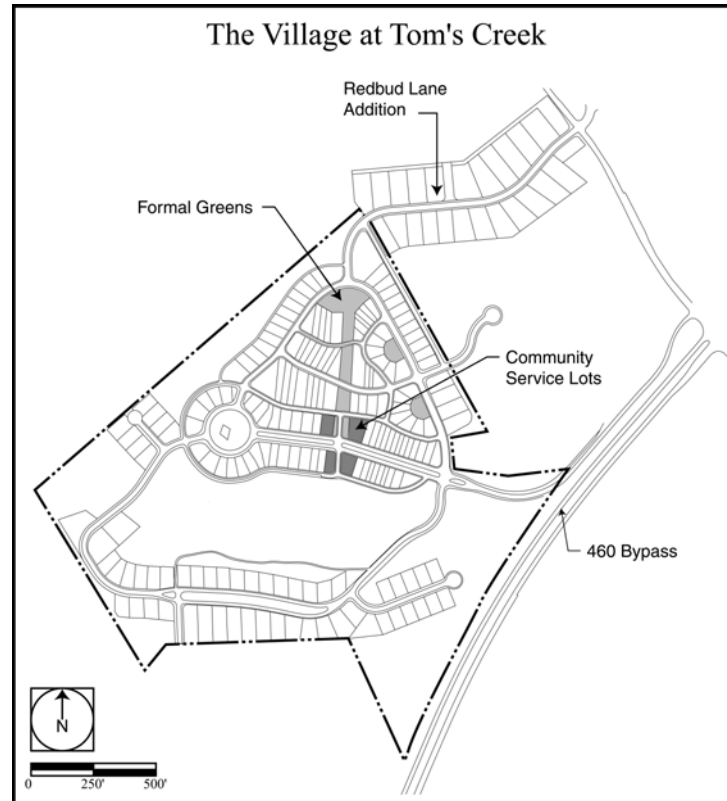


Fig. 3.1 Parcel map for the village.

Drawn by the author and based the public zoning application for the Village at Tom's Creek (see Gay & Keese Incoporated, 1999).

The Village at Tom's Creek cannot be classified as a "pure" traditional neighborhood development because it does not conform to all of the tenets associated with TND design (see Duany et al., 2000). Specifically, at the regional scale, the village does not connect to adjacent developments, encourage public transportation or actively attempt to reduce traffic. In terms of land use, the village does not provide a balanced mix of housing and non-residential uses nor, does the development reserve civic and commercial sites that are easily accessible by foot within a quarter mile walking distance.

In terms of street design the village does not avoid cul-de-sacs, conform to an organized street network based on the grid, or even require a sidewalks on all thoroughfares. All residential buildings are not placed relatively close to the street and there are limited

street-design features implemented to calm traffic. Additionally, the neighborhood does not provide for a “true” diversity of housing. Multifamily units and “granny flats” (apartments over garages) are not permitted inside the Village at Tom’s Creek.

This does not mean that the Village at Tom’s Creek does not fit into the rubric of New Urbanism. Clearly, there is some diversity in terms of the available housing and the architectural syntax has been informed by the regional vernacular. The smaller residential lots are accessed via an alley and garages that are served from the street are set back from the façade of the building. There are no collector roads with the sole purpose of handling traffic within the development, and there is a mix of civic open spaces in terms of greens and courtyards.

In addition, the clustering of development and increased density in the village is more environmentally sensitive than contemporary subdivisions that maximize lot size and lot number. Existing natural and cultural features were retained and celebrated in the layout of the community. And the trail and sidewalk network promotes walking, at least inside the neighborhood.

Therefore, the village is better classified as a neotraditional interpretation because it fails to achieve the mixed-use requirements, regional integration and reduce auto dependence as called for in the TND literature. As a mainstream suburban adaptation, the neotraditional typology is becoming an increasingly popular subdivision alternative that attempts to enhance the site’s sense of place by drawing on the local history, culture, geography and climate. This alone may not be enough to justify the development of “greenfield” sites on the urban fringe. However, this historically informed and environmentally sensitive form of cluster development is clearly drawing on the principles of New Urbanism and thus can be situated within the milieu of the movement.

The discussion of whether this piecemeal use of select New Urbanist principles is positive or negative is beyond the scope of this research. This is precisely why this site was selected for the study. Specifically, this project is first asking: how does a sense of place develop in the context of a contemporary American community. Based on this foundational understanding, this research will then attempt to evaluate if the piecemeal adaptation of New Urban design tenets is capable of enhancing or fostering the residents’ sense of place because this approach to New Urban design is becoming increasingly common across local jurisdictions as a means of combating “placelessness.”

Within the context of the Village at Tom’s Creek, the site has adopted six of the ten principles of neotraditional design outlined by Christoforidis (1996). First, the development has a distinct architectural character modeled on the traditional building patterns found within the region. Second, common open space modeled after historic village squares and town greens has been designed and constructed for public use. Third, the subdivision is built at a higher than typical density that clusters housing and preserves natural features. Fourth, to some extent, the housing does provide for a diversity of income levels. Fifth, the development does attempt to foster a sense of community based on notions of life in a small town by encouraging neighborhood interaction. And finally,

the design of the village has provided for the development of a mixed-use core, but the community service lots have not been constructed at the time of the study.

Therefore, it is argued here that because neotraditional neighborhood designs have adopted the claim that historically informed and environmentally sensitive development is capable of enhancing a community's sense of place, this study represents a means of evaluating this underlying normative claim of New Urbanism.

3.1.1 Neighborhood Context

The landscape of the site is defined by rolling topography typical of the Allegheny Ridge and Valley physiographic province. Shawnee Creek, a tributary of the Tom's Creek watershed, runs directly through the center of the residential development (See Fig. 3.2). The steeper banks associated with this creek level out onto a southern ridge where the first phase of single-family homes were constructed. The result is a distinctively divided site plan with a much greater density of smaller single-family lots and attached units located on the lower elevations of the subdivision.

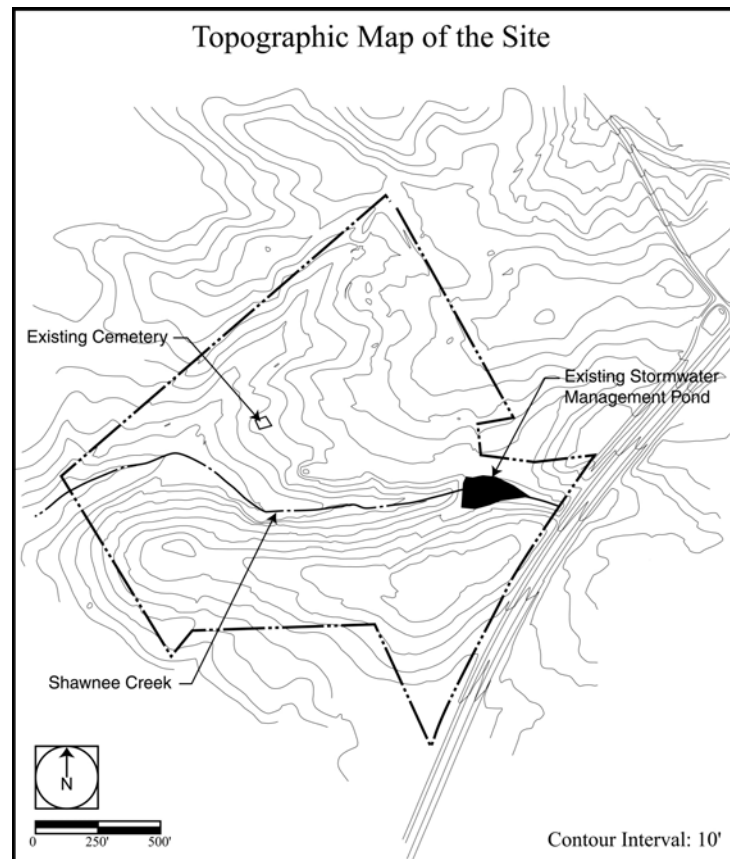


Fig. 3.2 Topographic map of the site.

Drawn by the author and based on the public zoning application for the Village at Tom's Creek (see Gay & Keese Incoporated, 1999).

Started in 1999, The Village at Tom's Creek is now well into its fifth phase of a planned six-phase development. Like many neotraditional communities, the site first needed to be rezoned as a planned residential district in order to achieve the density and smaller lot

sizes typical of new urbanists' plans. The plan, as approved, clustered development and preserved 48% of the 99.3 acres in open space, which will be dedicated to the homeowners' association upon completion.

The single-family homes inside the village are roughly built on quarter acre lots with assessed values that initially ranged from 175 to 250 thousand dollars. However, in recent months the market value of the single-family homes in the village has steeply increased and single-family units now start at \$340,000. Whereas, the attached housing that is built on less than an eighth of an acre are now going for over \$275,000.

In addition to providing a mix of housing units, the village includes a system of walking trails and sidewalks centered on small commercial/community service core. Although none of community service lots have been constructed at this point, each of the housing types including single-family dwellings, townhouses, and cottages are all presently represented. The community service lots and housing types are discussed further in the following section.

Throughout the phases of development, the developers (Tom's Creek Investors, LC) did not directly control the construction of all structures. Rather, approved contractors seek authorization for each planned unit from an architectural review board controlled by the town's planning office, which evaluates the structure's compliance with the "Village at Tom's Creek Pattern Book." In addition, contractors cannot duplicate another residence already constructed in the community. As a result, the initial community design and pattern book for the neighborhood has produced an eclectic blend historically informed architectural styles on variable lot sizes.

3.1.2 Housing Styles and Lot Types

The Village at Tom's Creek is composed of five different residential lot types laid out on a curvilinear street and alley network. The "farm house" lots are the largest of the five, typically over half an acre in size, and are designed to accommodate a single-family home with a maximum front facade width of 46 feet and a setback of 30 feet. There are only four sites originally platted within this classification, comprising only two percent of the total residential units.

The second and third classifications include "village" and "hamlet" lots. These lots are also designated for single-family units, which like the farm house lots, are accessed from the street by a driveway. Both of these lot types are typically smaller in terms of lot size. Village lots are restricted to 90 to 100 feet wide, whereas the hamlet lots range from 65 to 75 feet in width and have a seven-foot shorter front yard setback. Together, these lots account for 40 percent of the residential units with only a few falling into the larger village classification.

"Cottage" lots are the smallest of the lots dedicated to single-family homes. Typically these lots contain smaller housing units and are in the closest proximity to formal greens or shared open space. In fact, twelve of these lots are arranged around two semi-circular courtyards instead of the street. Typically, units on these lots are set back 13 feet from

the property line and have a maximum lot width of 55 feet. In all, these houses comprise 28 percent of the available residential units and are the only single-family units accessed by an alley.

Attached housing makes up the remaining thirty percent of the total residential units. These lots are only 18 feet wide with an 8-foot setback. Like the cottage lots, these lots restrict vehicular access to a private rear alley maintained by the homeowners association.

The final classification of lots within the village is reserved for non-residential uses. Labeled “community service” lots, these four lots are located at the intersection of the “town green” and the community’s formal boulevard (Honeysuckle Drive). Conceptualized as accommodating neighborhood-scale commercial, civic or office needs, these lots are situated at the heart of the subdivision as prescribed by the tenets of TND. Two uses, including both the non-residential and residential uses outlined above, are permitted on each lot in a number of arrangements. To date, there has only been speculation on how these lots may be developed. Based on conversations with the developer, it would not be surprising if these lots revert to more residential housing, but there does seem to exist a cautious interest among the residents in seeing the development of community based facilities.

Twenty-four additional lots along Redbud Drive were added to the original plot by another developer. Just shy of a half acre with a 30-foot setback from the street, these lots fall into “village” classification. However, these lots and the units on them are the largest to date within the development and clearly do not match the dense fabric already established in the community. The large lot sizes and greater distances between units reflect the spatial feeling of a conventional subdivision, as opposed to, a village network of homes.

Residential units located within the village not only have to conform to the setbacks and restrictions of the corresponding lot type, but additionally need to prescribe to one of the six architectural styles outlined by the neighborhood’s pattern book. Each historic pattern is based on architectural styles that are indigenous to the region. The house styles include a Colonial Revival, Virginia Farm House, Victorian, Craftsman, American Four Square, and a Classical Revival.

Contractors typically start with a spec floor plan and adapt the exterior treatment to one of the established architectural patterns. Therefore, the architectural styles of the neighborhood are only somewhat influenced by the spatial limitations of a given lot size and not the relationship the building has with the surrounding open space of the neighborhood. The eclectic use of historic forms is simply an aesthetic consideration that makes the village “look” different from “cookie-cutter” alternatives found in the area.

3.1.3 History of Development

Initially farmland zoned for low density residential, a separate local development company originally acquired the site now occupied by the Village at Tom’s Creek. In

1995, this development company had the site rezoned for a planned residential development and planned to build a neotraditional “hamlet.” A hamlet is a traditional eastern U.S. small town form that usually centers 50 to 100 homes on a common town green (Christoforidis, 1996).

Urban Design Associates, a Pittsburg based architecture practice noted for the development of Celebration, FL, completed a conceptual master plan for the parcel. Referred to as “Spring Valley,” the plan preserved forty-eight percent of the land in open space and called for a series of thirteen smaller neighborhoods each centered on a green or small park. These civic spaces were seen as reminiscent of Virginian hamlets and central to the community’s distinctive sense of place (Urban Design Associates, 1995).

Due to financial problems, the neotraditional hamlet was never built. Then in 1999, the property was acquired by Tom’s Creek Investors and redesigned by the local engineering and landscape architecture firm of Gay and Keese. The new plan called for a less formal street pattern that reduced the overall amount of required infrastructure. Renamed the “Village at Tom’s Creek,” the new design generally adopted the clustering of mixed housing speculated by the original plan. The village plan also maintained roughly the same overall number of residential units and preserved open space.

Overall, the village plan reduced the number of larger lot sizes and ironically gave the site a more suburban feel complete with cul-de-sac streets. This plan also introduced four community service lots with the prospect for neighborhood scale, commercial activity. Eliminated were the community center, the distinctive neighborhood units within the development and the collection of smaller civic spaces.

Development of the property was slowed at the beginning due to concerns involving the capacity of the town’s existing sewer system. However, a compromise was reached when the developers agreed to implement a decentralized sewerage alternative. Referred to as a Septic Tank Effluent Pump (STEP) system, this system essentially connects individual septic tanks on each lot with the existing main lines thus reducing each lot’s overall output. Once integrated with the plan, development of the first phase proceeded feverously along the ridgeline of the property.

3.1.4 Neighborhood Character

Similar to most neotraditional subdivisions, the Village at Tom’s Creek is marketed as the “neighborhood we all wanted to grow up in” (Cox, undated). The promotional literature boasts the preservation of environmental attributes and a unique community feeling. However, with all of the construction and building placement controlled by the pattern book, the neighborhood character is visually defined by its high degree of architectural continuity. Common design elements including the traditional scale and eclectic historic forms combined with the uniform use of materials, contributes to a cohesive appearance.

This cohesiveness fabric does not confuse an individual’s awareness of their surroundings. Rather, a stipulation that prevents that exact duplication of residential

structures has produced an intriguing environment that heightens one's architectural senses. As a result, the initial community design and pattern book for the neighborhood has produced a unique aesthetic character that contrast with conventional "cookie-cutter" subdivisions.

The village's distinctive character is also defined in part, by the site's unique topography. Designed by the engineering and landscape architecture firm of Gay and Keesee, the network of streets and alleys adapted to the rolling topography of the site, as opposed to, strict grid geometry. The integration of street layout and topography results in a distinct feeling of arrival as the landscape rises into the neighborhood at each entrance. Overall, the neighborhood is more reminiscent of an early 1930's automobile suburb with its wide curvilinear lanes and traditional architectural syntax than a historic urban block.

The site was also consciously designed to take advantage of the existing vegetation. Initially farmland that was for a short time converted into a golf course, homes and streets were designed around the large canopy trees that remained on the level parts of the site. The development also preserved stands of existing vegetation along the banks of the creek as permanent open space. Walking trails were designed through these spaces so residents can actively take advantage of the environment and the neighborhood maintains the feeling of the rural countryside.

The varying streetscapes of the development further contribute to the character of the neighborhood. At the heart of the community, the densest residential housing and commercial lots line along the central boulevard with dual sidewalks that define the edge of the street. Throughout the rest of the community, curvilinear residential streets that often lack a sidewalk and manicured appearance, reflect a less intense rural character. This hierarchy among the existing streetscapes reinforces the neighborhood center and thus the community character.

A final defining characteristic of the neighborhood is its context within Blacksburg. Located on the rural fringe of the town's limits and connected only to a collector road, the site has limited physical and physiological connections with the existing town center of Blacksburg. Therefore, most residents rely on their cars as the only real means of transportation.

This isolation and dependence on the automobile coupled with the village concept has created a feeling of enclosure, not unlike many residential subdivisions of the twenty-first century. The distant views onto the neighboring mountain ridges reinforce a feeling of a rural enclave separated from the rest of the town community. Therefore, both the character and the neighborhood itself may be best described as a "neotraditional automobile suburb" reinforcing the suburban dream of having the best of both worlds-rural living and urban convenience.

Throughout history, suburbs have been distinguished as development efforts that no longer linked to a central business district by some form of mass transportation. Often more rural in character, proximity to the central businesses district became far less

desirable due to perceived negative externalities associated with the city. However, the early automobile suburbs of the 1930's sharply contrast with today's sprawling "leapfrog" form of suburban development.

Both spatially freed by the emergence of the automobile, early "inner-ring" automobile suburbs were tied to the services and utilities provided by the urban center. Often located within the legal limits of the jurisdiction or later incorporated into the city, this is drastically different from contemporary subdivisions that no longer require the utilities of an urban neighbor, and thus, haphazardly dot the surrounding landscape in a disconnected spatial pattern. Therefore, in the context of this study and consistent with its use of historical precedent, the Village at Tom's Creek is referred to as a neotraditional automobile suburb. Unlike leapfrog suburban development, the village is tied to the services and utilities of the town and is separated but not disconnected from the existing urban fabric.

3.1.5 Housing and Demographic Data

The following description of the study context was derived from summary file one and three of the 2000 U.S. census. It should be first noted that the Village at Tom's Creek was not started until 1999 and few units were completed during the actual census. Therefore, the data is more descriptive of the population and housing that existed prior to the neighborhood's development. In addition, there is no data available at the more detailed block level due to the rural nature of the context (see Fig. 3.3). As a result, the following statistical description can be best conceptualized as a portrait of the region in which the study community is located, prior to its actual development.

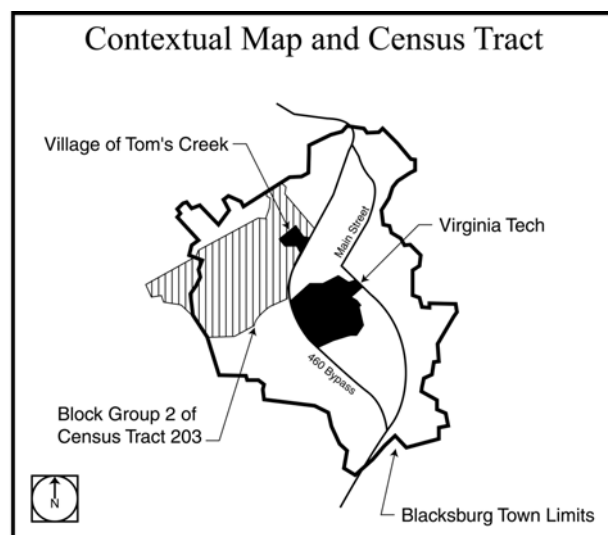


Fig. 3.3. Contextual map of the study area.

Drawn by the author and based on the 2000 U.S. Census Map (see U.S. Census Bureau, 2000).

The Village at Tom's Creek is located within Block Group 2, Census Tract 203 of Montgomery, Virginia. Block Group 2 is comprised of 445 total housing units, which represents only 3% of Blacksburg's total housing as of the 2000 census (see Fig. 3.4). With a similar percent of occupied housing units, the region in which the village is now

located had a far greater percent of owner-occupied units (75.6%) as compared to Blacksburg (30.4%).

Housing Occupancy				
	Block Group 2		Blacksburg	
	Total	Percent	Total	Percent
OCCUPANCY STATUS				
Total housing units	445	100	13,732	100
Occupied housing units	434	97.5	13,162	95.8
Vacant housing units	11	2.5	570	4.2
TENURE				
Occupied housing units	434	100	13,162	100
Owner-occupied housing units	328	75.6	4,003	30.4
Renter-occupied housing units	106	24.4	9,159	69.6

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices H3, H4, H5, H6, H7, and H16.

Fig. 3.4. Housing occupancy based on the 2000 U.S. Census (see U.S. Census Bureau, 2000)

The majority of the population within Block Group 2 is classified as living within owner-occupied, family households (see Fig.3.5). Within the Town of Blacksburg, the majority of residents live in renter-occupied, non- family units. In addition, Block Group 2 only contains 1% of Blacksburg's renting population and 8.7% of Blacksburg's population living in residential units that are owned. Combined, these numbers depict the area surrounding Tom's Creek as being predominately family households that do not accommodate Blacksburg's large, migratory population of students that is associated with the university.

Household Population				
	Block Group 2		Blacksburg	
	Total	Percent	Total	Percent
HOUSEHOLD POPULATION				
Population in occupied housing units	1,073	100	31,129	100
Owner-occupied housing units	848	79	9,802	31.5
Renter-occupied housing units	225	21	21,327	68.5
HOUSEHOLD TYPE				
Owner-occupied housing units	328	100	4,003	100
Family households	269	82	2,852	71.2
Non-family households	59	18	1,151	28.8
Renter-occupied housing units	106	100	9,159	100
Family households	35	33	1,927	21
Non-family households	71	67	7,232	79

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices H3, H4, H5, H6, H7, and H16.

Fig. 3.5. Household population based on the 2000 U.S. Census (see U.S. Census Bureau, 2000)

According to the 2000 census data, the majority of householders living in Block group 2 (94%) are classified as white (see Fig. 3.6). This percent is greater than the 85.3% of householders classified as white in the Town of Blacksburg. This contradiction between the percent of white householders living in the study area and town maybe a direct result of the location of Virginia Tech, which is found closer to the center of town. Or, these numbers might reflect the national trend of white homeowners moving to the suburbs. Either way, it is safe to say that the area in which the Village at Tom's Creek was built lacks much diversity among its householders.

Race of Householder

	Block Group 2		Blacksburg	
	Total	Percent	Total	Percent
RACE OF HOUSEHOLDER				
Occupied housing units	434	100	13,162	100
One race	431	99.3	12,895	98
White	408	94	11,232	85.3
Black or African American	12	2.8	614	4.7
American Indian and Alaska Native	0	0	16	0.1
Asian	8	1.8	930	7.1
Native Hawaiian and Other Pacific Islander	1	0.2	6	0
Some other race	2	0.5	97	0.7
Two or more races	3	0.7	267	2
HISPANIC OR LATINO HOUSEHOLDER AND RACE OF HOUSEHOLDER				
Occupied housing units	434	100	13,162	100
Hispanic or Latino (of any race)	6	1.4	267	2
Not Hispanic or Latino	428	98.6	12,895	98
White alone	404	93.1	11,074	84.1

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices H3, H4, H5, H6, H7, and H16.

Fig. 3.6. Race of householder based on the 2000 U.S. Census (see U.S. Census Bureau, 2000)

The age distribution of owner-occupied householders in Block Group 2 resembles the Blacksburg distribution with a spike in the 45 to 54-age bracket (see Fig. 3.7). However, the age distribution of householders in rental units does not mimic the Blacksburg trend. Rather, the greatest percentage of renters is slightly older in the study area. This contradiction could be the result of a number of factors including increased pricing associated with rental houses, as opposed to, apartment units. However, it is again safe to say that Block Group 2 contains a very small portion of Blacksburg's young rental population (Less than 1% of renter householders between the ages of 15 and 24).

Age of Householder

	Block Group 2		Blacksburg	
	Total	Percent	Total	Percent
TENURE BY AGE OF HOUSEHOLDER				
Owner-occupied housing units	328	100	4,003	100
15 to 24 years	3	0.9	190	4.7
25 to 34 years	39	11.9	429	10.7
35 to 44 years	69	21	767	19.2
45 to 54 years	88	26.8	985	24.6
55 to 64 years	49	14.9	664	16.6
65 to 74 years	41	12.5	531	13.3
75 to 84 years	30	9.1	345	8.6
85 years and over	9	2.7	92	2.3
Renter-occupied housing units	106	100	9,159	100
15 to 24 years	32	30.2	5,439	59.4
25 to 34 years	45	42.5	2,254	24.6
35 to 44 years	12	11.3	741	8.1
45 to 54 years	9	8.5	373	4.1
55 to 64 years	2	1.9	144	1.6
65 to 74 years	2	1.9	86	0.9
75 to 84 years	3	2.8	88	1
85 years and over	1	0.9	34	0.4

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices H3, H4, H5, H6, H7, and H16.

Fig. 3.7. Age of householder based on the 2000 U.S. Census (see U.S. Census Bureau, 2000)

Finally, the housing characteristics for Block Group 2 are what we might expect. The majority of housing units are single-family homes largely constructed through the 1970's and 80's (see Fig. 3.8). This existing housing stock is largely composed of rural homes situated individually in the countryside, as opposed to, the type of subdivision development that is being constructed in the village.

Select Housing Characteristics

	Block Group 2		Blacksburg	
	Total	Percent	Total	Percent
Total housing units	451	100	13,635	100
UNITS IN STRUCTURE				
1-unit, detached	377	83.6	3,965	29.1
1-unit, attached	14	3.1	1,166	8.6
2 units	8	1.8	446	3.3
3 or 4 units	21	4.7	754	5.5
5 to 9 units	23	5.1	1,608	11.8
10 to 19 units	8	1.8	4,596	33.7
20 or more units	0	0	578	4.2
Specified owner-occupied units	325	100	3,337	100
VALUE				
Less than \$50,000	24	7.4	65	1.9
\$50,000 to \$99,999	45	13.8	525	15.7
\$100,000 to \$149,999	122	37.5	1,244	37.3
\$150,000 to \$199,999	97	29.8	758	22.7
\$200,000 to \$299,999	28	8.6	587	17.6
\$300,000 to \$499,999	9	2.8	142	4.3
\$500,000 to \$999,999	0	0	16	0.5
\$1,000,000 or more	0	0	0	0
Median (dollars)	137,300	(X)	144,000	(X)
YEAR STRUCTURE BUILT				
1999 to March 2000	15	3.3	317	2.3
1995 to 1998	7	1.6	1,085	8
1990 to 1994	32	7.1	1,124	8.2
1980 to 1989	87	19.3	2,886	21.2
1970 to 1979	122	27.1	4,398	32.3
1960 to 1969	72	16	1,840	13.5
1940 to 1959	63	14	1,402	10.3
1939 or earlier	53	11.8	583	4.3

Source: U.S. Census Bureau, Census 2000 Summary File 3
Matrices H1, H7, H40

Fig. 3.8. Housing characteristics based on the 2000 U.S. Census (see U.S. Census Bureau, 2000)

Compared with Blacksburg, the study context of Block Group 2 contains a much larger percentage of single-family homes and contains less than 1% of Blacksburg's total attached and multi-family units. The existing housing in Blacksburg also has a slightly higher median value than the homes in the block group. Therefore, these numbers demonstrate that the village is in direct contrast to the surrounding housing stock in terms of price, age and type. The mix of housing types and clustering homes within the subdivision is an outgrowth of the town (i.e. suburban sprawl) and not necessarily "native" to the area.

Overall, this analysis revealed that the surrounding area of Tom's Creek was largely comprised of owner-occupied, single-family homes prior to the village's development. Rural in character, the value of these homes did not exceed the value of homes within the town of Blacksburg. Furthermore, the population living within these homes is predominantly white and middle aged. Block Group 2 does not contain the diverse student population associated with the university. Virginia Tech's campus and the immediate housing in Blacksburg may be an oasis of diversity for the region, but this suburban fringe of the town is clearly not.

From a regional perspective, these combined numbers paint a picture of the Village at Tom's Creek as being a typical suburban subdivision constructed at the rural fringe of the town limits. The value, age, and mixed of housing within the village contrasts the existing housing stock in the area. However as argued at the start of this chapter, these more suburban characteristics combined with piece-meal adaptation of New Urban principles makes this site especially suitable to study if the selective use of neotraditional tenets is capable of combating the associated "placelessness" of suburban sprawl.

3.2 Research Approach

The purpose of this study is to identify and understand common experiences of a 'sense of place' from the perspective of individual residents living in a new urbanist community. Framed as a phenomenological study, this research asks; are there common threads apparent throughout the residential experiences of place that will allow us to develop a holistic understanding of a sense of place? From this foundation, the second stage of this research then asks; has the physical environment played a role in altering or enhancing those experiences?

Rejecting the possibility of objective, detached analysis, this research draws upon the philosophical underpinnings of Heidegger's existential phenomenology. The aim of an existential approach is "to determine what the experience means for the persons who have had the experience and are able to provide a comprehensive description of it" (Moustakas, 1994 p. 13). From these individual descriptions, meanings are derived on an individual basis and later analyzed for their unifying features. Interpretation is limited to only the acquired data.

As identified in the previous chapter, an existential-phenomenological approach follows four broad sets of procedures. These include: identifying the phenomenon, gathering descriptive accounts, identifying the underlying commonalities and patterns, and presenting the results (Seamon, 2000). However, the cyclical, inductive nature of the qualitative research still dominates the overall process. Thus, "the individual style of the researcher and the specific nature of the phenomenon are much more important for establishing the specific research procedures and tools of description" (Seamon 2000).

Again, the goal of this research is to identify which experiences the residents of Village at Tom's Creek feel contribute to the development of their sense of place and to interpret if spatial features contribute to these essential experiences. The goal is not to identify how I

understand or experience each neighborhood, as is common in a first-person or hermeneutic phenomenological approaches. Nor is the goal is develop a generalized theory regarding the nature of the phenomenon. Therefore, the specific set of procedures followed throughout this investigation of place is discussed sequentially in the following sections.

3.3 Participant Selection

A central assumption of an existential-phenomenological approach centers on the idea “that there is a certain equivalence of meaning for the respondents whose experience the researcher’s probes” (Seamon 2000 p.166). As a result, participants are required to have experienced the object of study and are able to clearly express themselves. Procedurally, these requirements translate into a non-random sample whereas; participants are intentionally selected for their experiences and ability to articulate the subject matter (Seamon 2000).

In the context of this research, a criterion sampling method was employed in the selection of participants. Unlike random sampling used to elicit generalized information, criterion-sampling searches out participants believed to have experienced the studied phenomenon (Miles and Huberman 1994 in Creswell 1998, pp.119). Specifically, initial contact was made with the developers of the neighborhood. This allowed me to gain access into the neighborhood association and one layer of the community’s social network.

The developers suggested initial participants they thought would be willing to talk with me. From there, further participants were selected in a ‘snowball’ fashion, where the selection of individual neighbors was guided by those already interviewed. By asking: “Who else should I talk to?” a snowball sample is often used to identify information-rich informants or critical cases (Patton, 1990). This form of opportunistic sampling allowed the research to take advantage of information that emerged in the field, as well as provided for a systematic process of data collection.

In the end, twelve individuals from ten households were interviewed over the spring of 2006. Nine additional participants from seven households were interviewed for the second phase of this research. Of the 21 total participants 14 were women. Eleven of the participants (52%) could be classified as members of a young family with children still living at home. Two of the participants were single. These numbers were representative of a 2004 resident directory that listed 45 percent of the residents as families with young children still living at home and only 2 percent as single.

Five of the remaining participants were a retired and three were family members whose children no longer live at home. All of the participants were Caucasian, which from my sense of the neighborhood reflected the demographic composition.¹⁰ Two of the participants were members of an extended family whereas; the parents, children and grandparents lived in two separate households both within the neighborhood. Any

¹⁰ Some participants noted that there was one Asian family living in the neighborhood however, they could not be reached for an interview.

diversity in the neighborhood was limited to age and various life experiences stemming from different hometowns. In fact, the majority of participants were not originally from the region rather, they had relocated to the area for various work related issues.

Aside from these demographic issues, participant distribution was fairly equal throughout all areas of the development. Forty-seven percent of the participants lived in single-family households classified as “hamlets.” Twenty- three percent lived in “cottages” and the remaining twenty-nine percent owned attached units. These percentages are representative of the actual distribution of housing types within the neighborhood (40% hamlet, 28% cottages, and 30% attached).

3.4 Collection of Descriptive Accounts

Positivistic research clearly defines an ‘expert-centered’ role for the researcher throughout the process of data collection. Similarly, first-person and hermeneutic-phenomenological approaches place emphasis on the researcher’s experiences of the given subject matter while assuming an objective stance. As a result of these privileged positions, the researcher traditionally dominates the process of data collection.

In direct contrast to these approaches, the role of the researcher in this phase of the study was conceptualized within a participatory framework. By employing open-ended interviews and by denying my own knowledge of the subject matter throughout the interview, this research attempted to share the responsibility of data collection with the participants. After all, the individual participant is the expert of his or her own internal experience, which is the focus of this investigation. Therefore, the interview was conceptualized in this project as simply a guided conversation that allowed each participant to reflect on which experiences they felt were important to their understanding of place.

Typical of an existential phenomenological approach, descriptive accounts of neighborhood experiences were acquired through in-depth interviews with the selected participants (Moustakas, 1994). Specifically, the literature suggested that eight to twelve interviews were appropriate for a phenomenological study (Creswell 1998). For this study, 21 individuals were interviewed throughout the two phases of the research process. However, data collection was not concluded based on these arbitrary numbers rather, I stopped interviewing participants when I felt the data being collected had reached a level of “saturation.”¹¹

3.4.1 Interview Protocol Design

An interview protocol was followed during the guided conversations to provide a level of consistency throughout the process of data collection. The aim of the research protocol is to help participants reconstruct individual interpretations, experiences, and understandings of their lived-experience in the defined context (Seidman, 1998). The

¹¹ Saturation is qualitative research concept that refers to a point in data collection when the data offer no new direction, insights or questions and therefore there is no need for further sampling (Morse & Richards, 2002).

shared, descriptive accounts generated by these conversations are the participant's individual interpretations of place related to the residential context of the study.

Rubin and Rubin (1995) suggest three levels of questions to achieve a desirable level of depth during an interview. First, main questions are developed prior to the interview to guide the conversation in an open-ended format. The goal of these questions is to encourage the participant to express individual opinions and experiences related to the subject matter. Second, potential "probes" were also outlined in the interview protocol to generate further discussion regarding the main topics. Finally, "follow-up" questions are developed during the interview based on the interviewee's responses. The aim of this type of question is to pursue any themes that are discovered and to explore their implications.

3.4.2 Phase One Interview Protocol

The following section presents the actual interview protocol used throughout the first phase of the research. Each main question was asked of all participants in an open-ended format. However, the participants controlled the pace and direction of the conversation. As a result, the participants were forced into the role of the expert, revealing experiences, interpretations, and understandings of their local knowledge of the neighborhood. Follow-ups and probes varied with individual responses.

1. How long have you lived here?
2. What made you decide to purchase a home here?
3. Can you tell me what you feel or perceive are the boundaries or borders of your neighborhood?
 - Can you draw these boundaries on this map?
 - Are these boundaries related to any physical features?
 - What is this neighborhood called? Are there other local names for this neighborhood other than the one designated by the town or the builder?
4. How would you describe this neighborhood to a friend who has never been here?
 - What are all the important physical features (or characteristics) of this neighborhood that would help them understand the place where you live?
5. What do you like most about this neighborhood?
 - If reply is not about a physical feature ask: In terms of how this neighborhood was built, what features are most important to you? And why?
6. What do you like least about this neighborhood?
 - If reply is not about a physical feature ask: What is least appealing to you about how the neighborhood was constructed? And why?
7. Have there been pleasures or difficulties living here that you did not anticipate when you first purchased your home?
 - Has the neighborhood changed over the time you have lived here?
8. What is it like to live in this neighborhood on a daily basis?
 - Is this neighborhood important to your daily activities? How?
9. Other than inside your home, where is your favorite place in the neighborhood and why?

- How much time do you spend there?
10. Can you describe specific events or situations that are unique to your neighborhood?
- What makes these experiences stand out?
 - Where did this event take place and why there?
 - What are the important qualities of the experience that you just described?
 - Are there physical characteristics of this area that facilitate it happening there?
11. Are there other important aspects of living in your neighborhood that you believe could happen in any neighborhood?
- What makes this stand out?
 - What are the important qualities of the experience that you just described?
 - Are there specific physical characteristics of this neighborhood that facilitate what you have just described?
12. Are there any other things that we have not talked about up to this point, which, you think contributed to the understanding of your neighborhood?
- What makes this stand out?
 - What physical factors in the design of this neighborhood do you believe allow such an experience to happen? or:
 - Are there physical characteristics you associate with these experiences?
13. Do you walk or take advantage of the sidewalks and trails in this neighborhood on a regular basis?
- Have these experiences contributed to or changed your understanding of this neighborhood? If so, how?
14. Has the design of the neighborhood influenced your relationship with your neighbors in any way?
- If so, which physical features do you believe contributed to this?
15. Do you feel any connection with the natural amenities or open space in this neighborhood? How would you describe this connection?
- Is this connection based on any experiences you have had in this open space?
16. When you describe this neighborhood to friends, is the housing type a significant feature you might talk about in your description?
- What important features about the housing do you include in your description?
17. Do you believe the size of your lot either positively or negatively affects your relationship with your neighbors?
18. Do you believe the streets in your neighborhood are any different then the streets found in other neighborhoods?
- If so, which physical features make them different?
 - Do these features lead to a certain experience in this neighborhood when you travel either by foot or car?
19. Have your descriptions included everything you feel that is vital for me to understand this neighborhood?
20. Having now talk about your neighborhood, which experiences and/or activities do you believe are the most important in making this place feel like a unique neighborhood, as opposed to just another subdivision?
- What physical factors in the design of this neighborhood do you believe allow such experiences to happen?

21. Assuming that there were no outside pressures, could you grow old in this home, as was more typical of previous generations?

22. One last question, when you initially moved in this place was a few houses, empty lots, and a work in progress. What were those one or two big contributing factors that made it finally start feeling like a place, like home, like a neighborhood?

3.4.3 Phase Two Interview Protocol

Additional questions were added to the interview protocol after the descriptive accounts collected during the first phase were analyzed for common themes. Limited to the second phase of this research, these questions attempted to further interpret the role the physical environment played in the collective residential experiences of place. A number of questions were added to evaluate themes that had emerged in the field and a number of questions were revised for clarification. In addition, a few of questions were deleted based on the limited quality of conversation they generated through the first phase. The revised protocol follows with the additional questions highlighted in a bold font.

1. How long have you lived here?

2. What made you decide to purchase a home here?

- **Did you consider houses in other neighborhoods? If so, what did you like or dislike about those neighborhoods?**

2a. It seems like this development was marketed as a neighborhood that is somehow different from all the other newer developments in Blacksburg. Did you believe this neighborhood was different? How so?

- **What design features seemed to reinforce these assumptions?**

2b. How do the features you just mentioned contribute to the environment (i.e. why do you like them?)?

3. Can you tell me what you feel or perceive are the boundaries or borders of your neighborhood?

- Can you draw these boundaries on this map?
- Are these boundaries related to any physical features?
- What is this neighborhood called? Are there other local names for this neighborhood other than the one designated by the town or the builder?

4. How would you describe this neighborhood to a friend who has never been here?

- What are all the important physical features (or characteristics) of this neighborhood that would help them understand the place where you live?

5. What do you like most about this neighborhood?

- If reply is not about a physical feature ask: In terms of how this neighborhood was built, what features are most important to you? And why?

6. What do you like least about this neighborhood?

- If reply is not about a physical feature ask: What is least appealing to you about how the neighborhood was constructed? And why?

~~7. Have there been pleasures or difficulties living here that you did not anticipate when you first purchased your home?~~

- ~~• Has the neighborhood changed over the time you have lived here?~~

7a. Having now lived here for (x) number of years, how satisfied are you with the neighborhood?

8. What is it like to live in this neighborhood on a daily basis?

- Is this neighborhood important to your daily activities? How?

9. Other than inside your home, where is your favorite place in the neighborhood and why?

- How much time do you spend there?

10. Can you describe specific events or situations that are unique to your neighborhood?

- What makes these experiences stand out?
- Where did this event take place and why there?
- What are the important qualities of the experience that you just described?
- Are there physical characteristics of this area that facilitate it happening there?

~~11. Are there other important aspects of living in your neighborhood that you believe could happen in any neighborhood?~~

11a. Have the neighborhood wide gatherings such as the Fourth of July parade influenced your understanding or thoughts about the community? How so?

11b. Are there public gathering spaces in the neighborhood that allow for such events?

11c. Could the design of these public spaces be improved to encourage people to gather and socialize there?

11d. If there aren't, what types of place would be good for that type of gathering?

- What would the space have to be like in order to encourage people to come and interact?

12a. Do you spend more time in the front or backyard?

- Is it a pleasant place to be?
- What makes it a pleasant place? Is it the trees and shrubs? Are there spatial attributes? Is it contained?
- How does it relate to other public and private spaces?

12b. When in this space do you tend to have much interaction with your neighbors and/or other residents in the neighborhood?

12c. Where do you tend to have the most contact with your neighbors? How often/ with whom?

12b. What do you believe allows or facilitates the social interaction you have had with your more immediate neighbors? How so?

12d. Does the design of the front and/or backyard seem to contribute to such interaction?

- What are the attributes?

13. Do you walk or take advantage of the sidewalks and trails in this neighborhood on a regular basis?

- Have these experiences contributed to or changed your understanding of this neighborhood? If so, how?

14. Has the design of the neighborhood influenced your relationship with your neighbors in any way?

- If so, which physical features do you believe contributed to this?

15. Do you feel any connection with the natural amenities or open space in this neighborhood? How would you describe this connection?

- Is this connection based on any experiences you have had in this open space?

16. When you describe this neighborhood to friends, is the housing type a significant feature you might talk about in your description?

- What important features about the housing do you include in your description?

17. Do you believe the size of your lot either positively or negatively affects your relationship with your neighbors?

- **(If positive) What are the attributes of this place that make the density seem more delightful?**

18. Do you believe the streets in your neighborhood are any different then the streets found in other neighborhoods?

- If so, which physical features make them different?
- Do these features lead to a certain experience in this neighborhood when you travel either by foot or car?

~~19. Have your descriptions included everything you feel that is vital for me to understand this neighborhood?~~

19a. When talking to others are you more likely to identify yourself as a member of this neighborhood, as a resident of Blacksburg or from being from a previous hometown?

19b. So, is this home for you now, or is home still somewhere else?

19c. Having lived here now for some time, do you have strong feelings about this neighborhood?

- What do you feel particularly tied to?
- How attached do you feel to this neighborhood?

19d. Do you have strong connections and friendships with members in this neighborhood?

20. Does this neighborhood feel like a unique place or perhaps just another subdivision? Which experiences and/or activities do you believe are the most important in making this neighborhood feel like a unique place, as opposed to just another subdivision?

- **What physical factors in the design of this neighborhood do you believe allow such experiences to happen?**

~~21. Assuming that there were no outside pressures, could you grow old in this home, as was more typical of previous generations?~~

21a. How willing would you now be to leave or move from this neighborhood? What would a neighborhood have to be like in order for you to consider moving to another house in Blacksburg?

22. One last question, when you initially moved in this place was a few houses, empty lots and a work in progress. What were those one or two big contributors that made it finally start feeling like a place, like home, like a neighborhood?

3.5 Interpretation

The interpretation of the descriptive accounts gathered in the previous phase of data collection is an attempt to portray the threads of coherence among the individual experiences of the multiple participants. Each interview was recorded and later transcribed by a professional service. All names used in the descriptions throughout this study are randomly generated pseudonyms in order to protect the identity of the participants (See Appendix A and Appendix B for IRB approval).

Each transcribed conversation was then imported into the qualitative data analysis application, NUD*IST 4.¹² The NUD*IST software package includes tools that mechanize the tasks of ordering and archiving text passages. The central functions of the program allow the researcher to more efficiently code and organize the transcribed conversations in a fashion determined by the selected qualitative approach.

Guided by Moustakas's (1994) explanation of the Van-Kaam method of phenomenological data analysis, the process of interpretation began with multiple readings of all transcriptions. At this point, there was no distinction made between interviews collected during the first and second phase of the research. Each statement within the transcriptions was considered and coded with respect to its significance in the description of an individual's experience of the neighborhood. This phase of "horizontalizing,"¹³ resulted in a list of coded text passages or "free nodes"¹⁴ that represented every expression relevant to the object of study. Each statement was conceptualized as containing equal value in the eventual understanding of the phenomenon.

The subsequent phase of phenomenological interpretation required the elimination of coded passages that were vague and the combination of repetitive descriptive accounts. Every expression was tested against two criteria; does it contain a necessary experience in understanding the phenomena? Can it be abstracted and labeled? The remaining coded passages that met these two criteria, represented "invariant constituents" of the phenomenon and defined as unique qualities of the phenomenon that stood out during the analysis (Moustakas 1994). If a passage did not meet either of these criteria, it remained a 'free node' and was not considered in the further investigation.

Throughout this phase, similar invariant constituents were coded as 'meaning units' under the same heading. Each 'meaning unit' thus described how a group of individuals experienced or understood the phenomenon in a similar manner. These 'meaning units' were comprised of unique text passages, equally weighted in the description of the phenomenon.

The third phase of analysis grouped the previously coded meaning units into larger existential headings or "clustered themes." Interpretations and understandings of the neighborhood were removed in favor of actual descriptive accounts of specific experiences simply because the phenomenological investigation was concerned with actual experiences of the object of study as opposed to, conceptions of the experience. Labeled 'imaginative variation' (Moustakas, 1994), this third phase of phenomenological

¹² NUD*IST is a computer aided qualitative analysis application developed by QRS (Qualitative Research and Solutions).

¹³ 'Horizontalizing' refers to the process of delineating the invariant constituents of the phenomenon (Moustakas 1994).

¹⁴ A free node is simply a term used by the software package to delineate the initial coding of the text passages. From these free nodes, themes were developed after further analysis.

interpretation explored the underlying structures and relationships within the coded descriptive accounts.

Finally, the structural meanings and composite experiences of the clustered themes were interpreted as the essence of a sense of place for the selected participants within the given context. From a phenomenological perspective, the essence of a phenomenon is defined as the unified descriptions of an experience, which are interpreted as threads of coherence among the multiple descriptive accounts (Moustakas, 1994). These descriptions are interpreted as essential if the object of study would not exist in the same capacity without the stated elements. The results (presented in the following chapter) can be conceptualized as a synthesized, composite description of the phenomena as experienced throughout the group of participants (Moustakas 1994, Creswell 1998).

This linear process of interpretation is presented here as a general guideline employed throughout the process of data analysis. However, the actual interpretation of the descriptive accounts was a cyclical progression in which new findings encouraged further review and refinement of earlier stages. Therefore, the nature of phenomenological interpretation is better conceptualized as a continual process of reading, categorizing, and interpreting, which in the end, revealed common themes throughout the multiple interviews.

This inductive process of identifying collective themes requires that the results are presented as a collective understanding of an experience, as opposed to, a myriad of individual interpretations. In short, phenomenology studies the “parts in order to describe the whole” (Seamon, 1979). The analysis is not an attempt to prioritize individual voices but rather, to portray the threads of coherence among the individual experiences of the multiple participants.

3.6 Standards of Verification

There are multiple criteria on which we can evaluate the reliability and validity of qualitative research given the breadth of available philosophical paradigms. Since phenomenology is situated within a constructivist/ interpretative paradigm my criteria and terminology will draw heavily upon Lincoln and Guba’s established vocabulary and rejection of positivistic conventions of evaluation (Lincoln & Guba, 1985).

3.6.1 Credibility (Internal Validity)

Within a positivistic framework, internal validity traditionally questions if the independent variable lead to the changes in the dependent variable (Meier & Brudney, 2002). Because qualitative researchers simply are not working with variables in the traditional sense, Lincoln and Guba (1985) have argued that conceptions of “credibility” are more consistent with the philosophical assumption of a constructivist/ interpretative paradigm. Furthermore, strategies such as member checks, prolonged engagement in the field and peer debriefing are means of establishing greater credibility. Given these strategies, Anfara and his colleagues suggest that the real problem with establishing qualitative “credibility” is that often the qualitative

researchers do not reveal the inner workings of all aspects of the research process (Anfara, Brown, & Mangione, 2002).

In response to Anfara and his colleagues' call for increased transparency in the inner workings of qualitative analysis and interpretation, the results chapter presents a "code map" that details how each theme "emerged" throughout the analysis. The purpose of this map is to present the reader with a consolidated picture of the process of bring order, structure and interpretation to the collected data (Anfara et al., 2002). The map, progressing from the bottom to the top, reveals the iterations of coding and recoding as the raw data is processed. Conceptually, this consolidated picture allows the audience to question the researchers interpretations by succinctly revealing the assumptions that may have been made in each level of coding.

3.6.2 Transferability (External Validity)

Traditionally, phenomenological research places little emphasis on verification beyond the perspectives of the researcher (J. Creswell, 1998). Specifically, existential phenomenology does not claim that the findings themselves are 'generalizeable' to contexts other than the context that the study was conducted. As a result, authors such as Lincoln and Guba (1985) have favored the idea of "transferability" whereas; the reader is able to make decisions if the findings are applicable to other settings.

The specific strategy employed in this research to allow the reader to gauge the transferability of the findings is referred to as "thick description" in qualitative circles. Originally elaborated by Clifford Geertz (1973), the goal of thick description is to provide enough contextual information such that, the audience is able to develop their own decisions if the findings are transferable to other context which they are familiar (J. Creswell, 1998). This verification technique provides a basis for the external audit of the relevance of the phenomenological interpretations. As such, the findings presented in the following chapters are revealed within the context of the actual descriptive accounts.

3.6.3 Dependability (Reliability)

Reliability has traditionally required that the same results would be obtained if the study was replicated (Morse & Richards, 2002). Because qualitative research is not replicable in the traditional positivistic sense of the concept, Anfara and his colleagues have recommend an "analytic openness" in the discussion of the results that would allow the reader to refute the findings (Anfara et al., 2002).

Traditionally, phenomenological researchers include their reflections on their findings in the text after they have drawn some conclusions i.e. (Chaffin, 1989; Million, 1992; Nogue' i Font, 1993; Seamon, 1979, 2000) Therefore, the analysis section not only describes my findings but, more importantly, discusses how I arrived at them. This reflective procedure allows the audience to critique the overall "reasonableness" of the proposed argument by providing "analytic openness" suggested by Anfara and his colleagues.

Finally, Lincoln and Guba (1985) present triangulation as means of testing for consistency among the results. Although, Patton discusses four different methods of triangulation in qualitative research, including a mixed methods approach, triangulation of data sources seems most appropriate to this study. This process involves comparing and cross-checking the consistency of information at different times and from different sources (Patton, 2002). Within my framework, the different sources would equate to the different phases of data collection. The point of this process is not simply to establish that there is consistency in the findings. Rather, the final chapter discusses when and why differences across the descriptive accounts appear in the analysis.

CHAPTER 4: ANALYSIS AND RESULTS

Guided by the Van-Kaam approach, the analysis of the data can be generally defined as an inductive investigation of the participants' descriptions. Specifically, the analysis is an attempt to interpret the essential experiences of the object of study. The object of study throughout the first phase of this analysis was the residential experiences of a sense of place. From a phenomenological perspective, sense of place was generally conceptualized as the experiences that allowed mere space to transform into place (See Chapter 2 for a further discussion on sense of place).

Throughout the second phase of analysis, the object of study evolved to focus on the environmental attributes that contributed to the experiences identified throughout the previous phase. Before proceeding to each phase of analysis, it is first necessary to discuss how the participants conceptually define their neighborhood because their understandings of place are inherently related with their spatial perception of the residential environment.

4.1 The Neighborhoods within the Village

At one level, natural and man-made environmental features reinforce the legal boundaries of the Village at Tom's Creek. The highway bypass and the rural collector roads define northern and eastern limits of the development, while a system of hedgerows and farm fields define the southern and eastern boundaries. However, the participants' spatial concepts of the neighborhood and cognitive boundaries within the Village at Tom's Creek were largely defined by the established social relationships residents have with other neighbors.

Lily: Oh for me it's much smaller. I consider the neighborhood that we live in... just where we are; up here. I would just consider this area and this little area as my neighborhood.

Kyle: So pretty much Village Way South...

Lily: Right and Poplar Ridge. Yeah. I don't think I would encompass any of this because mainly because I don't know anyone down here; I know a few people but I don't...I think my boundaries would just be the small area that I live in and the area of the people that I know. I don't know about you...so yours might be different.

Deanne: Yeah. I mean I guess I mean...well let me start out I would say that we know some people down here so I kind of feel we're all a community.

Kyle: So maybe a larger...

Deanne: Um huh.

When asked to define the boundaries of what "felt" like their neighborhood, two general sets of interpretations emerged among the participants of the study. Nearly half of the participants responded that the "entire neighborhood" represented by the legal boundaries felt like their neighborhood. All of these residents had recently moved into the neighborhood (1 to 3 years of residency) and contributed their feelings to either experiences of walking throughout the development or "weak" social bonds to other

residents. That is, organized neighborhood-wide social events and simply walking allowed this group of residents to feel like they at least politely knew people throughout the development and therefore they tended to define their neighborhood as encompassing the legal boundaries. This set of interpretations also tended to be held by participants living in attached housing towards the center of the development.

Kyle: Can you tell me what you feel or perceive are the boundaries and borders of your neighborhood?

Meredith: Oh, that is an interesting question. Well, I know where the boundaries of the Village are because it is still under construction and it is pretty well defined at the two entrances and there is just a certain number of streets, and it is pretty much surrounded by cow pastures and the highway; it is not really contiguous too much.

Kyle: Could you kind of draw or circle the areas that would feel more like your immediate neighborhood rather than kind of geographic boundaries that the town has given, or if I am leading too much, does the entire village does feel like one continuous neighborhood?

Meredith: Well, it is still under construction, so it is like evolving as we speak. So when I first moved in it was the townhouses and this area up here, which was the first part that was built. Now, these homes are pretty much all there too and so are these but they are a little bit farther out. But there is a walking path, or bike path, that goes down here, so that when I go for walks, I go around the whole village in fact. I go around the roads that aren't even paved yet, so that is kind of one identifier that I have of what constitutes the neighborhood is when I go out for a walk around the neighborhood; I walk around the whole perimeter.

The other half of the participants tended to identify smaller areas (sub-neighborhoods) within the legal boundaries of the village, as “feeling” like their neighborhood. All of these residents contributed these smaller boundaries to stronger social relationships with more localized individuals they interacted with on a daily basis. This group could be further classified into two subcategories that roughly corresponded to the phases of construction (See Fig. 4.1 and Fig. 4.2).

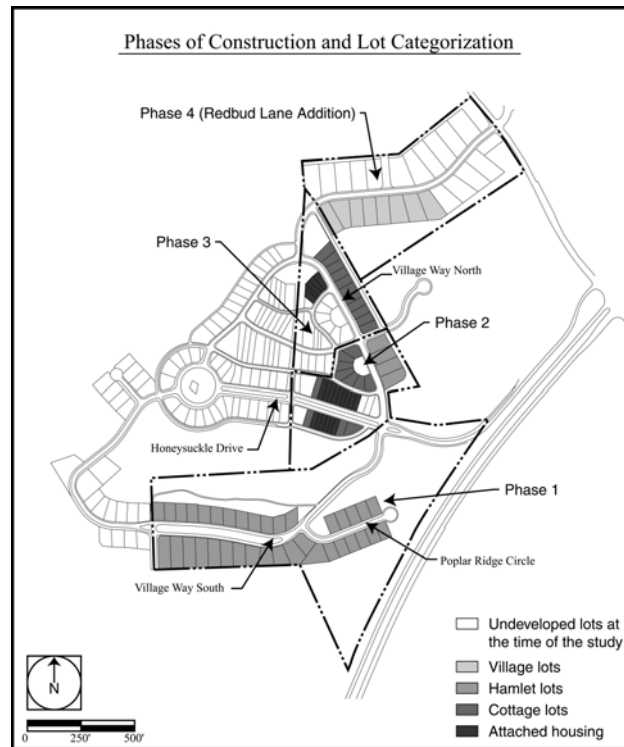


Fig. 4.1. Phases of the development.
Drawn by the author based on site survey.

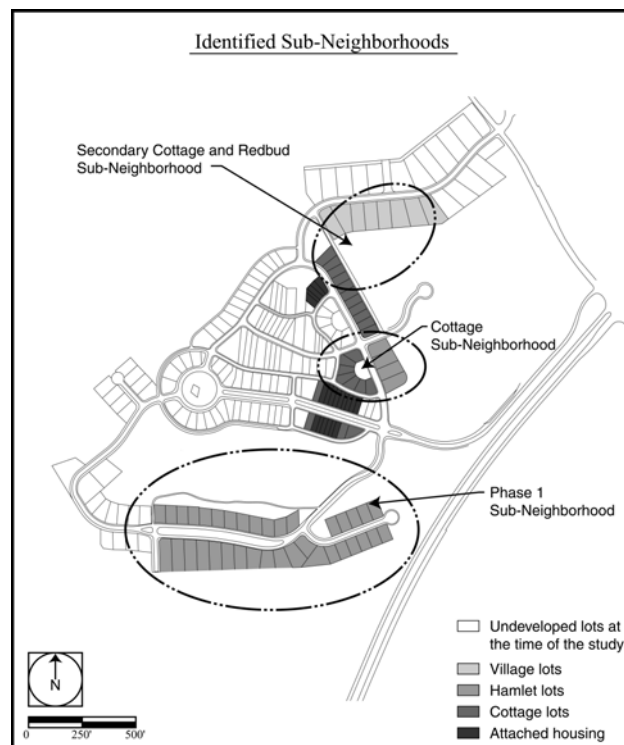


Fig. 4.2 Sub-neighborhoods as identified by the participants.
Drawn by the author based on interview conversations.

All participants living along Village Way South and Popular Ridge Circle identified the first phase of the development as feeling like their “neighborhood.” These residents have generally lived in the neighborhood for the longest period of time, three to five years, and relate this first identifiable sub-neighborhood to their “social circle of friends” or the people they are more likely to interact with on a daily basis. For young families, these boundaries are also related to the friendships their children have developed in the neighborhood. In addition, these boundaries seem to be reinforced by the natural division between the single family housing of phase one, situated on top of the ridge and the remaining sections of the neighborhood situated across the lower elevations.

Kyle: Does it feel like your neighborhood would extend all the way to those borders?

Courtney: Uh, it's...to a certain degree you feel like that street we live on, that oval, that's Village Way South.

Kyle: You can draw on this map...

Courtney: This would be like one set of boundaries, because most of the people who moved in here I knew them when they moved in. We would go meet these people, and then this would be like a secondary set, so you might make the circle go kind of like this and then thirdly it would be kind of all these people down here where I know people, but only because I might know these people. I know one family that lives here and one that lives here and I knew one that lives there because I knew them before. Then now there is this section coming on so it is kind of...this is really extended in lots. We all live in the Village and go to Christmas parties together; these are the people that I really feel like, these people and these people are part of, you know, my neighborhood where I...

Kyle: Your immediate neighbors?

Courtney: Yeah, where I, my kids can go to their kid's house. You know they can just run down and go play. You don't need to call ahead and make a play date or anything.

Kyle: So you think these borders are kind of defined by just proximity or you know these people better so...

Courtney: Well, you know this large hill makes a difference because that's like a, you know, when you have, when we moved in my kids were 4, you know almost 3, well I know 4 and 2, so as they grew older you know their safe range got bigger. It used to be you can't go past this here; don't go to the end of this circle or you can't go past this, the path here, because a lot of cars come through there, and now they are older and they can go to this house and if my 4 year old wants to go to this house, then I walk her up there. But if she goes to a house down here or this house, I watch her; I stay on the porch. I think it is a physical boundary defined by where I let the children go.

The second group of participants, who also identified a sub-neighborhood, lived in the most recent portions of the development for the shortest period of time (1 year to 18 months). They also lived in single-family homes, but they tended to be on smaller lots. Again, this group related these smaller areas along Village Way North and Redbud Road to stronger social ties and the boundaries of their children. This group also related these boundaries to outdoor areas closest to their house that they were more likely to use and shorter walking loops they might use on a daily basis.

Kyle: And having lived there now for 8 months, what feels like the neighborhood, does it include everything or are there smaller sections?

Becky: Um, well, for hmm, as far as the physical boundaries, that's quite easy as you've got the big Tom's Creek running down here and I think there's one, yeah there's this house over here, and the fraternity house over here that are quite visibly distinct. There is less mingling, we find, at least my family does, with the old part of the neighborhood, as they refer to it, but even at that, there's plenty of people that we know down here and that we recognize and even when we were walking around there and didn't know anybody, people would say hello and we've created some friendships with the families right in this corner that have also got young children so I guess if I was going to talk about boundaries for my children, I would say you know all you can do is make the loop down the alleyway and around the street and that's your space. I don't know if I answered your question.

Kyle: Laughter. And this is pretty important because a lot of times those boundaries do reflect children, so maybe kind of the loop around the alley and back around the front?

Becky: Yep, and they can get up here; we have a couple of the families, we haven't done it yet, but have cut paths through the grass; this is all open field back here but they've cut paths to this person's house with the trampoline or this person's house because they know there are other kids there so we will say well you can get back there and that's as far as you go. My kids are younger so I guess the boundary will probably change, as they get older.

Based on these results, we can generally conclude that the participant's cognitive boundaries tended to be defined by social relationships and interaction with the other residents. Specifically, within the Village at Tom's Creek, weaker social bonds tended to generate a larger and perhaps more generic spatial conceptions of the neighborhood. These larger spatial interpretations of the neighborhood were also more likely to be held by participants living in attached housing located towards the center of the development. Whereas, participants with stronger personal relationships tended to identify smaller spatial areas or sub-neighborhoods located closer to their homes as the boundaries of their neighborhood.

These findings seem to suggest a relationship between housing type or location and spatial interpretations, which is analyzed closer in the following sections. However, length of residency did not seem to be a factor in spatial cognition since newer residents were equally likely to identify either the entire neighborhood or more localized boundaries.

4.2 Towards Place- Phase 1 Analysis and Results

The first phase of the analysis was limited to data collected in response to questions twenty and twenty-two. These two questions directly asked the participant to identify which experiences helped them make that transition from mere space to place. It was assumed that the participant's understanding of their sense of place lies somewhat hidden in their average and everyday interpretations of their life-worlds and the concept is somewhat abstract. Therefore, the questions were worded in such a way to make the concept as clear as possible:

20a. Does this neighborhood feel like a unique place, or perhaps just another subdivision?

20. Having now talked about your neighborhood, which experiences and/or activities do you believe are the most important in making this place feel like a unique neighborhood, as opposed to just another subdivision?

What physical factors in the design of this neighborhood do you believe allow such experiences to happen?

22. One last question, when you initially moved in this place was a few houses, empty lots and a work in progress. What were those one or two big contributors that made it finally start feeling like a place, like home, like a neighborhood?

All participants reported that the Village at Tom's Creek did in fact feel like a unique place. However, there was variation among the experiences the participants contributed to these spatial interpretations. Generally, participants that identified smaller spatial boundaries or sub-neighborhoods contributed their interpretations of the environment to experiences of social interaction. Whereas, participants who interpreted more encompassing boundaries and lived in attached housing contributed their interpretations to visual and aesthetic cues. These results are discussed in the following three sections.

4.2.1 Experiences contributing to the Sense of Place for Participants of the Phase One Sub-Neighborhood

Phase one of the Village at Tom's Creek consists of 36 single-family homes situated on "hamlet" size lots. Constructed along a ridge within the development, this sub-neighborhood is physically separated from the remaining housing by the riparian corridor and the associated open space running through the development. Participants living within this section ranged from young families to retired couples. These participants also lived within the development for the longest period of time, averaging a little over four years of residency.

When asked which experiences contributed to making their neighborhood feel like a unique place, social interaction emerged as the essential theme shared among all participants living within the first phase of the development. These essential experiences with other neighbors could be further divided into two categories.

First, social interaction in the form of unplanned, informal contact with neighbors contributed to the participant's sense of place in that it reinforced their conceptions of the neighborhood as a community. That is, in the phase one sub-neighborhood, participants reported that experiences of seeing other neighbors "out front" and having the opportunity to interact with each other contributed to making the development feel like a neighborhood, which for these residents had an underlying theme of community.

Kyle: And in following up...I am kind of getting the sense too that you guys feel like this is...the Village itself is pretty unique; it feels like a unique place in Blacksburg, right, and so what would be those factors that distinguish the Village from any other subdivision around Blacksburg? What's the...if I am a designer, I am saying what did they do right that really contributes to this feeling like a unique place and not just another Christiansburg subdivision or the golf course or something else; what is it here?

Derrick: Well, uh, I think the sense of the neighborhood; particularly people our age I think. This goes back to the kind of place that we lived when we were little kids. This is where we were born in a Cleveland suburb and I was born in Canton, Ohio on a street that is very similar, front porches

and front yards and neighbors reacting back and forth to each other, and the fact that we have got a good developer, a good homeowners, a lot of planning, uh...

Kyle: So, part of that is how it was designed, in that proximity, homes close together, big front porches, people out in the front, but the other big part of that is just the people themselves, all this interaction and all this...

Florence: Well, did you tell him what happened because of your injury?

Derrick: Yes...somebody gets sick and the meals come pouring in... and that would have never happened at the Country Club. I was saying that one of the things that I thought that was so different, not just the proximity, but the fact that there was no golf course or swimming pool or tennis courts; that people just lived here; they didn't live here for the fact that they could go out their back door and run to the golf course, so it has to have something special about it...

Kyle: What do you think contributed to that feeling of a neighborhood, what...

Florence: Well, out at the Club and we lived there 12 years, the lots were larger and so you had, so people were different.... So, that was a difference; you didn't see neighbors too often.

The second subcategory of social interaction was organized group interaction in the context of planned social gatherings. This theme also emerged as the essential experience these residents felt contributed to their sense of place. Like the experiences of informal daily contact with neighbors, the experiences of these larger group gatherings reinforced the interrelated concepts of neighborhood and community.

Kyle: Now having talked about your neighborhood, what experiences or activities do you believe are most important to making this place feel like a unique neighborhood as opposed to just another subdivision?

Steven: Well, it seems to be conducive to a lot of different family types because of the diversity of housing types we have. We have quite a diverse group from empty nesters, retirees to young couples with no kids and single people. The potlucks that we have, and we have had quite a few of them at my house, I think are a real contributor, but that can happen in any neighborhood really, and I have wanted to do it as much as anything to help create a sense of neighborhood, so it has not all been just to have a potluck. I thought it was a good idea to get to have the neighbors to get together and have a common experience. We also have a July 4 kids parade that one of the other neighbors suggested, and that has been a, I think that is probably unique to our neighborhood, and that's been a really cool experience. We have a big potluck afterwards.

To summarize, participants living within single-family homes of phase one generally defined tighter spatial boundaries as feeling like their neighborhood. For these participants, experiences of social interaction were interpreted as essential experiences facilitating the transition of mere space into place. These experiences of informal and group interaction are interpreted as essential because they were found to be common among all of these participants. Specifically, informal contact and group gatherings seemed to reinforce concepts of place, neighborhood, and community.

For this group of residents, all of these concepts are interrelated and difficult to distinguish. However, at this point, I am comfortable saying that social interaction does seem to be the essential experience of place for these participants within the village because it is impossible to imagine the later concepts of community and neighborhood

without the foundational experience of interaction. Again, this is the litmus test for phenomenological research.

This conception of a sense of place also mirrors the sense of place description suggested by the existential model. Specifically, this finding suggests that for this group of participants, social interaction is primarily responsible in explaining how individual residents construct a sense of place (see Jackson, 1994; Relph, 1976; Tuan, 1974, 1977, 1980). This conception of the process contends that unknown space acquires meaning through the daily routines of the participants interacting with other neighbors. However, this research is not concerned with what that meaning may be rather, is only focused on identifying those experiences and those aspects of the physical environment that facilitate it.

4.2.2 Experiences contributing to the Sense of Place for Participants within the Cottage Sub-Neighborhoods

Additional sub-neighborhoods identified within the village were found within single-family portions of phases two through four of the development. These two additional single-family sub-neighborhoods were primarily composed of “cottage” lots constructed at a higher density and located on smaller parcels as compared to the phase one sub-neighborhood. Attached housing is also disbursed throughout these latter phases of the development but these units were not identified as belonging to the sub-neighborhoods (see Fig. 4.2).

Participants living within the cottage units ranged from young families to older working couples but no retirees. Due to the timing of construction, these participants lived within the development for a shorter period of time as compared to participants living in the first phase. Residency within the cottage single-family houses averaged a little over one and a half years.

When asked which experiences contributed to making their neighborhood feel like a unique place, social interaction again emerged as the essential theme shared among all participants living within the cottages. Similar to the results of the phase one sub-neighborhood, participants within the cottage neighborhoods reported that both unplanned, informal contact with neighbors and planned social gatherings were essential experiences of place.

Kyle: Does this neighborhood feel like a unique place or perhaps just another subdivision?

Becky: Hmm. Well I think that it is rather unique at this point in time where we hear about kids who are overscheduled and don't spend much time playing at home or who live in neighborhoods where parents don't feel safe to let their kids go out and just roam around like you and I probably did when we were younger, and so I think that is unique about this neighborhood and the degree to which other people are willing to reach out and include others in community activities, I think that's unique and I think there are several other neighborhoods like that here in Blacksburg that do a lot and know their neighbors real well and some people never join anything kind of thing.

Kyle: What experiences contribute to your feeling this might be...unique might be a strong word, you know, like you said, this happens in other neighborhoods, of course, but what experiences have you had in this neighborhood?

Becky: I think on Halloween when everybody was trick or treating and we realized that standing on our front porch we could look all, even though there's a curve in that road, we could look all the way up the road and see through everybody else's front porches and that was unique to see but all you need to do is look down the road and you've got people to talk to or people to wave to and people to say hello to so that was kind of a striking feature. Walking around giving out beer on Halloween, I am not sure I should say that; somebody has got their keg on the front porch, with the parents walking around with their children...so that's kind of funny, and I wish I had been at the 4th of July event because that was really nice as well and I don't know, I do think that even when this neighborhood is finished I don't know what it will be like.

Strikingly, this passage reveals that these essential experiences tend to happen “out front,” as was found in the phase one neighborhood. These participants reinforced the idea that social interaction, especially in the form of informal contact was essential in the transformation of mere space to place. However, in the cottage units, participants tended to speak less about the neighborhood as a community or the meaning that this place acquired.

Kyle: Having now talked about your neighborhood, which experiences and/or activities do you believe were the most important in making this place feel like a unique neighborhood as opposed to just another subdivision?

Jane: I just think it is the interaction of all of our neighbors. ...But again it is the nature of the way that it is designed, we are just out together all the time, and I will go and hang out at their house just because we get along.

Kyle: So the social interaction is very important to your understanding, your feeling towards this neighborhood, making it comfortable. You alluded to... are there some design features that you believe really allow that interaction to happen?

Jane: Yeah. Again the courtyard brings people over here. It is a natural community space. People from across the neighborhood are always over here.

Kyle: Oh, even people from across the street hang out...

Jane: Yeah, yeah, absolutely. It is much more rare for us to go over there into their back yards. We do but it is a planned event; it is; we have to call each other, you know, okay come on over; where when we are just sitting out here [in the courtyard], just casual, they are over here.

Kyle: So the lack of open space on the other side of the street doesn't allow the same interaction to happen over there just because it [the courtyard] is on this side of the street.

Jane: Right, right. They have to call and invite us over. You know, when, but I could be just sitting out on my porch and people are going to come over.

Kyle: Okay. Okay.

Jane: You know, where we don't really do that going over to that side. Um, so we are us, just, yeah, again the front porches, big front porches too, not shallow façade of a front porch, places where we put our, you know, we've got our rocking chairs and a sofa and a table out there, you know they are places that you want to be sometimes.

In terms of design attributes, the passage above also highlights the importance of the communal spaces found in the cottage sub-neighborhoods. Specifically, the semi-circle

courtyards and the semi-public porches seem to engender the essential experiences of place for these participants. However, as a physical attribute, the detailed discussion of this topic is reserved for the next section of this analysis.

To summarize, the results for the participants living within the cottage homes were nearly identical to results found in the phase one sub-neighborhood. Participants living in the cottage units of the latter phases of the development tended to identify their homes as a part of a sub-neighborhood within the village. For these participants, experiences of social interaction with other neighbors were interpreted as essential experiences facilitating the transition of mere space into place because they were common among all participants. In addition, these participants indicated that such experiences tended to happen in the front of the units. And finally, as was found in the phase one sub-neighborhood, the participants' conceptions of place supported existential theories regarding sense of place.

4.2.3 Experiences contributing to the Sense of Place for Participants within Attached Housing

The final group of participants interviewed for this study lived within attached housing. Typically townhouses or row houses of three units, these units are naturally constructed at the highest density within the village. As was alluded to earlier, none of these participants identified their housing as belonging to a sub-neighborhood. Rather, participants living in attached housing located towards the center of the development tended to identify larger and perhaps more generic spatial boundaries.

Perhaps the most diverse group in terms of age and life experiences, participants living within the attached housing included single individuals, young families and retired couples. However, like residents living within the cottage units, these participants lived within the development for a shorter period of time as compared to participants living in the first phase. Residency averaged one and a half years.

In contrast to the two previous groups, when asked which experiences contributed to making their neighborhood feel like a unique place, all participants in the attached housing referred to more aesthetic features of neighborhood. In fact, only a few participants within this group talked about social interaction with other neighbors. Rather, they were more likely to talk about the styles of homes, the layout of the neighborhood or the open space and surrounding views to the natural environment.

Kyle: Does this neighborhood feel like a unique place or perhaps just another subdivision?

Thomas: I think it's unique just the way, you know the way they, I don't know if it really feels unique, it looks unique, they set up the horseshoe up here and down there and that's very unique to me and we would have loved to have been able to afford a house on the horseshoe where we would need to take care of a yard.

Kyle: So does it feel unique to you?

Rachael: It does. It feels unique to me. Maybe it's because of what's available in this area as compared to elsewhere ...alot of them are really prepackaged houses...three house styles on one side of the road...

Kyle: So, for both of you guys you are kind of talking about the style of the homes, the aesthetics, kind of all these visual elements that just make this...

Thomas: The layout of the neighborhood, yeah...

Kyle: Are there any experiences or activities that you kind of believe also are important to making this place feel unique?

Thomas: I mean we witnessed experiences, like at Christmas they had a big thing where everybody would go around and they each would have a different hors d'oeuvres at their house.

Rachael: I wonder why we didn't do that.

This conception of the neighborhood environment suggests that for these residents interpretative knowledge is central to their understanding of place. Representative of the 'genius loci' tradition within the literature, these participants' perspectives are focused on the environment and to some extent its meaning (see Green, 1999; Lewis, 1979; Norberg-Schultz, 1980). From this perspective, 'genius loci' is not conceptualized as different from the location's sense of place rather; it conceptualizes the aesthetic features as the primary variable associated with place making. As discussed in the literature review, this perspective opposes other theories regarding the nature of a sense of place, which emphasize social interaction and were found in the other portions of the village.

As the passage below reveals, a participant living in the Redbud addition to the development also held this perspective. The Redbud addition is composed of single-family houses on the largest lots built in the development to this point. Here deep setbacks and large lot sizes are much more typical of contemporary subdivisions seen around the country.

Kyle: Okay. Uh, does this neighborhood feel like a unique place or perhaps just another subdivision?

Ed: Uh, I think it feels unique.

Kyle: Okay. Which experiences and activities do you believe kind of contribute to that feeling or making this place seem unique?

Ed: Not necessarily experiences. I go back to the quality, the space, you know the quality of construction of house, and then just the open spaces.

Kyle: Kind of the design of the housing and the layout of the housing, that makes it something different you can't find everywhere else?

Ed: Correct.

These findings raise the question of why these participants contribute their sense of place to environmental interpretations as opposed to spatial experiences, as was found with the previous groups. If you recall, time alone does not explain this contradiction. Residents

in the attached housing lived in the neighborhood equally as long as residents in the cottage units who did contribute their perspectives to social interaction.

The answer seems much simpler. That is, participants in the attached units did not report the level or quality of social interaction that was found in the sub-neighborhoods. Therefore, the lack of daily interaction with neighbors not only tended to develop a larger perhaps more generic conceptions of the neighborhood, but more importantly fostered a different type of sense of place. This causes me to speculate that the transformation of space into place is a continual process that is primarily informed by environmental interpretations only when social interaction is limited by spatial design and/or individual preference. To develop this idea more completely, the following sections analyze the spatial designs and specific environmental attributes associated with each neighborhood group.

4.2.4 Summary of Findings for the First Phase of Analysis

The object of study throughout the first phase of this analysis was the residential experiences of a sense of place. From a phenomenological perspective, sense of place was generally conceptualized as the experiences that allowed mere space to transform into place. Several important findings and three distinct groups of participants were interpreted from the data.

First, participants living within the first phase of the development identified that portion of the neighborhood environment as a sub-neighborhood within the village. Social interactions in the form of informal neighborhood contact and planned group gatherings were interpreted as the essential experiences contributing to the transformation of place. These experiences also tend to be identified as happening towards the front of the residential units and within the public realm. This conception of a sense of place is consistent with existential explanations of phenomenon in the literature, which suggest human activity is the primary influential variable.

Second, residents predominantly living in cottage units identified smaller areas of the development as feeling like “their neighborhood.” Experiences of social interaction towards the front of the units were also interpreted as essential for the residential sense of place within these sub-neighborhoods. Again, this finding was consistent with existential definitions of a sense of place.

Finally, participants living in attached housing towards the center of the neighborhood identified larger, more encompassing boundaries as feeling like their neighborhood. Unlike the previous two groups, aesthetic interpretations were interpreted as the essential experiences of place for this group of residents. This group also reported less group interaction and little informal contact with neighbors. Therefore, their sense of place was found to be more consistent with conceptions of ‘genius loci’ in the literature because their interpretations were focused on environmental qualities as opposed to social experiences.

This distinction between determining factors does not suggest to me that social interaction ‘over rides’ environmental interpretations in the transformation of space into place. Rather, social interaction may gain greater influence in the long run because it is a very conscious activity that is capable of much repetition given the presence of such human activity.

Length of residency did not seem to be a factor in explaining this distinction. And from a design perspective, these themes begin to suggest that our neighborhood designs should engender unplanned social contact and provide for spaces that allow for planned social gatherings if, we hope to foster an existential sense of place. Thus, phase two of this analysis will attempt to interpret if the physical environment and design of the neighborhood seemingly contributed to explaining these contrasting sets of experiences and perspectives.

4.3 Environmental Attributes- Phase 2 Analysis and Results

For the second phase of this analysis the full transcripts were coded with “free nodes” that corresponded to the theme within that portion of the text passage. Each node was comprised of multiple text passages of similar reference. These nodes were then categorized within a hierarchical index system illustrated in a family-tree pattern. Each node was reanalyzed and situated beneath a “parent node” and “meaning unit” that described the overall significance of the selected descriptive accounts. Consequently, three parent nodes developed including; community experiences, environmental interpretations, and environmental attributes (see Fig. 4.3).

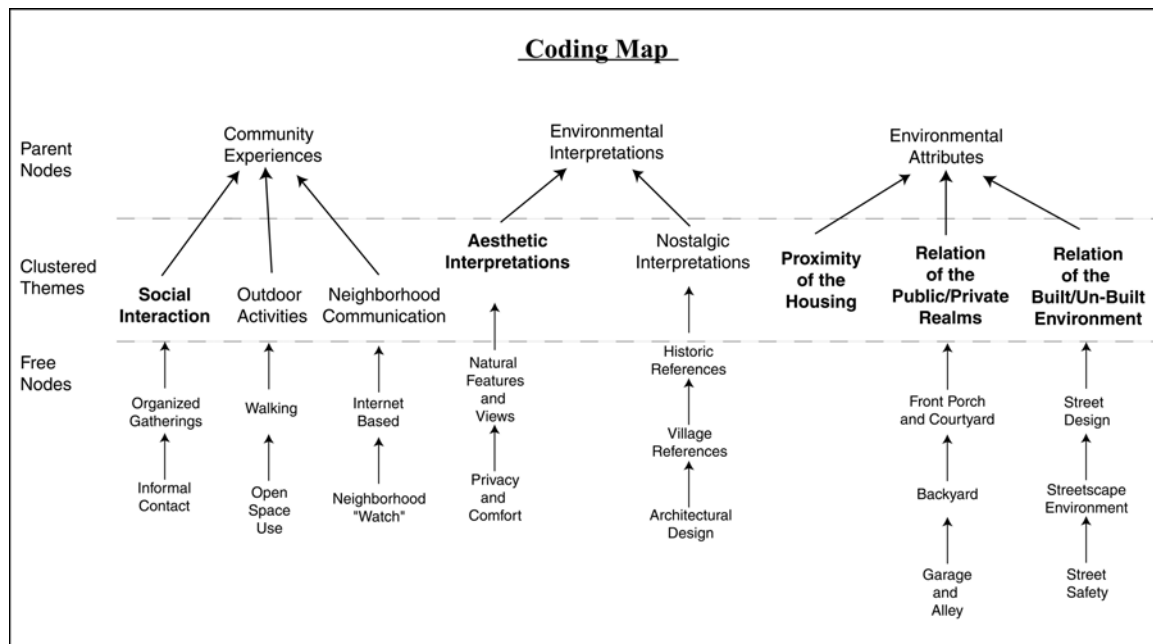


Fig. 4.3. Conceptual map of coded themes. Note that the essential themes that were identified as common among all participants are shown in bold.

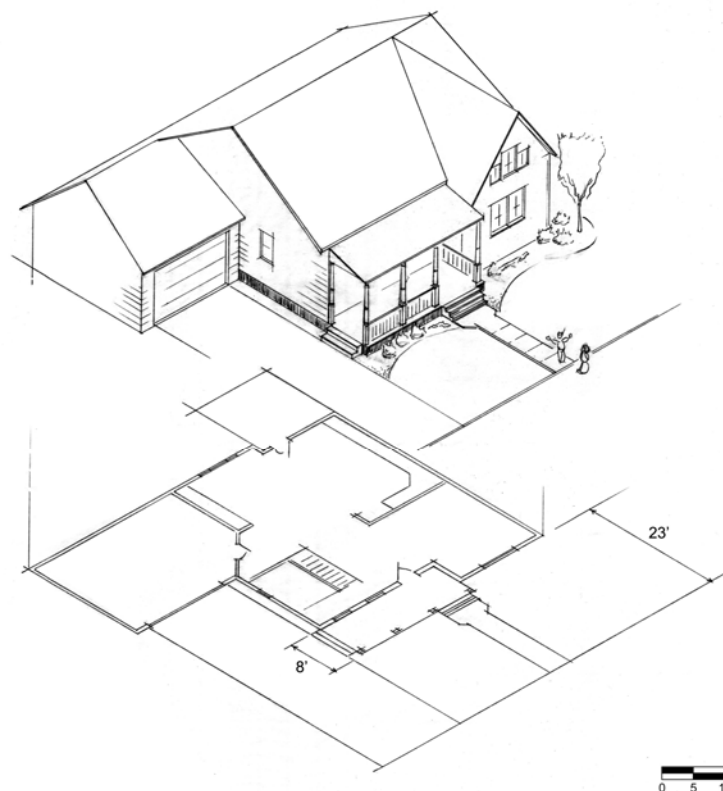
Concerned primarily with the physical attributes, this phase of analysis interpreted the phenomenological value of each node within the environmental attributes category with

respect to their significance in the description of the phenomenon. As such, three clustered themes within this category were shared by all participants and thus were identified as essential themes in understanding the residential experiences of place. They included the proximity of the housing, the design and relationship of the public and private realm, and the relationship between the built and un-built environment. As was found earlier, the meaning and interpretation of these environmental attributes was consistent only throughout the sub-neighborhoods. Therefore, the findings are presented as they relate to these three sub-groups.

4.3.1 Environmental Attributes of the Phase One Sub-Neighborhood

Again, the phase one sub-neighborhood consists of 36 single-family units on “hamlet” lots. Regulations for this lot type translate to a façade width of 36 feet and a lot width of 70 to 80 feet wide. All units are set back from the street a maximum 20 feet with prominent front porches that protrude well into this zone. Side yard setbacks vary from a minimum of 5 to 10 feet with most side yards averaging less than 20 feet between units. Vehicular access for these units is from the front and garages are set back from the main façade (see Fig. 4.4).

Isometric Diagram of a Typical Phase One Housing Unit



**Fig. 4.4. Diagram of phase one housing unit on a hamlet lot.
Drawn by the author and based on site survey.**

These measurements in combination with the historically inspired façade treatments make for a fairly dense linear street edge. However, constructed on a divided boulevard

with a 50-foot open space median, there is a limited feeling of enclosure along the streetscape. With 132 feet separating the houses across the street, the streetscape along Village Way South just barely falls under the 6:1 street width to building height ratio suggested as the maximum distance for a feeling of enclosure (see Fig. 4.5).¹⁵

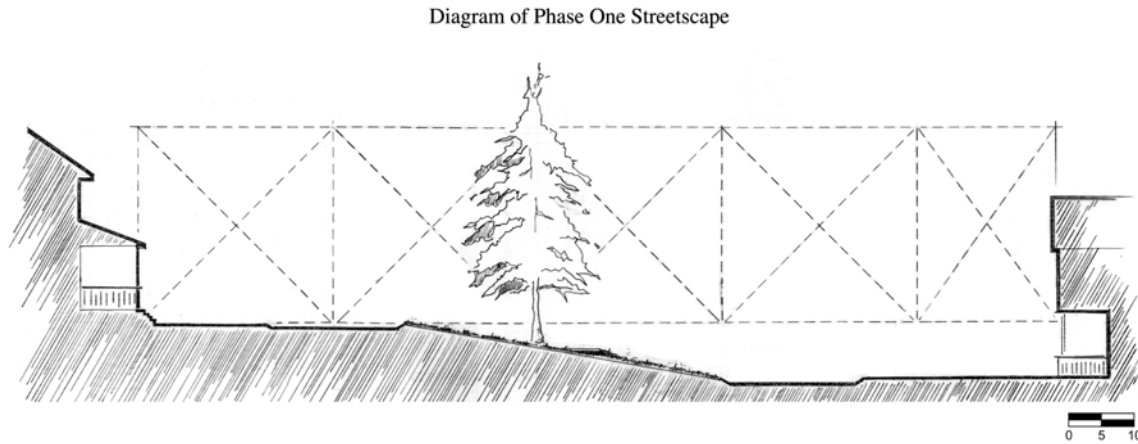
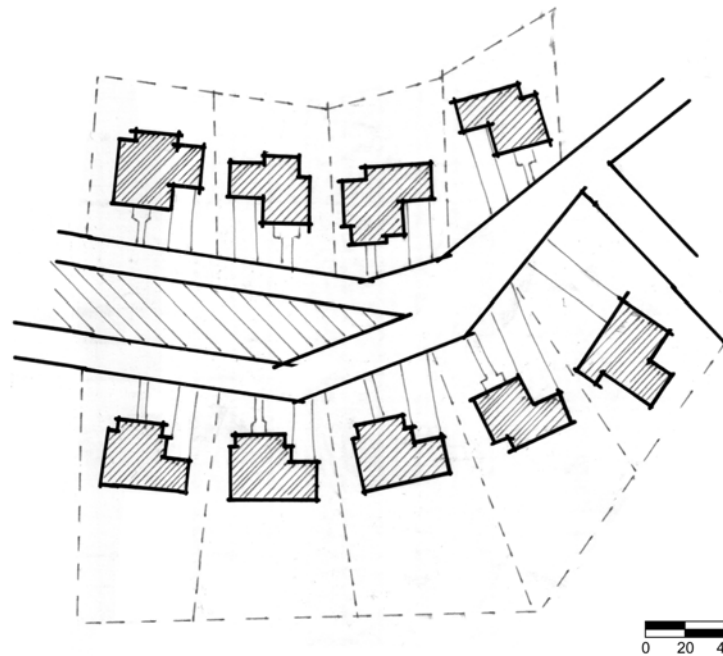


Fig. 4.5. Diagram of phase one streetscape. Note that the street to building ratio is 5.75:1. Drawn by the author and based on site survey.

Most participants noted that the wide median produced a feeling of openness as opposed to enclosure that gave this sub-neighborhood a “country” feeling even though the lots are relatively small and tightly grouped on each side of the street (see Fig. 4.6). In short, the streetscape itself has more of a suburban appearance with its wide right-of-way, numerous driveways and cul-de-sac on one end.

¹⁵ See Duany et. al. for a discussion of streetscape ratios (Duany et al., 2000).

Figure-Ground Diagram of a Section of Phase One



**Fig. 4.6. Figure-ground diagram of phase one sub-neighborhood.
Drawn by the author and based on site survey.**

4.3.1.1 Proximity of the Housing Units

Throughout all of the interviews with participants living in the phase one sub-neighborhood, proximity of the housing units emerged as a primary physical attribute that each participant related to their experiences. Specifically, the narrow lot size in comparison to more conventional suburban lots were interpreted by the participants as a key factor in increasing social interaction within this sub-neighborhood.

Kyle: So, in terms of physical features, it may be the proximity of the houses to each other that would be important?

Courtney: Um huh.

Courtney: I think the way this neighborhood is laid out is to get you involved with your neighbors... There are other neighborhoods, like Stroubles Mill is a good neighborhood for kids, and I have a lot of friends there but you still don't see many people out.

Kyle: Has the design of the neighborhood influenced your relationship with your neighbors?

Courtney: Oh, sure, I think I know them, like it was much easier to get to know them this way than...

Kyle: This way meaning...

Courtney: Just the way that it's set up. So, you know everyone is kind of outside more and you are closer together so you can say "hi, what are you doing?" and also knowing that when they moved here they knew what kind of neighborhood it was going to be so I knew that they at least wanted to be there because you know these lots are pretty big, but most everyone has a really

small lot so you wouldn't have moved there if you weren't looking for something other than just a nice house on a big...or looking for something else...you wouldn't spend this kind of money; you could get a lot more property at Brush Mountain or other parts of town.

Kyle: Do you believe the size of the lot positively or negatively affects your relationship with your neighbors?

Courtney: I think it is positive, just because they are so close. The closer you live to people the nicer you have to be; you can't let a little thing fester; you have to say, hey you have got to get your, the kids are leaving their bikes on my side of the thing for a long time and you really need to get those up, or you know we built a fence because our neighbor's son is definitely afraid of dogs, which is why, you know we really didn't do it for him; we did it because we didn't want to hear him scream any more, so you know good friends make good neighbors. But you know, when you live that close you have to be friendly with people and sometimes it makes a difference; it is a lot easier to be friendly with people.

As this text passage hints, the proximity of the housing is an important factor contributing to a level of social interaction; however clearly it is not the only factor. The following citation demonstrates that the similarities between the resident's age and lifestyle seem to also influence the likelihood of social interaction. However, not a physical attribute of the environment per se, this homogeneity is probably a factor related to the neighborhood's sense of community as opposed to the locale and therefore outside the scope of this project.¹⁶

Kyle: We kind of talked about this. You felt the lot size kind of influenced your relationship with your neighbors. How much, you know, I don't know if we are talking in percentage terms or something like that, how much is it due to lot size and how much is it due, you kind of mentioned, it is similar types of people, young families, with kids...

Steven: I think it is distance front door to front door. I mean I think that is really...

Kyle: It is the actual lot size influence...

Steven: Well, you know, to be specific it is distance from front door to distance from front door, which is not necessarily reflective of lot size; it is just that; it is, for instance if you had a cul-de-sac you might have a cul-de-sac of half acre lots but the front doors might be a couple hundred feet away. The farthest between two front doors might be two hundred feet of all the houses, and you know, our neighbors two doors up, that is not much of a distance. If they were eight doors up we would probably see them half or a quarter as much as we do, so it is just something about the amount of time it takes you to get there or get back and the less it is the more, the easier it is, so the more you do it, and their front door is probably one hundred feet from our front door, and that is nothing.

Kyle: So that's a bigger factor and they are also young couples with young children and...

Steven: Well, I mean the fact that they are a young couple with young children is compelling too. The fact that they are people in my same kind of family situation is important also, but I don't think I would be best friends with an elderly couple two doors up.

Whether it is specifically the distance between front doors or some other measurement that is influencing social interaction is a separate research question in and of itself.

¹⁶ For a discussion about homogeneity and sense of community see (Talen, 1999).

However, I am comfortable saying that in the phase one sub-neighborhood, the relatively close proximity of housing units to each other did emerge as one essential environmental attribute seemingly contributing to the level of social interaction. However, clearly it is not the only factor and as the following sections will demonstrate it is unlikely it is even the primary environmental attribute.

4.3.1.2 Focus of the Housing Units and the Design of the Private and Public Realm

The second environmental attribute that emerged throughout the conversations with participants living in the phase one sub-neighborhood focused on the design of the public and private realms.

Chelsea: I find it, more than any place I've lived; I've lived in several different types of subdivisions, different cities, uh, this being close to the road and close together, more people do things out front, you know, and having the porches, porches out front, a lot more people are in their front yards. It used to be, you know, people would be in the back yard where now it's a different dynamic.

Kyle: So you think you spend more time out of the front door and the front of the house than you do out in the back yard?

Chelsea: For us it's probably about equal, but I've spent much more time in my front yard than I ever did before.

Kyle: And then the proximity to the road, that just gives it more of a feeling of an older town maybe, you said...

Chelsea: It does, and with the porches, I think people are encouraged, you know they just want to be out there sitting on the porch.

Kyle: Yeah. So the porches too might increase your interaction with your neighbors.

Chelsea: Yes.

Seemingly, the large front porches that dominate the facades of the homes in the phase one sub-neighborhood encourage the residents to actively use this space. Because this space is located towards the public realm of the house, its use apparently increases interaction with other neighbors. However, this space is not limited to just the porch. Rather, these homes have a strong relationship with the entire semi-public and public realm. Consistent with the proximity theme, the front yards are rather small with only a 20-foot setback thus; together, these semi-public front porches and the public front yards seem to foster a communal atmosphere.

Kyle: ...for you, and that would be, if I am kind of picking up right, mostly based on the proximity of the houses to each other, everything is kind of small...the lots are smaller; the houses are closer together...

Lily: Yeah, I think if you had a big 5 acre lot, I mean, you wouldn't necessarily get to know your neighbors as intimately as you get to know the neighbors that are here. I mean you are outside; you're talking to this one; you're talking to that one; um and you get more of a feeling of community and a feeling of, you know, you know what's going on; you know you don't have to worry about your kids in this particular setting.

Deanne: Yeah, I mean that pretty much says it for me. I mean you know we picked the house because it had a large back yard but the kids play out front. You know, the adults get together and talk out in front and the closeness of the thing; you just can't help not know everybody and that's really great.

Kyle: Um huh. What do you think in terms of how the neighborhood was designed and the houses, what do you think contributes to that forward focus that people are out front more often than we've come to expect, I think, in other subdivisions. What do you think contributes to that?

Deanne: Well, I mean we have to...there's like a certain distance that the houses have to be so it's just...and the sidewalks go out to the thing and we've got big front porches and people tend to just sit out there.

Kyle: Yeah. So it's still that proximity. Everyone's closer together and you just feel more...

Lily: Even if you're in the back, we have a porch back here and a deck back here, even if you are back there are some that are back there that you can visit with, like neighbors over here, neighbors over here, so you do but you have to come out front to get your mail so somebody is out front to get their mail and it's close; it's not as if you are talking miles away or acres away, you know, you sort of just see the people.

Kyle: Okay. So again I'm guessing here but maybe the back yard is a little bit more private of a space and kind of the porch on the front of the house, that's more of a social neighborhood space.

Lily: Yeah, very much. I think you hit it right on the head.

The front porches are more than just well designed semi-public spaces. Their prominence seemingly directs the focus of outdoor use towards the front of the house and the public realm. As such, the front porches and yards are not just a space, but rather a “place” within the sub-neighborhood that incorporates layers of meaning associated with specific activities and experiences. And, in the phase one neighborhood that meaning holds both connotations of a social gathering area and playground.

Deanne: I spend a lot of time in the front.

Kyle: What's the difference here?

Deanne: Well, I have kids and they play out front and I'm always chatting with somebody.

Kyle: It's interesting. Typically we think of the kids playing in the back yards. Why are they out front so much?

Deanne: They are out front and we have swing sets in the back. Uh, they all play out front. They like to play on the driveway and they like to play in the road and they play ball out front; they play soccer, I mean everything is out front.

Kyle: When you say "they all" you are referring to more than just your own kids?

Deanne: Yeah, more than just mine; like all the kids congregate...

Kyle: So all the neighborhood kids are out front?

Deanne: Typically in my driveway, yeah.

4.3.1.3 The Built and Un-built Environment and the Relationship to the Streetscape

A discussion of this “forward” communal atmosphere and associated environmental characteristics is not complete without discussing the final essential attribute that emerged throughout all the interviews. All participants living within the phase one sub-neighborhood also noted a relationship between the built and un-built environment. Specifically, within the phase one sub-neighborhood, the relationship the housing units have with the streetscape emerged as an important theme and revealed a level of ownership over that space.

Derrick: But I think everybody, and I will say this, if anybody forgets that there are children and if someone zips a little bit too much, there are a number of us who will just, you know, [tell them to] ease it down a little bit...

Kyle: So the streets are kind of controlled by the people out there; it's more of a pedestrian space...

Derrick: Yep, yep, oh yes. I mean, good God, cars are a necessary evil. The kids, the older little kids do skate boarding and inline skates and people are walking the babies and you know, so it's just a paved community.

In the phase one sub-neighborhood the streetscape is used as an extension of the front yard and the lack of a sidewalk emerged as more of an aesthetic concern whereas, the majority of participants preferred the “finished” look of a sidewalk. In good weather, residents used the roads for walking and their children used the roads as an outdoor playground, which again both increased the likelihood that they would have contact with their neighbors.

Kyle: If you don't mind me asking, where did you live before you moved here?

Courtney: We lived on Highland Circle behind the old municipal golf course. It backed up to a pasture that looked down over Catawba Valley, actually very pretty but the road was going like this so we couldn't stay there because there was nowhere for our kids to ride a bike. You see, that was another big hill; because it's flat here they could ride bikes. It is like a racetrack.

Kyle: You know I never thought of that, kind of like a little Martinsville [speedway]... So that's one of the reasons I guess you moved; because you weren't comfortable with your kids growing up on the street you used to live on and you thought this street would be more suitable for kids?

Courtney: Yeah. Like I, if it had started over here, I wouldn't wanted to have lived here [Village Way North another section of the neighborhood] because of...we may have ended up there anyway but because of this...we didn't want to live on this...this is going to be a busy street. It won't be as busy when they finish this, but it is a hill and you know.

This relationship between the built and un-built environment of the streetscape is related to the proximity of the housing and the focus towards the public realm. And, combined all three physical attributes are seemingly related to the level of social interaction.

Kyle: Yeah. So the porches too might increase your interaction with your neighbors.

Chelsea: Yes.

Kyle: How far it is set off from the road really doesn't influence that...

Chelsea: Oh, I think it does...

Kyle: Oh, it does...

Chelsea: Somebody's walking down the road and you are just sitting on your porch and it's close, you are much more likely to get up and talk to somebody...

Kyle: Okay and say hi...so all three of the factors, the lot size, how close it is to the road and the big porches which actually you can use are all...

Chelsea: Yeah, and you know it's nice, you know, my daughter, she can just bop over to the neighbor's house and come back; you know, it's not a huge distance for her to go.

4.3.1.4 Summary of Physical Attributes in the Phase One Sub-Neighborhood

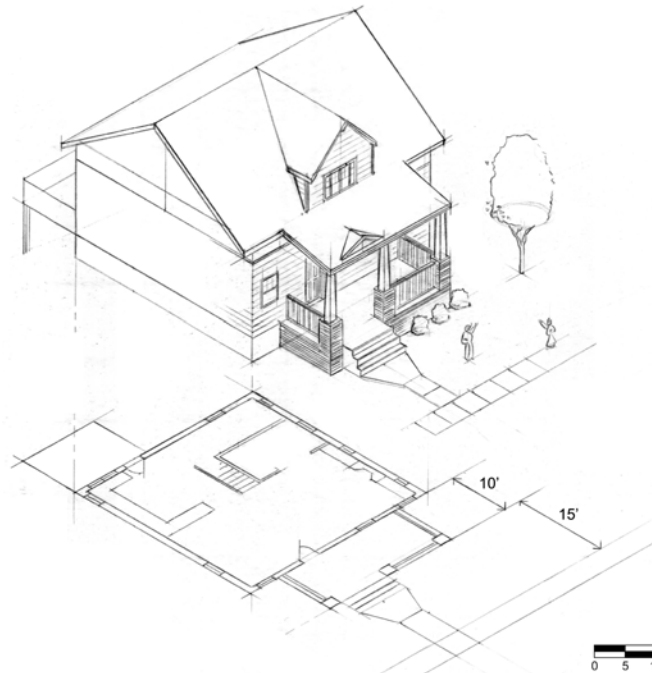
Again, working with the theory that social interaction was the essential experience fostering the transformation of mere space into place for participants in the phase one sub-neighborhood, three physical attributes emerged as important objective qualities of the environment. The proximity of the housing units, the design of public and private realms and the relationship to the streetscape emerged as inter-related themes or essential characteristics of the physical setting. More importantly, these environmental attributes were associated with specific activities and thus layered with meaning for participants within this sub-neighborhood. As a result, these objective qualities fostered experiences of social interaction and thus subjective interpretations of the sense of place. They may not be the only factors contributing to experiences of social interaction however; they did emerge as the most important physical attributes common throughout all the interviews with participants of this research.

4.3.2 Environmental Attributes of the Cottage Sub-Neighborhoods

Development phases two through four at the Village at Tom's Creek initialized construction of the lower elevations of the site. This portion of the new housing was built at a higher density than was previously found in the first phase. Within this denser portion of the development, participants identified two sub-neighborhoods. These sub-neighborhoods were largely composed of single-family homes on "cottage" lots, which average 6 units per acre as compare to 4 units per acre in the phase one sub-neighborhood.

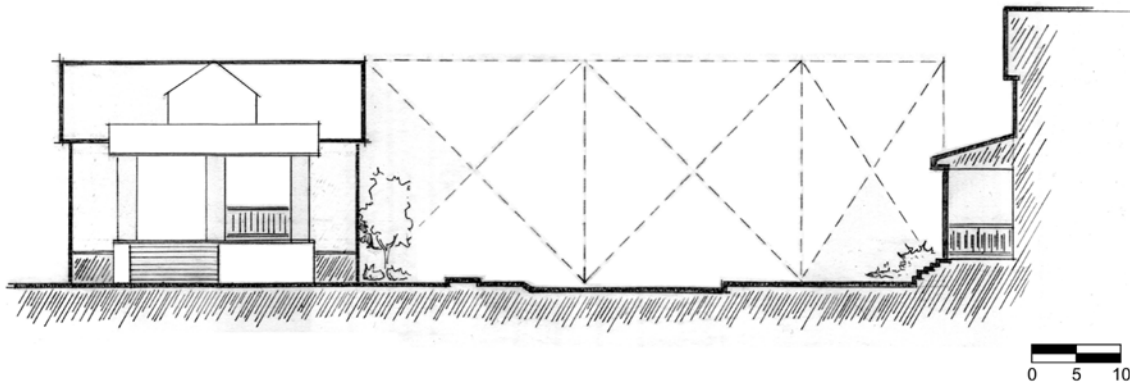
The regulations for this lot type translate to slightly smaller units (32 feet wide) and narrower lot widths (50 to 60 feet) than the hamlet lots found in the first phase. The maximum setbacks are the same but these units tend to sit closer to the street and are not located on a divided boulevard. These factors create a greater feeling of enclosure along the streetscape of Village Way North (See Fig. 4.7 and Fig. 4.8).

Isometric Diagram of a Typical Cottage Housing Unit



**Fig. 4.7. Diagram of housing unit on a cottage lot.
Drawn by the author and based on site survey.**

Diagram of Cottage Sub-Neighborhood Streetscape



**Fig. 4.8. Diagram of cottage sub-neighborhood streetscape. Note that building to street ratio is 2.5:1.
Drawn by the author and based on site survey.**

There are two additional distinguishing features for these units. First, vehicular access is directed towards the rear of the homes and approached via an alley. Unlike the hamlet lots, front driveways are not permitted. Second, two semi-circle courtyards are located in these sub-neighborhoods and are distinctive features not found anywhere else in the development. Currently, seven of the cottage units sit on one of the semi-circle courtyards, creating an inward facing common space for these units and the units located directly across the street. (See Fig. 4.9)

Figure-Ground Diagram of Courtyard in
Cottage Sub-Neighborhood

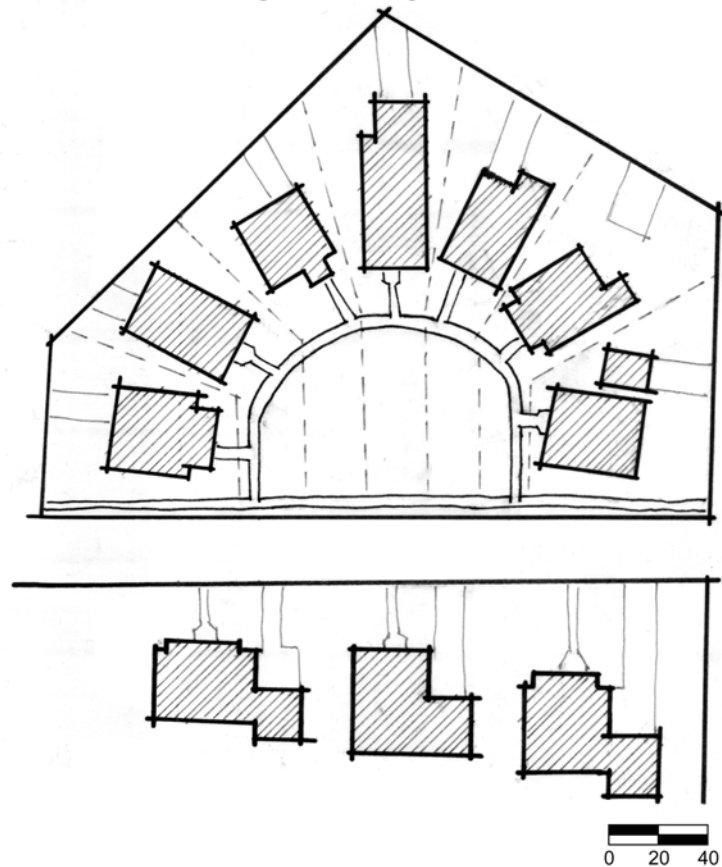


Fig. 4.9. Figure-ground diagram of cottage courtyard.
Drawn by the author and based on site survey.

4.3.2.1 Proximity of the Housing Units

Similar to the phase one sub-neighborhood, proximity of the housing units emerged as a primary physical attribute that each participant related to specific neighborhood experiences. Specifically, all participants living in the cottage sub-neighborhoods believed that the smaller distance between the units increased contact with their immediate neighbors and thus the level of social interaction.

Kyle: Okay. Has the design of the neighborhood influenced your relationship with your neighbors in any way?

Shannon: Well, yes, I think so in that you tend to associate with the people that you directly see on a regular basis, so I think the fact that we have just this alleyway behind us and this row of condos so I mean you are right, you are back to back with these folks, so you tend to talk to them and they, like this one guy back here, who after the trash man comes he puts our trashcans back up and brings the stuff; I mean there's a lot of sort of looking after each other, but I think that is totally kind of influenced by where you are.

Kyle: And so that is just being the proximity of the units to each other?

Shannon: I think so.

Kyle: So, as a logical follow up then, do you believe the small lot sizes that are available in this neighborhood positively or do they negatively influence your relationship with your neighbors?

Shannon: Oh I think they positively do.

Kyle: So would you contribute maybe increased neighborly interactions due to this lot size and proximity?

Shannon: Oh, yeah, I think so. Definitely. There's no one living in this house yet, but if you...from where we would be sitting on our front porch, I mean, you couldn't reach out and touch them, but they would be right there. If they were out, you know if your neighbor is out on their front porch and you are out on your front porch, and you are within, you know, normal voice talking distance, to me the natural tendency is to at least greet them and say how are you and that kind of stuff. If they are a little beyond, you know, normal conversation, you are probably going to wave but you are not going to engage into any sort of getting to know them better kind of conversation, so I think you are definitely more compelled just by human nature to strike up more of a conversation to get to know them better.

So, proximity was interpreted as an important physical attribute however, similar to phase one neighborhood it was clearly not the only factor that contributes to an increased level of social interaction.

Kyle: Do you believe the size of the lot either positively or negatively affects your relationship with your neighbors?

Jane: Well, you can see here that we are very close to our neighbors and you know when that house started going up and we saw the foundation we went gulp, oh no. But we moved from a log cabin on 13 acres to here, so I don't know, our lot was 6000 square feet or something, very small, and I don't miss it one bit. Not one bit. I really like it. Again I am a very extroverted people person and I think if you were to buy a house in this courtyard you would have to be; you couldn't buy a house here and expect to have ultimate privacy. Uh, but I think the small yards are much easier to maintain so I don't spend all my time having to maintain a huge lawn so we have more time just to spend outside playing. You do feel close to your neighbors; you can't help but to feel close to your neighbors and we have really been lucky that we all get along, you know. I think maybe it is the personality and the type of people that would move into this style house kind of know what they are getting into, um, but I think it has been a positive experience.

Kyle: There's something I am missing and I can't put my finger quite on it... I grew up in more or less in the inner city and we were that close so it might just be a personality type; I am not quite sure.

Jane: But I think it makes you feel good. At the same time I think it is nice to know that there are people close by and that know you well and that you trust and that you know, I mean I think there are just so many people that live in neighborhoods that don't know the people, very well, that live on either side of them, and you know I can always think...I have called my neighbor when I am out of town and said hey, you know, go let my dogs out, or you know there are so many times where it is just so casual. My door is open all the time on a nice day just like it is right now so we just come in and out of each other's houses a lot and no one every feels like they are being bothered and if I do I just shut my door and someone has to knock but um, no I don't mind that and I don't know where this need of privacy came from.

Again, it seems that proximity of the homes alone is not enough to increase interaction. At some level the personality of the neighbors have to be compatible. However, in terms of the design of the neighborhood it does seem that given compatible social characteristics, the number of encounters with immediate neighbors is related to the distance between units. Therefore, increase proximity is at least one key design factor related to social interaction within these sub-neighborhoods and thus is conceptually tied to the experiences that transform mere space into place for this group of participants.

4.3.2.2 Focus of the Housing Units and the Design of the Private and Public Realm

Unlike the phase one sub-neighborhood, there was not a consensus regarding the focus of use in the cottage sub-neighborhoods. Rather, participants living in units located on the semi-circle courtyards tended to use the front of the house more often whereas; other participants living within the Redbud sub-neighborhood were more likely to use the backyard.

Kyle: What do you like most about this neighborhood, the key features?

Jane: Um, I really love the courtyard that we are on. We have 2 kids and so you can hear kids right now outside playing. We are out...this courtyard creates a very natural place to want to be. People from across the street come over; the kids ride on the courtyard and are always out; they can ride around you know ride their bikes around the circular loop of the courtyard; we love the courtyard; we are very happy with that. And then beyond that we really like the bike path; you know that there is a walking path we could take. Again, the styles of houses are nice to look at.

Kyle: Do you think the design of the neighborhood influences that kind of interaction and activity?

Jane: Oh yeah, I was saying that earlier. Absolutely. I mean you know my son loves to know when our neighbor is home so he can help him wash dishes so he, you know, you can just kind of see people more often, again we are out on our front porches all the time and I focus a lot on the courtyard because I think that is unique, and that is what I am most familiar with, living on it, but you know we can see each other's houses because of the way it is shaped; I can see the fronts of the houses; so I can tell when a neighbor is home because their blinds are open or their door is open, you know, um so I think that definitely influences and not...for kids not having to cross the street, um, makes it a lot easier to go between houses when they are young.

As was found in the phase one sub-neighborhood, the cottage units located on the courtyard had a stronger relationship to the semi-public and public spaces found in the front of the units. But, the other units located in the cottage sub-neighborhoods seemed to focus towards the more private spaces and the alley located in the rear.

Kyle: Other than inside your home, where is your favorite place to spend some time in this neighborhood?

Becky: Um, oh, does the porch count? Either out on the deck or on the porch... I really like being able to get outside.

Kyle: Where do you spend more time?

Becky: The deck in the back, just because we have a table for eating back there and...

Kyle: Okay. Which area are you more likely to have that social interaction with your neighbors?

Becky: Um, that's a good question. Probably from the front, but even from the back, um we have a basketball hoop and the neighbors kids come over and they use the basketball hoop rather you are playing or not, and they're often going up and down the alleyway and the neighbors all stop and say hello or other people who are walking because the alleyway connects to the bike path and so the neighbors from the other part of the development will walk past the deck and say hello. I am not really sure that one is more likely to stop and visit than the other.

Kyle: I was going to ask about that. So the alley almost serves as more of a pedestrian kind of experience itself.

Becky: Um huh. Yeah.

Kyle: Light traffic only to...

Becky: Mostly just light traffic, um huh. Uh, because the path does actually break off over here to go across Tom's Creek, but there are people who will just pick up the bike trail here and keep walking down our alleyway, I guess, to turn around.

Kyle: Okay, so even though you know traditionally I would think of the front porch and sidewalk as being more social space, maybe in these units the back of the house is equally social?

Becky: Well and maybe though it is just because it is where I am sitting for a longer period of time and in more of a relaxed...I don't spend a whole lot of time on the front porch.

Kyle: Okay. Does the alleyway almost seem, you know, is there kind of a breakdown of spaces where there is a public alley but then this may be a semipublic space where you are more likely to greet someone?

Becky: Uh, probably, yeah it would probably just be the neighbor's kids or the neighbors if they were looking for us who would come into the backyard, either invited or uninvited and other than that you know we wouldn't typically have people coming through the yard or onto the driveway.

Kyle: So the backyard is still a pretty private getaway?

Becky: Um huh.

This contradiction between these units within the same sub-neighborhood seems to be directly related with the design of the public and private realms surrounding each unit. As will be discussed in the next section, there is not as strong of a relationship to the streetscape as was found in the phase one sub-neighborhood. Therefore, the dominant semi-public courtyard allows units surrounding this space to more directly connect to the public realm by reserving a space that the residents feel ownership over and can actively use. In contrast, the units that directly border the street in these sub-neighborhoods do not have a strong connection to any semi-public space because the street is dominated by automobile more so than the pedestrian.

4.3.2.3 The Built and Un-built Environment and the Relationship to the Streetscape

As opposed to the phase one sub-neighborhood, there was no sense of ownership over the streetscape within the cottage sub-neighborhoods. In fact, the relationship the housing units have to the streetscape did not emerge as an important theme among this group of participants perhaps due the increased level of traffic along Village Way North.

Kyle: What about the alleys? Do you think the alleys are an important design feature in this neighborhood?

Jane: I do because the alleys are built for people for parking in the rear... so I think that is a nice feature and again that's because the garages are either nonexistent or they are all in the back of the houses.

Kyle: So it is a nice feature in the way of getting the automobile out of the focus, not that the alley itself creates more of a pedestrian environment?

Jane: No, it's not, you wouldn't, I mean people walk back there but it is not, no, it's not an attractive for walking. I mean you are looking at the backs of everybody's houses and there are garages or cars back there and there aren't big decks in the back of the house so it is not something that you know, you aren't going to walk in these alleys to see people.

Kyle: What about, you know I always kind of think about the alleys are kind of where the kids are going to hang out, maybe when they are more teenagers and play stickball and that kind of thing. Do you think they have the potential to develop into...

Jane: Right. Yeah I do. I can see that because there is going to be less traffic on the alleys, so you know as the place I grew up playing in the street, playing 4 square and stuff and you know I wouldn't have my kid do that. Right about here this is a wider road [Village Way North]; it's maybe that's a little different, seems a little bit wider than the average neighborhood street and that also might be because of lack of curb it might make it feel that way, it kind of just runs off into the road, but um, and this is kind of a little blind hill, so I wouldn't want you know my kids to play 4 square, but back here it is fine because people that come down the alley are going to be going slower, all of a sudden it does get really narrower so psychologically people are going to slow down; there is not double [lanes]; you know they are only one way so yeah, I could see that as being a place where they would ride bikes or something.

Adults that used some of the sidewalks for walking reported limited use of streetscape. However, the streets within the cottage sub-neighborhoods were clearly not dominated by the pedestrian as was found in the phase one sub-neighborhood. If anything, there was a stronger relationship to the un-built environment of the alley.

Kyle: What about the alleys are important?

Brenda: Um, we just like the fact, it just seems to be a cleaner kind of look with the alley, having an alley and garages in the back and um, we are from the south so just old southern towns you know and the old architecture.

Kyle: Do you use the alley for anything other than kind of your auto and...

Brenda: Yeah, the children ride their bikes in the alley and it is not super busy; it's not as busy as the street, you know, I guess the alley is more or less an extension of our driveways you know, so it's nice; I mean, um, but what sold us on this home and this neighborhood wasn't the fact that we were sacrificing a bigger yard and giving up a bigger yard; it was the fact that um all the green spaces that they were going to have, the open green spaces, and that kind of we knew there would be places for us to go and hang out.

This stronger relationship to un-built environment of the alleys draws the focus of these units away from the private realm and towards the private and semi-private spaces found in the rear of the houses. Therefore, the relationship to streetscape seems to present itself

as a lynchpin which all other themes rest. That is, with a less pedestrian friendly streetscape, activity and use in the residential landscape is directed towards the more private spaces found in the rear of the units. And naturally, one can expect to find less casual interaction the more private the space is.

4.3.2.4 Summary of Physical Attributes in the Cottage Sub-Neighborhood

The study of physical attributes in the cottage sub-neighborhoods presents an important dichotomy. Social interaction in the form of informal contact with neighbors was the primary experience interpreted as aiding in the transformation of mere space into place for these participants. However, the relationship and feeling of ownership over the streetscape was not strong nor was it dominated by a pedestrian atmosphere as was found in the phase one sub-neighborhood. Therefore, two distinct groups emerged in the cottage sub-neighborhoods.

First, units located on the semi-circle courtyard cultivated a focus towards the front of the house and the public realm, similar to the relationship that was found in the phase one sub-neighborhood. Without a strong relationship to the streetscape, the focus on the public realm was maintained because the front porches and courtyard respectively served as semi-private and semi-public spaces that participants actively used and had control over. Combined with the proximity of housing, these physical attributes could be directly related to experiences of social interaction. And thus, similar to the phase one sub-neighborhood, these environmental attributes were associated with specific activities and thus layered with meaning that informed the participant's sense of place.

Kyle: Are the front porches a significant feature for you, other than maybe just again a nice feature? Is it something you really use or get use out of?

Shannon: Yes, when the weather is nice we use it a lot. Particularly on ours, that little circle, everybody has front porches. Ours are great. I mean they are big front porches so I mean you do; I would always go home when the weather is nice, go home and sit on the porch and take the paper and you know sit there and drink your ice tea and talk to whoever comes by.

In the second group, the lack of a defined semi-public space and limited feeling of ownership over the automobile dominated streetscape direct activities toward the rear of the units. These more private spaces still promote a level of interaction due to a relationship with the alley however, this interaction tended to be polite acknowledgment of passer-bys, as opposed to the extended conversations found in the previous sub-neighborhoods. It may be logical to assume that these spaces generate less interaction because they are more private in nature however, that conclusion will be tested in the following section, which investigates the physical attributes of the attached housing.

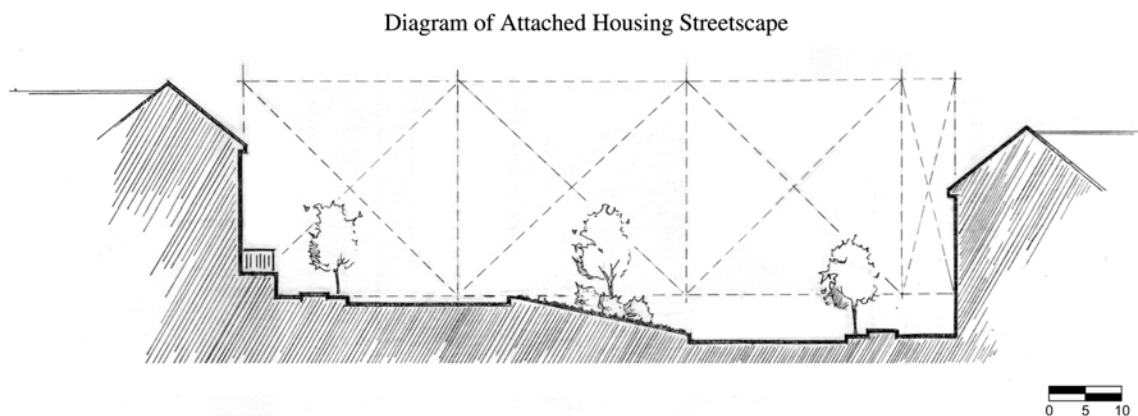
Kyle: Has the design of the neighborhood influenced your relationship with your neighbors? I know you have mentioned the layout of the cottages [on the courtyard].

Jane: Again, I definitely do. I think it makes it, with the sidewalks, with the bike path, the courtyard, you know, I think it all gets people out seeing each other. Even the folks that have larger back yards, the bike path goes through their backyard so, you know, on any given time if you are sitting back there, people are walking by and there is lots of interaction; I probably run into people you know, we run into people throughout the neighborhood all the time. Um, I guess

the one thing I am just curious to see evolve is the townhouses. I would almost say that the townhouses are almost their separate little entity. I don't know hardly anybody that lives in the townhouses; I hardly ever see them except for when they pull in their driveway and go inside. Um a lot of that is because their houses are faced towards the back, you know our backs face each other; they don't have a lot of front porches. Some of them do, I mean I have met a couple of the people back here but I don't see them on a regular basis. Again, I mean there is no yard to go out into so that's it just seems almost drastically different than the feel that's out here so I am curious to see how it goes, especially with these town houses being built behind us.

4.3.3 Environmental Attributes of the Attached Housing

Largely located along the development's central boulevard, the attached housing is naturally the densest portion of the village, averaging 12 units per acre. However, like in the phase one section of the development, this wide boulevard with a 25-foot median limits the feeling of enclosure along the streetscape. The total streetscape is only slightly narrower than the boulevard found along Village Way South with 104 feet separating the houses facades. This narrower distance across the street is due to the smaller median width and shallower eight-foot setbacks (see Fig. 4.10 and Fig. 4.11).



**Fig. 4.10. Diagram of attached housing streetscape. Note that building to street ratio is 3.25:1.
Drawn by the author and based on site survey.**

Figure-Ground Diagram of a Section
of the Attached Housing

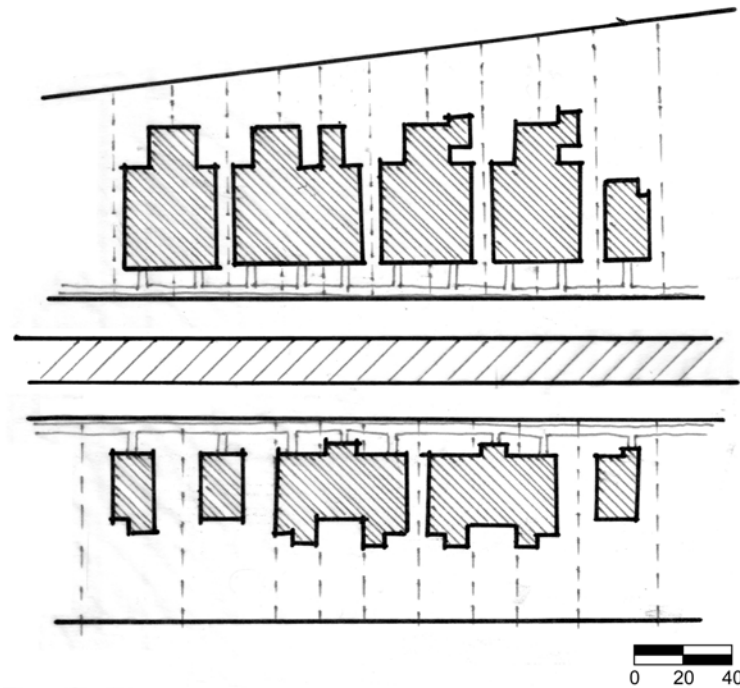


Fig. 4.11. Figure-ground diagram of attached housing.
Drawn by the author and based on site survey.

Similar to the cottage lots, all vehicular access is directed towards the rear of the units via the network of alleys. However, unlike all other units in the development, the porches on these units are not as prominent of a feature and are often little more than front “stoops” with limited usable space. These un-useable front stoops and the lack of front yards due to the shallow setbacks effectively removes any semi-public spaces found in the front of these units (see Fig. 4.12). In addition, all participants living within the attached housing did not identify their units as a part of any sub-neighborhood.

Isometric Diagram of a Typical Attached Housing Unit

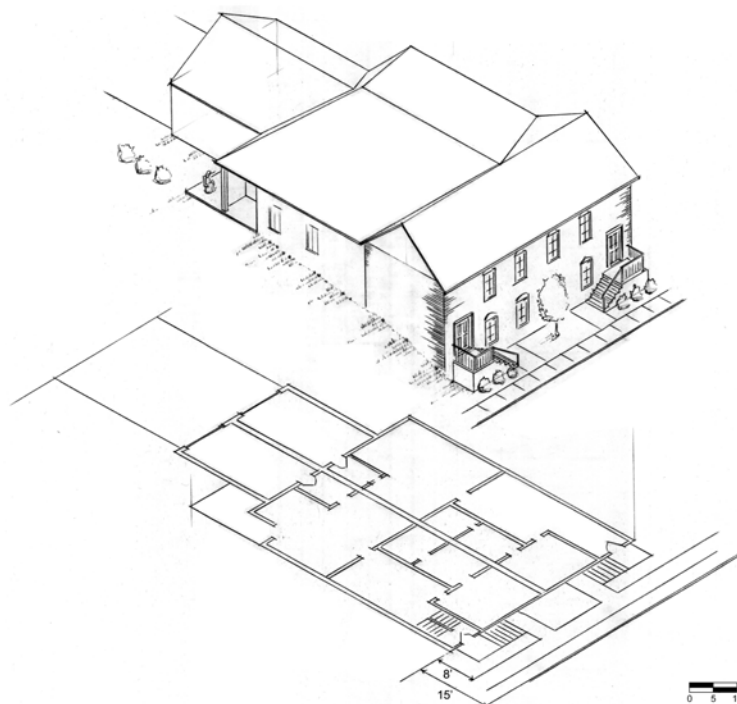


Fig. 4.12. Diagram of attached housing unit.
Drawn by the author and based on site survey.

4.3.3.1 Proximity of the Housing Units

As a theme, the proximity of the housing was not a concept that participants living in the attached housing directly related to specific experiences. That is, in the phase one sub-neighborhood, participants related proximity to the ease of visiting neighbors or being comfortable enough to let their children run down the block. In the cottage sub-neighborhoods proximity allowed residents to have conversations while remaining on their porch. In the attached housing, participants were more eager to point out that the arrangement of homes was not too close thus reinforcing the concept of privacy.

Paula: I mean I think the physically closer you are, you know, you are more likely to run into each other and stuff like that.

Kyle: And that's kind of been your experience; you are pretty likely to run into somebody and...

Paula: Yeah. Yeah. But I don't see it as we are too close, you know. When I think of too close I think of not getting along so well, you know, and I mean so far I have gotten along pretty well with everybody.

Kyle: What do you think contributed to that feeling of not feeling too close? Is it just because they have preserved a bunch of open space or...

Paula: Uh, I think, yeah, I think it's that and I think the alleys help, you know, actually, well I think you know when you've got, well maybe not, when you've got maybe garages on the front and you've got all of the coming and going from the front, then you know, it's like you see everybody all the time, versus you know maybe when you sort of split the coming and going on two different sides of the house there's not quite as much, I don't know; that might not fly, but it

just seems less crowded because you don't have everything going on right in one spot, do you see what I'm saying?

Kyle: One spot. Then you can kind of sneak in and out of your driveway?

Paula: [Laughter]...yeah...[laughter].

If you recall, for participants living within the attached housing the transformation of space into place was more consistent with conceptions of 'genius loci' because their interpretations were focused on environmental qualities as opposed to social experiences. This is apparent even when talking about proximity. Residents of the attached housing would point out their connection with the larger surrounding landscape and open space and not dwell on the density of the housing.

Kyle: What are the attributes that seem to make this neighborhood and your unit, what makes the density seem more delightful and pleasing, even...because I think if we looked at Oak Tree or one of those, your know, and at least compared to these units, we would be probably close to the same density, you know...

Thomas: Oh yeah...

Kyle: and you guys even mentioned that, but what makes this seem a little less crowded.

Thomas: Even the houses are crowded but just having houses with yards make it seem a whole lot less crowded. They do have green space that they say they are going to keep and just having that farm, you can go out there and look that way and it is just open space; that's what makes it a whole lot different to me than just...I mean it's ultra dense through here. If you look at the lots...well you have the map...the lots are just cut out. I think ours is like .06 acres...[laughter], but still it doesn't seem like that to us compared...we don't look out and we are looking into the neighbor's kitchen or anything like that; I mean at Oak Tree we would look back and you would see, I mean, you would be in the neighbor's living room.

Kyle: Okay. So just because you are still surrounded by open space and there's a little open space included in the neighborhood makes it seem a lot more ...

Thomas: Yeah.

These conversations regarding the proximity of the attached housing are not reinforcing a physical connection to the existing open space. Rather, it is a visual and mental connection to the countryside that I would interpret as related to feelings of privacy. That is, for this group of participants the town homes still feel like "a little home in the woods." Therefore, proximity seemingly has less value as physical attribute related to experiences of place within the attached housing because of the lack of a semi-private space.

4.3.3.2 Focus of the Housing Units and the Design of the Private and Public Realm

As alluded to earlier, the front porches tend to be a smaller and less prominent of a feature among the attached housing. The passage below highlights that the front porches within this section of the development maybe little more than exterior decoration. In fact, participants within the attached housing overall reported little use and a few experiences in front of the house.

Meredith: I am old enough that I can remember going to see my grandparents and sitting on the porch because there was no air conditioning in the house. You sit on the porch and you chat with all the neighbors as they walk by. And the houses in the village are designed that way, but I don't think people really do that; they are still more likely, if they are going outside to sit in the back on the deck or the patio or somewhere.

Due to the lack of useable space, the focus of the attached housing was towards the rear of the units. This developed a primary relationship to private realm and little to no relationship to the public sphere for these units and their residents.

Kyle: Outside of your home, where's your favorite time to spend or favorite place to spend some time in this neighborhood?

Lucie: The back porch.

Bart: Out back because we can, like we say, we can see everybody walking by and then we've still got the view.

Kyle: What are your thoughts on the alley and the design of the alley, how close it is to your back porch; if the back porch is your focus? Is that kind of a negative in your perspective; is it positive?

Lucie: Um, (pause) I guess it's neither. I don't really see it; I see it as like our, kind of like our driveway, like that's the way we, the only way we get to our house. It doesn't seem like a dark alley, I mean it's just a little road that goes kind of...

Bart: It feels like our street, I never even go out the front door. If I go anywhere we go out the back.

Lucie: Yeah.

Kyle: So you almost feel ownership over the alley too-it's an extension of your house, maybe...

Lucie: Yeah, I guess it's a positive then.

Bart: I think even more so. I mean everybody on the street, this is where we park and the only time we go out there is to get the mail or something. Everybody's usually in their back yard.

Kyle: Okay, so for these homes along Honeysuckle, maybe the focus and that activities and the residents are maybe more towards the alley and there's not as much going on out the front door.

Bart: I think so.

Lucie: Yeah. And it is the opposite up there [the phase one sub-neighborhood] because all the kids go in and out their front doors and they all play on the street and the cul-de-sac.

Kyle: And so the front door is there...are more important and so maybe the porches would be more important up there because that's where all the activity is going on and they are less important to the point, you know...

Lucie: Yeah, we don't really have... [a porch]

Bart: Yeah, that's true...

Unlike the cottage sub-neighborhood that had little connection to the semi-public spaces in the front of the units, the result of this rearward focus limited social interaction to conversation with only immediate neighbors. Therefore, it should be no wonder that participants living within the attached housing did feel social interaction contributed to their sense of place. The focus of the attached housing towards the private realm and limited interaction with neighbors has simply curtailed the prospect of social interaction for these residents.

Kyle: Okay. So what's it like to live in this neighborhood on a daily basis; does it kind of influence your activities, your interactions, your...

Thomas: I stayed home one day from work and that is the only time I have ever seen anybody really. I mean everybody pretty much, in the town houses, there's nobody that not...everybody is retired except for one couple, as far as I know, the people I've met. So we don't really interact with people very much because we just don't, I mean I know a few people that work in my office that live up the road here.

Kyle: So you guys usually come in from the back of the house?

Both: Yes.

Kyle: And in that little bit of distance you don't get to see many people.

Rachael: Not really.

Kyle: Do you spend more time in your front yard or in the back yard?

Rachael: In the back, [laughter], we don't have a front yard...[laughter]

Thomas: We don't even have a yard...laughter...yeah we sit out there a lot.

Kyle: And so maybe with this unit in particular, because there's really no front porch, just kind of a stoop, all of your outside time is spent in the back.

Thomas: Yes.

4.3.3.3 The Built and Un-built Environment and the Relationship to the Streetscape

As one might expect, the attached housing did not have a strong connection to the formal street each unit faces. Rather, participants living along the central boulevard seemed to appreciate the aesthetic quality of the streetscape, as opposed to, its function or use. Specifically, the wide median was related to a feeling of openness similar to residential interpretations found in the phase one sub-neighborhood.

Kyle: Which experiences to you feel are the most important in making this feel like a unique neighborhood rather than just another subdivision?

Wendy: The style of the homes, that each one has its own individual look.

Fred: They have a family style home. They are not just a square box. They are warm and comfortable.

Wendy: The garages are set back. There are no garages right up from in any of them. And, the dual street out front makes you feel like you are not right on top of your neighbors. I don't feel that we are too close right across the street. Even though there's not a big front yard the median separates you from your neighbor.

However, unlike the phase one sub-neighborhood, residents in the attached housing did not report a feeling of ownership over this space. Rather, the alleys were seen as an extension of their homes and thus connected these units to an un-built environment largely hidden from the rest of the community.

Kyle: You mentioned the alleys, what is important about these alleys?

Wendy: We always loved the ones at the shore because all like trash went out there and we used to ride our bicycles but here is a little hilly. It was a different feeling you saw people in the back to their houses that is where people usually are.

Fred: It is actually a private alley.

Kyle: So even the alleys here feel like more of the extension of your home?

Wendy: Yes, we like it.

Fred: We walk the dog in alley and talk to our neighbors in the back of their homes. The front is kept on display and the alley takes care all of your trash removal and stuff that goes on.

Again, the relationship to the un-built environment serves as a lynchpin that connects the physical attributes to residential activities and ultimately, experiences of place. Not connected to the public streetscape, the focus of use in the attached housing is directed towards the rear of the units.

Kyle: Do you find yourself using that alley space for anything other than kind of like a driveway to get back into your home?

Thomas: We do walk on the alley. I mean, that's one part of the walking trails that we are talking about; we do walk down the alleys a lot, especially there's one on the back side of this house that we walk on off that road. There's one that runs all the way down the backside of those houses.

4.3.3.4 Summary of Physical Attributes in the Cottage Sub-Neighborhood

The investigation of physical attributes within the attached housing demonstrates that clearly proximity or density of housing alone is not enough to increase social interaction. Rather, built at the highest density, the rearward focus of the attached units on the more private realm of the neighborhood and the stronger connection with the alley presents fewer opportunities for social interaction. More importantly, these physical attributes are consistent with these participants' interpretation of place. That is, with more limited opportunities for interaction, the transformation of space into place for these participants focused on environmental context as opposed to social experiences.

4.4 Summary of Findings and Conclusions

This research project sought to identify the experiences that lead to the transformation of mere space into place for select residents within a neotraditional automobile suburb. This

project then proceeded to investigate the relationships that environmental attributes had to those identified experiences. Within the Village at Tom's Creek, the findings regarding the residential experiences of place were consistent with two separate 'sense of place' theories across multiple sub-groups.

Over half of the participants identified their house as being located within a sub-neighborhood of the Village at Tom's Creek. Within these sub-neighborhoods experiences of social interaction were interpreted as essential to the transformation of mere space into place. This conception of a sense of place is consistent with the 'existential' model that suggests unknown space acquires meaning through the daily routines of the participants interacting with other individuals. This research was not concerned with what that meaning may be and leaves open the question that multiple 'senses' of place (in terms of variable understandings of place) may exist.

Further investigation identified three environmental factors as contributing to the experiences of social interaction within these sub-neighborhoods. The proximity of the housing units, the design of public and private realms and the relationship to the streetscape emerged as inter-related themes and essential characteristics of the physical setting. Combined, these three physical attributes directed the focus and activities of the housing towards the public and semi-public spaces found in the front of the units. These environmental attributes were associated with specific activities and thus layered with meaning for participants within this sub-neighborhood. More importantly, these objective qualities fostered experiences of social interaction and were interpreted as central to the transformation of space into place for participants living within the phase one and cottage sub-neighborhoods. However, this relationship between physical design and social interaction is complex and layered with multiple contributing factors such as the routines of the neighborhood children, traffic and the social characteristics of the residents themselves.

For the other half of participants, weaker social bonds tended to generate a larger and perhaps more generic spatial conceptions of the neighborhood. These residents lived in the attached housing within the neighborhood and did not identify their units as belonging to a distinct sub-neighborhood.

Within this group, aesthetic interpretations of the environmental context were understood as the essential experiences of place. This group of residents also reported less group interaction and little informal contact with neighbors. Therefore, their sense of place was found to be more consistent with conceptions of 'genius loci' because their interpretations were focused on environmental qualities as opposed to social experiences.

The investigation of the physical attributes related to the attached units revealed a relationship to the built environment that was directly opposite of what was found in the sub-neighborhoods. Within these units, the lack of semi-public spaces and the primary relationship to the alley directed the focus and activities of the housing towards the more private realm of the neighborhood found in the rear of the units. Furthermore, constructed at the highest densities within the neighborhood, the increase proximity of

the attached housing did not increase social interaction. In fact, when talking about the proximity of the housing, the participants within this group were still focused on the privacy that each unit afforded them and their families.

These findings have allowed me to draw several important conclusions. First, within the Village of Tom's Creek, two theories regarding the nature and factors contributing to a sense of place seem to be valid in explaining the transformation of space into place. Therefore, the current direction within the literature to identify a single theory or to identify the most "valid" theory from a naturalistic perspective may be misguided (see Hay, 1988; Stedman, 2003a).

This research project suggests that both an interpretative and existential perspectives are not only valid but are also capable of co-existing within the same neighborhood. This implies that multiple 'senses' of place in terms of variable and diverse meanings of place may also exist with the village (see Cross, 2001; Eyles, 1985; Hummon, 1992). However, this research project was only focused on the experiences that contributed to the residential sense of place, not the meaning that was generated by these experiences and interpretations.

From my perspective, this finding implies that the development of a sense of place is a continual process in which individuals experience spaces on both an interpretive level and an existential level when the environment accommodates certain forms of social interaction. However, I would not term this process as being "hierarchical" in that existential interpretations are capable "overriding" environmental interpretations. Rather, these existential experiences of interaction may be just at the forefront of the conversations with participants who live in the sub-neighborhoods that accommodate such experiences because they are more of conscious, as opposed to, an interpretative sub-conscious experience. This speculation will be more fully developed in the following chapter.

In terms of the second conclusion, it is hypothesized that the variable physical attributes of the housing are related to the contrasting set of residential experiences and therefore the two 'sense of place' theories. Specifically, physical attributes that directed activities toward the front of the home and consequentially the public realm increased social interaction within the sub-neighborhoods and fostered an existential sense of place. Whereas, physical attributes that directed activities towards the more private realm of the neighborhood limited interaction and thus conceptually forced the residential sense of place to be based on aesthetic interpretations of the environmental qualities of the surrounding landscape.

Third, these identified relationships suggest that if a goal of residential design is to increase social interaction, placing units within a close proximity of each other is not enough alone to foster such experiences. The study of the attached housing clearly demonstrates that individuals are not more likely to interact with other neighbors at higher densities- alone. In addition, the study of the phase one sub-neighborhood revealed that proximity was important assuming that the neighbors' social characteristics

were compatible to each other. Similarities between the resident's age and lifestyle also influenced the likelihood of social interaction.

Therefore, assuming a level of homogeneity among residents, the connection of the housing to the public realm emerged as a primary design factor associated with social interaction. Specifically, participants that lived in units that demonstrated a strong connection to public and semi-public spaces located in the public realm of the neighborhood reported highest levels of interaction. These spaces included useable front porches, a semi-public courtyard and pedestrian controlled streetscapes. In contrast, the lack of semi-public spaces, a non-used streetscape, and a focus towards more private spaces in the rear of the housing fostered a lack of interaction and more aesthetic interpretations of place.

Fourth, these research findings do not allow me to conclude that interpretative or existential processes of engendering a sense of place can be valued over the other. That is, I am not saying that a sense of place that is informed primarily by social interaction is better than a sense of place informed by the environmental context. Certainly, there is overlap between the two. Rather, the distinction is made here to highlight that a designer can potentially influence both set of experiences related to the transformation of space into place. As a speculation, this idea will be further developed in the next chapter.

Finally, this project has demonstrated that when social interaction is limited, residential interpretations of place are more influenced by the aesthetic conditions and the surrounding environment or the 'genius loci.' Therefore, as recommended by the New Urbanism design tenets, neighborhood design should reinforce the unique identity of each place by adopting a consistent and distinctive architectural style that draws on local history, culture, geography and climate (Congress for the New Urbanism, 2000).

But, what happens when a site does not have a strong or perhaps even a positive 'genius loci?' Should contextually appropriate site design and attempts to endanger a sense of place be abandoned? Naturally, the answer for me is no. But, again what I am suggesting is not an 'either-or' style of design. Rather, this research has also demonstrated that social interaction fosters a sense of place for residential units with a strong connection to the public realm. Therefore, I propose that designers need to consider a holistic approach towards place that reflects the existing genius loci and the physical attributes that promote social interaction in order to ensure the transformation of mere space into place. However, such a proposition is clearly outside the bounds of a specific finding and therefore will be taken up in the next chapter.

CHAPTER 5: DISCUSSION

As was discussed in the previous chapter, the transformation of space into place for the participants living within the Village at Tom's Creek was consistent with two distinct, existing theories regarding the development of a sense of place. For over half of the participants, who lived in the single-family sub-neighborhoods, social interaction was the common experience that fostered a sense of place. Within the sub-neighborhoods, housing units tended to have a stronger connection to the public realm and residents tended to report greater activity and interaction within these spaces. Therefore, it was hypothesized that specific physical attributes of the residential environment contributed to the level of social interaction and ultimately an existential sense of place for this group of participants.

These physical attributes included the proximity of the housing, the connection between the public and private realm, and the relationship of the housing to the un-built environment. Other factors, such as similarities between the participants' interests, lifestyle and age did emerge throughout the interviews as contributing to the likeliness of neighborly interaction. However, these social characteristics were considered outside the influence of the design profession and therefore the scope of this research project.

These two sets of factors found to influence social interaction are emphasized here to make it clear that I am not advocating "environmental determinism." Physical attributes alone are not responsible for the level of interaction found in the study area. Rather, I would contend that this research demonstrates that neighborhood design, which directly connects individual units to the public realm via a system of well-developed semi-public spaces, better accommodates social interaction and thus allows for the development of an "existential" sense of place as defined in the literature review. However, this was not the case for all participants in the study area.

The study of attached residential units not located within sub-neighborhoods of the Village at Tom's Creek suggested a second relationship between the design of housing and the transformation of space. In contrast to the single-family sub-neighborhoods, aesthetic interpretations of the residential environment and the surrounding landscape emerged as the primary experience influencing the participants' sense of place. These attached housing units demonstrated a stronger connection to the rear of the house and the private realm of the residential landscape. Therefore, it was hypothesized that for these participants the design of this portion of the neighborhood limited social interaction and thus centered the development of a sense of place on interpretations of the environmental context. These findings are consistent with an alternative sense of place theory that conceptualized the phenomenon as "genius loci" as was discussed in the literature review.

This chapter begins by exploring the broad philosophical implications of these conclusions. This chapter then proposes an alternative sense of place theory based on the findings and discusses the specific implications for the design tenets of the New Urbanism movement. This chapter concludes by suggesting a paradigm for neighborhood design.

5.1 Philosophical Implications

What is place? This seemingly common-sense idea has been the subject of interpretation and debate throughout the course of human history. However, only recently have geographers attempted to define “place” as an academic concept central to their field of study and beyond. The result has been a diverse collection of perspectives ranging from descriptive, reductive, inductive and most recently, critical interpretations (see T. Creswell, 2004). Drawing on a phenomenological and an inductive perspective, it is possible to develop my interpretations in a philosophical context.

Place, to humanistic geographers such as Yi-Fu Tuan (1974; 1977), Anne Buttimer and David Seamon (1980), and Edward Relph (1976) was seen as a universal part of the human condition and a way of being-in-the-world. Specifically, Relph draws from the phenomenological concept of ‘intentionality’¹⁷ the conclusion that “places are profound centres of human existence.” (Relph, 1976 p.43) Therefore, for Relph, place is not merely a location or a list of characteristics. Place is a pre-scientific fact of life based on the way we experience the world while also determining how we experience the world (T. Creswell, 2004).

My findings state that specific experiences and interpretations are associated with the development of a sense of place. And, like Relph, I would describe place as a combination of a physical setting, the activities that take place in that setting and meaning associated with that setting. From this perspective, place is ultimately a human construct that is primarily located within our own minds but is tied to the objective physical realm and influenced by both subjective interpretations and existential experiences. Therefore, I would agree that place is an innate part of the human condition that both determines and is determined by our experiences. This perspective has forced me to conclude that we can never inhabit the objective, academic concept of “space.” We are slaves to the conscious and subconscious experience of place.

What does this mean for designers that wish to create place or foster a sense of place? I suggest that we need to continue to research and discover which experiences are associated with a sense of place from the perspective of the individuals interacting with that environment. Stating the idea that humans never inhabit space stresses the fact that we (as designers) need to create environments that allow for certain experiences to take ‘place.’ This is not environmental determinism. It is an assumption, based on the findings, that certain experiences are more valuable in the transformation of space to place, which is a dynamic process of mental construction and inherent human need.

This phenomenological perspective of place has been criticized because Heidegger’s idealized ‘Black Forest Cabin’ or Relph’s ‘authentic’ environments are difficult to imagine in the current context of mobility and globalization. But, as demonstrated by this research, the transformation of space into place still occurs within the newest of

¹⁷ From a phenomenological perspective, intentionality is the idea that the objective and subjective are inherently intertwined and cannot be separated (see Seamon, 2000).

residential developments that attempt to do more than just provide housing. Therefore, we do not need to abandon this romantic notion of place. Rather, we need to revitalize this ‘way of knowing’ that conceptualizes place as an innate human need and values the role of more subjective or ‘invisible’ factors in our lives if, we hope to create more satisfying and sustainable human environments.

Just as we may derive visual pleasure from looking at a particular picture, or a particular landscape, a more profound engagement must depend upon more than the visual, upon those things that remain invisible... Perhaps this is why art, like place needs a little time, a little patience, and no little sensitivity, in order that we might then become aware of what else it is, beyond that of which we are first aware. (Dean & Millar, 2005)

5.2 Theoretical Implications

As a central research question, this project examined if there were common threads apparent throughout the residential experiences in a neotraditional neighborhood that would allow us to develop a holistic understanding of a sense of place in a contemporary residential setting. Within the Village of Tom’s Creek, two existing theories regarding the nature and factors contributing to a sense of place seem to be valid in explaining the transformation of space into place.

Within the single-family sub-neighborhoods of the village, experiences of social interaction were interpreted as essential to the transformation of mere space into place. This conception of a sense of place is consistent with the ‘existential’ model that suggests unknown space acquires meaning through the daily routines of the participants interacting with other individuals. Specifically, the authors associated with this philosophical framework depict human behaviors and activities as central in the development of a sense of place (i.e. Jackson, 1994; Relph, 1976; Tuan, 1974, 1977, 1980).

For the other half of participants living in attached housing, their experience of place was based less on social interaction. Rather the aesthetic interpretations of the physical setting were found to be essential in their development of a sense of place. These participants also reported weaker social bonds and tended to generate more encompassing spatial conceptions of the neighborhood. Therefore, their sense of place was proposed to be consistent with the conceptions of a non-rooted ‘genius loci’ because their interpretations were focused on environmental qualities developed in a relatively short period of time (Green, 1999; Lewis, 1979; Norberg-Schultz, 1980).¹⁸

In the context of this study area, rootedness was not found to be a factor contributing to development of a sense of place. This is consistent with the literature that cites a trend in modern cultures and specifically American communities towards an increasingly ‘mobile’ society that is less rooted to place (Relph, 1976; Tuan, 1977, 1980). Therefore, being rooted may be an innate human need as suggested by Hay (1998b), but it is not a

¹⁸ See chapter two for a full discussion of the existing sense of place theories and literature review.

key requirement for the development of a sense of place. Rather, it may be best reserved as a descriptor of more indigenous cultures and strived for in modern contexts that wish to deepen their sense of place experiences.

From my perspective, these distinctions between the design of the residential units and the experiences associated with them does not allow us to conclude that one type of a sense of place can be preferred over the other. That is, I am not saying that a sense of place that is informed primarily by social interaction is better than a sense of place informed by the environmental context. Nor, does it suggest to me that existential experiences “override” interpretative critiques, given the context. Rather, the sub-neighborhoods’ focus on social interaction might be better explained by the fact that this is more of a conscious activity and therefore at the forefront of these participants’ thoughts. Therefore, I have proposed that the transformation of space into place happens at both levels, assuming that the design of the residential environment allows for social interaction. Furthermore, the distinction suggests to me that community design must ultimately respond to both the experiences and interpretations of place to guarantee the likelihood of spatial transformation.

Therefore, I would argue that in the context of this research, sense of place is best conceptualized as a complex process of spatial transformation that is influenced on both an interpretative and existential level, if and only if, the design of the environment accommodates the required human experiences of social interaction. Given such neighborhood design, the subconscious interpretations of place are simply subtler in the ‘taken-for-granted’ context of lived-experience. This theoretical explanation regarding the development of a sense of place is depicted in the following graphic (see Fig. 5.1).

Diagram of Proposed Sense of Place Theory

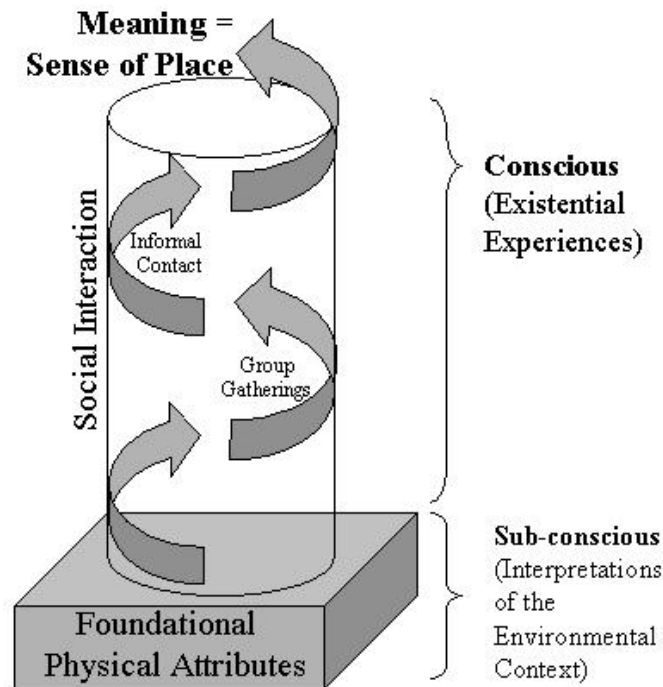


Fig. 5.1. Diagram of proposed sense of place theory.
Graphic developed by the author.

From this perspective, the meaning that is generated and associated with this transformation does not inform an individual's sense of place rather, it is the sense of place. However, because this project was investigating the experiences that contributed to the transformation, it leaves open the question that multiple 'senses' of place (in terms of variable meanings of place) may exist as argued by Cross (2001), Eyles (1985), and Hummon (1992).

This theory regarding the transformation of space into place is supported by Steele's (1981) work, which depicts sense of place as the combination of physical setting, social setting and psychological factors. His work is also consistent with my thoughts that the 'genius loci' is a separate concept best reserved for the combination of characteristics that give some locations a special "feel" or personality (Steele, 1981). More importantly, these findings also suggest that the current direction within the literature to identify the most "valid" theory from a naturalistic perspective that can be generalized across populations (see Stedman, 2003a) are misguided because the variables for a given study area are too subjective and resist quantification. Sense of place is a complex process of transformation that defies narrow definitions that overemphasize a single contributing factor.

5.3 Implications for Design

In the second phase of the analysis, this project generally questioned if the physical environment is capable of fostering a sense of place and specifically investigated the role of neotraditional community design in this process. The Village at Tom's Creek was described as a neotraditional automobile suburb and characterized as a local interpretation of the TND design tenets contained within the rubric of the "New Urban" movement. The study of a local neotraditional interpretation was justified based on the fact that these interpretations are more typical of the new communities being built in mass around the country. Given this hierarchy of nomenclature, the findings from this research do suggest several implications regarding both the assumptions contained within the literature of the movement and the specific design tenets found within TND models.

5.3.1 Implications for the New Urbanism Movement

As a planning and design movement, there are several socially and environmentally sound design concepts contained within the Charter of the New Urbanism (MacCannell, 1999). The Charter is a reaction against sprawl-like development that dominated the American landscape after World War II and the associated reliance on the automobile. As a result, the New Urban movement calls for walkable, mix-use neighborhoods that have a clearly defined center reminiscent of Perry's earlier work on the neighborhood unit (Perry, 1929). The charter also emphasizes the need for pedestrian friendly streetscapes, the incorporation of public spaces as places of shared use, and the inclusion of schools and regional corridors (see Congress for the New Urbanism, 2000).

The charter also recommends that neighborhood design should reinforce the unique identity of each place by adopting a consistent and distinctive architectural style that draws on local history, culture, geography and climate (Congress for the New Urbanism, 2000). This design tenet is consistent with the genius loci theory, which claims that the physical environment itself is capable of fostering a sense of place given the presence of unique atmospheric qualities (see Lewis, 1979; Norberg-Schultz, 1980). Therefore, the existing language within the charter is largely based on an aesthetic focus and an interpretative understanding of the construct.

This study of the Village at Tom's Creek found that social interaction fostered an existential sense of place for participants living in single-family sub-neighborhoods. Whereas; interpretations of the environmental context fostered more of an aesthetic sense of place for participants living in attached housing. It was speculated that space is transformed into place on both an interpretative and existential level however; an existential sense of place is only possible when the designed residential environment accommodates certain forms of social interaction.

Therefore, this research did partially support the underlying New Urbanism assumption that the physical environment itself is capable of fostering a sense of place. However, this was found to be the case only in the context of the attached housing where the design of the outdoor environment limited social interaction. Therefore, I would conclude that the movement's claims of fostering a sense of place could be strengthened by including a provision that also requires sub-neighborhood scale, semi-public outdoor spaces in all

neighborhood design. As was found in this research, shared semi-public spaces or “residential third places” tied individual units to the public realm and accommodated social interaction. “A third place is a generic designation for a great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms [within] home and work” (Oldenburg, 1989 p. 16). Even though Oldenburg is conceptualizing “third places” as more public gathering spaces such as bars and bookstores, I think the analogy works well here.

This research found that residents living within homes directly connected to “residential third places” or semi-public gathering spaces in the front of the housing tended to identify social interaction as the primary experience contributing to their sense of place. This does not suggest that there is a direct cause and effect relationship. Rather, it suggests that such spaces are important in accommodating the development of an existential sense of place. Furthermore, the current call for “public spaces as places of shared use” within the New Urban Charter is too large in scale because these spaces are primarily interpreted as neighborhood parks. It is not simply public space that is important from this design standpoint, but it is the type of space. What is needed are smaller more intimate semi-public spaces, such as courtyards, directly connected to each residential unit.¹⁹

In short, I am suggesting that the movement should also attempt to foster a sense of place within their communities by engendering social interaction given the existing focus on the environmental context. Specifically, the charter should call for the inclusion of “residential third places” or semi-public gathering spaces in the public realm of all neighborhood design. This provision would present the designer with an additional means of ‘inculcating’ a sense of place based on interaction, rituals and shared experiences. Such a provision would encourage development of these spaces and would also present a broad realm of design possibilities.

I’m inclined to believe that the average American still associates a sense of place not so much with architecture or a monument or a designed space as with some event, some daily or weekly or seasonal occurrence which we look forward to or remember and which we share with others, and as a result the event becomes more significant than the place itself. Moreover, I believe that this has always been the common or vernacular way of recognizing the unique quality of the community we live. (Jackson, 1994 pg. 159-160)

5.3.2 Implications for the TND Design Tenets

Although not stated specifically within the Charter of the New Urbanism, two design features have become synonymous with traditional neighborhood design. Perhaps because they are the most obvious visual cues that contrast contemporary sprawl development, large, useable front porches and relatively tight alley networks seem to be interpreted by the mainstream development community and some architectural critics as key design features of traditional neighborhoods (Hall & Porterfield, 2001; Kunstler, 1998; Wentling, 1995). These design features have been cited time and time again as

¹⁹ A complete theory of neighborhood design with regards to the development of a sense of place is presented in the final section of this chapter.

primary factors contributing to a neighborhood's "sense of place" and have been utilized by the development community to market neo-traditional neighborhoods as "places of community."

To make the neighborhood function better, streets and sidewalks must become more congenial places. Houses must not have big garages dominating the street... There are many ways to make garages less obtrusive. Traditionalist designers often lay out communities to have garages at the rear, along alleys. By this simple stroke the houses are freed to have attractive, communicative fronts... The setting can become more gardenlike, which might encourage people to spend time out front, where they will be apt to encounter neighbors and passersby.

A usable front porch – which Wentling (see Wentling, 1995) describes as at least six to eight feet deep and ten to twelve feet wide- encourages residents to occupy the area in the front of the house, where there are opportunities for contact with neighbors... these measures give the streets a measure of dignity and personality. They invite people to linger. (Langdon, 1994 pg. 155 -156)

The findings from this research seem to support the neotraditional emphasis on the front porch in terms of its ability to foster a sense of place. Specifically, participants that lived in units that demonstrated a strong connection to public and semi-public spaces located in the front of the housing reported the highest levels of social interaction. And, social interaction was essential in the development of these participants' sense of place. So, is the inclusion of a front porch enough to "inculcate" the sense of place suggested by Lewis (1979)? Probably not, several other design and non-design factors emerged during the interviews.

First, the front porches within the sub-neighborhoods of the village seemed to be more significant in terms of neighborly interaction when they were directly connected and adjacent to more public spaces the residents felt they had a level of ownership or control over. Within the Village at Tom's Creek, these spaces included a semi-public courtyard and a pedestrian dominated streetscape controlled by the residents. Combined, this relationship to the un-built environment and the design of the public realm drew the focus of activities towards the front of the house.

This finding may be somewhat contradicting to the New Urbanism literature because the pedestrian streetscape in the village that residents felt they had the most control over was in fact, very suburban in nature. However, I would not argue that this means all residential streets should be more suburban in character. Rather, designers should include traffic calming measures that not only slow down vehicle speeds but more importantly, put a level of control and feeling of ownership back in the hands of the residents themselves.

Second, the residential units have to be within a close proximity of each other. It is difficult to tie down a specific number, but the distance between the front doors of single-family homes within the village that reported a high degree of interaction ranged from

being 45 to 80 feet apart. Although these numbers may vary across neighborhood communities, a good rule of thumb may be based on the maximum distance it takes to comfortably acknowledge another individual. Then, residents may be more likely to pause and take the time to interact with each other. This speculation indicates further research is needed on the subject.

Finally, there are social factors that are related to interaction that community design has a very limited relationship with. Throughout the interviews, some participants reported that the resident's age and lifestyle also influenced the likelihood of social interaction. However, this fact should not be used as an excuse to ignore the other findings. Rather, it should be viewed as a compelling reason that designers should provide a more social and pedestrian-friendly environment in the public realm if, we hope to increase understanding and diversity within neighborhoods that divided generations in the past.

Therefore, I would argue that this research indicates there are relationships between neighborhood design and the development of an existential sense of place. Specifically, residential design that ties housing to the public realm engenders social interaction and in doing so, is capable of inculcating a sense of place as defined from an existential perspective. Therefore, the TND emphasis on the front porch is appropriate but needs to be expanded if the New Urban movement desires to support their underlying, normative claim that good design can have a measurably positive effect on sense of place, which it holds as essential to a healthy, sustainable society.

This research also tends to contradict the neotraditional emphasis on including alleyways in new developments. Traditional neighborhood design tenets favor layouts that direct the majority of automotive access to the rear of both residential and commercial units. It is believed that by limiting driveways and reducing the "aesthetic burden" of a garage, a system of alley networks contributes to the overall quality of the residential environment. Also, it is proposed that the creation of a secondary space for utilities removes the "messy stuff" associated with domestic and commercial life from the public eye (Duany et al., 2000). Therefore, the call for a system of rear access is largely based on aesthetic concerns and not directly tied to the social environment in the TND literature.

Throughout the interviews for this research, the participants living in units connected to an alley did seem to value the aesthetic benefits this system of access afforded their immediate neighborhood. The alleys in Village at Tom's Creek were also associated with more polite social interaction because they were found to be used in conjunction with the system of walking trails. Thus, the alleys did connect the more private realm of the housing with a secondary, semi-private space within the neighborhood. Such findings support claims that recreating the environmental complexity of the archaic back-alley may lead to the design of more satisfactory neighborhoods (Martin, 2002). However, this research ultimately found that emphasizing the connection to the alley while limiting the connection to public realm found in the front of the housing seems to decrease the overall opportunity for social interaction and thus the existential development of a sense of place.

Specifically, the findings at the Village in Tom's Creek indicated that physical attributes of the residential landscape that directed activities towards the rear of the home (and thus the more private realm of the neighborhood) limited social interaction. Thus, units that focused on an alley as the primary connection to the neighborhood fostered a sense of place based on aesthetic interpretations of the environmental context and more encompassing spatial definitions. Therefore, I would argue that the TND design tenets' concern for aesthetic qualities must not over emphasize the importance of an alley network. The alleys do present benefits to the residential environment. However, community design interpretations that stress this connection and do not provide a system of semi-public spaces that connect the housing to the public realm of the neighborhood run the risk of limiting the residents' ability to develop an existential sense of place.

As a local interpretation of traditional neighborhood design, the attached housing sections of the village overemphasize the alley by not providing a series of semi-public spaces in the front of the housing. This set of design attributes is also related to TND calls for shallow residential setbacks in an attempt to create a greater feeling of enclosure and a pedestrian friendly streetscape. This research does support calls for shallow setbacks, but it also demonstrates that a sense of place is not related to a sense of enclosure. Therefore, as is the case in the village's attached housing, shallow setbacks can be too shallow. Specifically, further research is needed that defines the minimum space required to create a semi-public realm because this project found that these spaces are essential to social interaction and related to an existential sense of place.

5.4 Proposed Neighborhood Design Theory

The findings of this research hold implications for the broader conversation regarding community design. This research has demonstrated that providing a clearly defined system of semi-public spaces or "residential third places" in the public realm is tied to increased opportunities for social interaction. Based on these findings and the proposed relationship between design attributes and sense of place, community design should focus on the connection of housing to the public realm as a primary concern.

With regards to the increasing sensitivity to contextual design reflected in the "critical regionalism" design movement (see Kelbaugh, 2002), I would conclude that claims of fostering a sense of place could be strengthened by also focusing on the role social interaction plays in the development of a sense of place. Many designers already recognize the benefits of contextually responsive design in terms of creating a 'unique' environment. However, this research found that both interpretations of the physical environment and experiences of social interaction were essential in the transformation of space into place. By additionally focusing on existential experiences, designers could also fulfill their desire to foster a sense of place in residential communities by providing the necessary spaces for interaction, rituals and shared experiences.

Finally, it is not simply public space that is important in terms of accommodating social interaction, but it is the type and quality of space that is designed in the residential environment. Specifically, to accommodate social interaction and thus an existential sense of place, neighborhood design has to provide a clear transition of zones from the

private realm to public realm. Based on the findings of this research, this transitional set of spaces has three requirements.

First, the design of the “un-built” environment²⁰ has to directly tie each individual house to a shared semi-public “third place” within a neighborhood. These residential third places should be developed on the sub-neighborhood scale and accommodate a maximum of 20 households. Second, residential third places have to be within a close proximity of each unit and each unit has to be in a close proximity of its neighbors. This proximity should be based on the maximum distance individuals can comfortably acknowledge their neighbors from the semi-private space adjacent to their house. Within the village, this distance was no greater than 80 feet from front door to front door and spanning the front porch. However, this semi-private space does not need to be a “front porch” per se. Again, it is the semi-private quality of the space that needs to connect individual houses to the more communal third place at a human scale.

And finally, the residential third place needs to be dominated and controlled by the residents themselves, as opposed to, the automobile. The key word in this final standard is “control.” The residents seem more likely to use a space when they feel they have ownership over it, especially if that space is more public in nature. It is not enough to preserve larger tracts of “common” space that is typical of “cluster” design. Rather, as was found in the phase one sub-neighborhood, the residents used the street itself as playground and communal gathering area (or residential third place) because each homeowner took control over the traffic and thus fostered a suitable environment for interaction. This was not the ‘designated’ green space that was set aside for the collective good of the community and the benefit of the existing ecological system. This fact implies to me that residential third places are an innate human need capable of developing even when they are not designed. But, then we have to question ourselves as designers- why would we not provide for such an important community design element that has the possibility of fostering a more socially sustainable environment?

In my concluding remarks, I would like to propose two answers, which for me are equally troubling. First, as stated at the start of this project, to this point there was no empirical research that investigated the development of a sense of place in the context of a contemporary American subdivision. So, there may be a remote possibility that designers did not know or understand the importance of human scaled, shared, semi-public spaces developed for distinct sub-neighborhoods within each community. Therefore, hopefully my research, further research and the dissemination of such information will directly contribute to the design of the “real world.” However, I fear that to some extent I will be “preaching to the choir.” The professional design community is not negligent to similar conclusions drawn by the likes of Jane Jacobs (1961), J.B. Jackson (1994) or William Whyte (1993).

This leads me to my second explanation. In this battle against the continue development of “placeless” environments, we are really struggling against a larger social norm titled

²⁰ The term “un-built” environment is used here to designate the space, as opposed to, the object in a figure-ground study.

the “American Dream.” Supported by federal policies, fostered by developers and enabled by government subsidies of cheap oil, designers that value the innate human need for place, as opposed to, nostalgic facades of times that have passed, are in the fight of their life. Can an individual or team of designers win such a one-sided fight? I am skeptically optimistic.

Trends and norms change when there is a shift in the social consciousness. Is the current level of environmental awareness coupled with increased gas cost enough for us to question our policies and social standards? Maybe, or maybe not. Regardless, when we do truly realize our contemporary development patterns are not sustainable and are not conducive to the social creators we are, I will hopefully still be here to remind all of us that the solution is not simply increased density. We also have to fulfill our innate human need for place.

Thus, the great importance of a place to sit, trees to sit under, a passing parade to look at, sunlight unobstructed, chance encounters. Anything that makes this human congress easier, more spontaneous, more pleasant is at the heart of the most ancient function of the city: a place where people come together.

Face to face. (Whyte, 1993 p. 145)

REFERENCES

- Altman, I., & Low, S. (1992). *Place Attachment* (Vol. 12). New York, NY: Plenum Press.
- Anfara, V., Brown, K., & Mangione, T. (2002). Qualitative Analysis on Stafe: Making the Research Process more Public. *Educational Researcher*, October, 28-38.
- Beidler, K. (2002). *Towards an Understanding of the Horizontal Landscape: A Phenomenological Study of Sense of Place in Chautauqua Park, Des Moines, Iowa*. Unpublished Master's Thesis, Iowa State University, Ames, IA.
- Bookout, L. (1992). Neotraditional Town Planning; A New Vision for the Suburbs. *Urban Land*, 51(1), 20 - 26.
- Boss, P., Dahl, C., & Kaplan, L. (1996). The Use of Phenomenology for Family Therapy Research: The Search for Meaning. In D. Sprenkle & S. Moon (Eds.), *Research Methods in Family Therapy* (pp. 83-106). New York, NY: Guilford.
- Brown, B., & Cropper, V. (2001). New Urban and Standard Suburban Subdivisions; Evaluating Psychological and Social Goals. *Journal of the American Planning Association*, 67(4), 402 - 419.
- Buttimer, A. (1980). Home, Reach and the Sense of Place. In Buttimer & D. Seamon (Eds.), *The Human Experience of Space and Place* (pp. 166-187). London: Croom Helm.
- Buttimer, A., & Seamon, D. (Eds.). (1980). *The Human Experience of Space and Place*. London: Croom Helm.
- Calthorpe, P. (1989). The Pedestrian Pocket. In R. LeGates & F. Stout (Eds.), *The City Reader* (pp. 350-358). New York, NY: Routledge.
- Calthorpe, P. (1993). *The Next American Metropolis; Ecology, Community, and the American Dream*. New York, NY: Princeton Architectural Press.
- Chaffin, V. F. (1989). Dwelling and Rhythm: The Isle of Brevelle as a Landscape Home. *Landscape Journal*, 7, 96-106.
- Christoforidis, A. (1996). *New Alternatives to the Suburbs: Neotraditional Developments*. Paper presented at the Proceedings of the 27th Annual Conference of the Environmental Design Research Association, Edmond, OK.
- Congress for the New Urbanism. (2000). Charter for the New Urbanism. In A. Duany, E. Plater-Zyberk & J. Speck (Eds.), *Suburban Nation; The Rise of Sprawl and the Decline of the American Dream* (pp. 257 - 265). New York, NY: North Point Press.
- Cox, S. (undated). The Village at Tom's Creek... "A Great Place to Come Home To". *Builder/Architect, Southwest Virginia Edition*.
- Creswell, J. (1998). *Qualitative Inquiry and Research Design, Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publishing.
- Creswell, T. (2004). *Place: A Short Introduction*. Malden, MA: Blackwell Publishing.
- Cross, J. (2001). *What is "Sense of Place?"* Paper presented at the The Twelfth Headwaters Conference November 2-4, 2001, Western State College.
- Day, K. (2003). New Urbanism and the Challenges of Designing for Diversity. *Journal of Planning Education and Research*, 23, 83-95.
- Dean, T., & Millar, J. (2005). *Art Works Place*. New York, NY: Thames & Hudson.
- Denzin, N., & Lincoln, Y. (2000). Introduction: The Discipline and Practice of Qualitative Research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (Second Edition ed., pp. 1-30). Thousand Oaks, CA: Sage.

- Duany, A., Plater-Zyberk, E., & Speck, J. (2000). *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press.
- Duany, A., & Talen, E. (2002). Transect Planning. *Journal of the American Planning Association*, 68(3), 245-267.
- Egoz, S., Bowring, J., & Perkins, H. (2006). Making a 'Mess' in the Countryside: Organic Farming and the Threats to Sense of Place. *Landscape Journal*, 25(1), 54 -66.
- Embree, L. (1998). Phenomenological movement. In E. Craig (Ed.), *Routledge Encyclopedia of Philosophy* (Vol. 7, pp. 333-343). New York: Routledge.
- Eyles, J. (1985). *Senses of Place*. Warrington, England: Sliverbrook Press.
- Flick, U. (1998). *An Introduction to Qualitative Research*. London: Sage.
- Gay & Keesee Incorporated. (1999). *The Village at Tom's Creek: Application for Change of Zoning Classification*. Blacksburg, VA.
- Geertz, C. (1973). *The Interpretations of Cultures*. New York, NY: Basic Books Inc.
- Green, R. (1999). Meaning and Form in Community Perception of Town Character. *Journal of Environmental Psychology*, 19(3), 311-329.
- Gustafson, P. (2001). Meanings of Place: Everyday Experiences and Theoretical Conceptualizations. *Journal of Environmental Psychology*, 21(1), 5 - 16.
- Hall, K. B., & Porterfield, G. A. (2001). *Community By Design: New Urbanism for Suburbs and Small Communities*. McGraw-Hill Professional.
- Hammersley, M. (1992). *What's Wrong with Ethnography? Methodological Explorations*. London: Routledge.
- Hay, R. (1988). Toward a Theory of Sense of Place. *Trumpeter*, 5(4), 159-164.
- Hay, R. (1998a). Sense of Place in Developmental Context. *Journal of Environmental Psychology*, 18(5), 5-29.
- Hay, R. (1998b). A Rooted Sense of Place in Cross-cultural Perspective. *The Canadian Geographer*, 42(6), 245-266.
- Heidegger, M. (1993). Being and Time: Introduction. In D. Krell (Ed.), *Martin Heidegger Basic Writings* (Second ed., pp. 37-89). San Francisco: Harper Collins.
- Hester, R. (1993). Sacred Structures and Everyday Life: A Return to Manteo, North Carolina. In D. Seamon & R. Mugerauer (Eds.), *Dwelling, Place and Environment; Towards a Phenomenology of Person and World* (pp. 271-298). Boston: Martinus Nijhoff Publishers.
- Hough, M. (1990). *Out of Place; Restoring Identity to the Regional Landscape*. New Haven: Yale University Press.
- Hughes, V. (2002). Engendering a Sense of Place: Why are Some Places More Successful than Others? *Landscape Design, March*(308), 33-36.
- Hummon, D. (1992). Community Attachment: Local Sentiment and Sense of Place. In I. Altman & S. Low (Eds.), *Place Attachment* (Vol. 12, pp. 253-278). New York, NY: Plenum Press.
- Husserl, E. (1970). The Vienna Lecture; Philosophy and the Crisis of European Humanity (D. Carr, Trans.). In J. Wild (Ed.), *The crisis of European sciences and transcendental phenomenology; An introduction to phenomenological philosophy* (pp. 269-299). Evanston, IL: Northwestern University Press.
- Inwood, M. (1997). *Heidegger: A Very Short Introduction*. New York: Oxford University Press.

- Jackson, J. B. (1994). *A Sense of Place, a Sense of Time*. New Haven: Yale University Press.
- Jacobs, J. (1961). *The Death and the Life of Great American Cities*. New York: Random House.
- Jorgensen, B., & Stedman, R. (2001). Sense of Place as an Attitude: Lakeshore Owners Attitudes Toward Their Properties. *Journal of Environmental Psychology*, 21, 233-248.
- Jorgensen, B., & Stedman, R. (2006). A Comparative Analysis of Predictors of Sense of Place Dimensions: Attachment to, Dependence on, and Identification with Lakeshore Properties. *Journal of Environmental Management*, 79, 316 - 327.
- Katz, P. (1994). *The New Urbanism: Toward an Architecture of Community*. New York, Ny: McGraw-Hill Inc.
- Kelbaugh, D. (2002). *Repairing the American Metropolis: Common Place Revisited*. Seattle, WA: University of Washington Press.
- Kim, J., & Kaplan, R. (2004). Physical and Psychological Factors in Sense of Community: New Urbanist Kentlands and Nearby Orchard Village. *Environment and Behavior*, 36(3), 313-340.
- Knack, R., & Bunnell, G. (2003). A Suburban Success [and] How the City Center Marketplace Helped to Strengthen Westminster's Identity and Sense of Place. *Planning*, 69(1), 30-33.
- Kunstler, J. H. (1993). *The Geography of Nowhere; The Rise and Decline of America's Man-Made Landscape*. New York, NY: Simon and Schuster.
- Kunstler, J. H. (1998). *Home from Nowhere: Remaking our Everyday World for the Twenty-First Century*. New York, NY: Touchstone.
- Lalli, M. (1992). Urban-Related Identity: Theory, Measurement, and Empirical Findings. *Journal of Environmental Psychology*, 12, 285-303.
- Langdon, P. (1994). *A Better Place to Live: Reshaping the American Suburb*. Amherst, MA: The University of Massachusetts Press.
- Lee, T. (2000). Place Making in Suburbia: Reinventing Suburban Communities with a Sense of Place. *Urban Land*, 59(10), 72-79, 112-113.
- Lewis, P. F. (1979). Defining a Sense of Place. *The Southern Quarterly, The University of Southern Mississippi*, 17(3&4), 24-46.
- Lincoln, Y., & Guba, E. G. (1985). *Naturalistic Inquiry*. Thousand Oaks, CA: Sage.
- Lund, H. (2003). Testing the Claims of New Urbanism; Local Access, Pedestrian Travel, and Neighboring Behaviors. *Journal of the American Planning Association*, 69(4), 414 - 429.
- Lynch, K. (1960). *The image of the City*. Cambridge, MA: MIT Press.
- MacCannell, D. (1999). 'New Urbanism' and Its Discontents. In J. Copjec & M. Sorkin (Eds.), *Giving Ground: The Politics of Propinquity* (pp. 106-130). New York, NY: Verso.
- Martin, M. D. (2002). Replacing Alleys. *Landscape Journal*, 21(1), 123-133.
- Meier, K., & Brudney, J. (2002). *Applied Statistics for Public Administration* (Fifth Edition ed.). Fort Worth, Texas: Harcourt.
- Meinig, D. W. (1979). *The Interpretation of Ordinary Landscapes: Geographical Essays*. New York, NY: Oxford University.

- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (Second Edition ed.). Thousand Oaks, CA: Sage.
- Million, M. (1992). *It was Home: A Phenomenology of Place and Involuntary Displacement as Illustrated by the Forced Dislocation of Five Southern Alberta Families in the Oldman River Dam Flood Area*. Unpublished Doctoral Dissertation, Saybrook Institute Graduate and Research Center, San Francisco, California.
- Moran, D. (2000). *Introduction to Phenomenology*. New York, NY: Routledge.
- Morse, J., & Richards, L. (2002). *Readme First for a User's Guide to Qualitative Methods*. Thousand Oaks, CA: Sage.
- Moustakas, C. (1994). *Phenomenological Research Methods*. Thousand Oaks, CA: Sage Publishing.
- Nasar, J. (2003). Does Neotraditional Development Build Community. *Journal of Planning Education and Research*, 23, 58 - 68.
- Nogue' i Font, J. (1993). Toward a Phenomenology of Landscape and Landscape Experience: An Example from Catalonia. In D. Seamon (Ed.), *Dwelling, Seeing and Designing: Toward a Phenomenological Ecology*. Albany, New York: SUNY Press.
- Norberg-Schultz, C. (1980). *Genius loci: Towards a Phenomenology of Architecture*. London, England: Academy Editions.
- Oldenburg, R. (1989). The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars Hair Salons, and other Hangouts at the Heart of a Community. In (pp. 336). New York, NY: Marlowe & Company.
- Paradis, T. (2000). Main Street Transformed: Community Sense of Place for Nonmetropolitan Tourism Business Districts. *Urban Geography*, 21(7), 609-639.
- Patton, M. (1990). *Qualitative Evaluation and Research Methods* (2nd Edition ed.). New Berry Park, CA: Sage.
- Patton, M. (2002). *Qualitative Research and Evaluation Methods* (Third ed.). Thousand Oaks, CA: Sage.
- Perry, C. (1929). The Neighborhood Unit. In *Neighborhood and Community Planning; Regional Survey* (Vol. VII, pp. 22-202). New York: Regional Plan of New York and its Environs.
- Plas, J., & Lewis, S. (1996). Environmental Factors and Sense of Community in a Planned Town. *American Journal of Community Psychology*, 24(1), 109 - 143.
- Pocius, G. (1991). *A Place to Belong: Community Order and Everyday Space in Calvert, Newfoundland*. Athens, GA: The University of Georgia Press.
- Pretty, G., Chipuer, H., & Bramston, P. (2003). Sense of Place amongst Adolescents and Adults in Two Rural Australian Towns: The Discriminating Features of Place Attachment, Sense of Community and Place Dependence in Relation to Place Identity. *Journal of Environmental Psychology*, 23, 273-287.
- Proshansky, H., Fabian, A., & Kaminoff, R. (1983). Place-identity: Physical World Socialization of the Self. *Journal of Environmental Psychology*, 3(1), 57 - 83.
- Relph, E. (1970). An Inquiry into the Relations between Phenomenology and Geography. *Canadian Geographer*, 14(3), 193-201.
- Relph, E. (1976). *Place and Placelessness*. London: Pion.

- Relph, E. (1981). *Rational Landscapes and Humanistic Geography*. New Jersey: Barnes and Noble Books.
- Relph, E. (1984). Seeing, Thinking and Describing Landscapes. In Saarinen, D. Seamon & Sell (Eds.), *Environmental Perception and Behavior, An Inventory and Prospect* (pp. 209-223). Chicago: The University of Chicago, Department of Geography Research Paper No. 209.
- Rubin, H., & Rubin, I. (1995). *Qualitative Interviewing; The Art of Hearing Data*. Thousand Oaks, CA: Sage Publications.
- Ryden, K. C. (1993). *Mapping the Invisible Landscape: Folklore, Writing and the Sense of Place*. Ames, IA: University of Iowa Press.
- Salvesen, D. (2002). The Making of Place. *Urban Land*, 61(7), 36 - 41.
- Sancar, F. H. (1994). Paradigms of Postmodernity and Implications for Planning and Design Review Processes. *Environment and Behavior*, 26(3), 312-337.
- Schwandt, T. (2000). Three Epistemological Stances for Qualitative Inquiry; Interpretivism, Hermeneutics, and Social Constructionism. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (Second Edition ed., pp. 189-213). Thousand Oaks, CA: Sage.
- Schwandt, T. (2001). *Dictionary of Qualitative Inquiry; Second Edition*. Thousand Oaks, CA: Sage.
- Seamon, D. (1979). *A Geography of the Lifeworld*. New York, NY: St. Martin's.
- Seamon, D. (1984). Philosophical Directions in Behavior Geography with an Emphasis on the Phenomenological Contribution. In Saarinen, D. Seamon & Sell (Eds.), *Environmental Perception and Behavior, An Inventory and Prospect* (pp. 167 - 178). Chicago: The University of Chicago, Department of Geography Research Paper No. 209.
- Seamon, D. (1989). Humanistic and Phenomenological Advances in Environmental Design. *Humanistic Psychologist*, 17, 280-293.
- Seamon, D. (1990). *Using Pattern Language to Identify Sense of Place*. Paper presented at the Coming of Age. EDRA Proceedings.
- Seamon, D. (2000). A Way of Seeing People and Place; Phenomenology in Environmental-behavior Research. In Wapner (Ed.), *Theoretical Perspectives in Environmental-behavior Research* (pp. 157 - 178). New York, NY: Plenum Publishers.
- Seidman, I. (1998). *Interviewing as Qualitative Research; A Guide for Researchers in Education and the Social Sciences*. New York, NY: Teachers College Press.
- Shamai, S. (1991). Sense of Place: An Empirical Measurement. *Geoforum*, 22, 347-358.
- Shamai, S., & Ilatov, Z. (2005). Measuring Sense of Place: Methodological Aspects. *Tijdschrift voor Economische en Sociale Geografie*, 96(5), 467 - 476.
- Squires, G. (2002). Urban Sprawl and the Uneven Development of Metropolitan America. In G. Squires (Ed.), *Urban Sprawl; Causes, Consequences and Policy Responses* (pp. 1-22). Washington, DC: The Urban Institute Press.
- Stedman, R. (1999). Sense of Place as an Indicator of Community Sustainability. *The Forestry Chronicle*, 75(5), 765-770.
- Stedman, R. (2001). Sense of Place and Forest Science: Toward a Program of Quantitative Research. *Forest Science*, 46(6), 822-829.

- Stedman, R. (2003a). Is it Really just a Social Construction?: The Contribution of the Physical Environment to Sense of Place. *Society and Natural Resources*, 16, 671-685.
- Stedman, R. (2003b). Sense of Place and Forest Science: Toward a Program of Quantitative Research. *Forest Science*, 49(6), 822-829.
- Steele, F. (1981). *The Sense of Place*. Boston, MA: CBI Publishing Company.
- Stewart, D., & Mickunas, A. (1974). *Exploring Phenomenology; A Guide to the Field and its Literature* (2nd ed.). Athens: Ohio University Press.
- Talen, E. (1999). Sense of Community and Neighborhood Form: An Assessment of the Social Doctrine of New Urbanism. *Urban Studies*, 36(8), 1361-1379.
- Talen, E. (2000). Measuring the Public Realm: A Preliminary assessment of the Link between Public Space and Sense of Community. *Journal of Architecture and Planning Research*, 17(4), 344 - 360.
- Taylor, & Bogdan. (1998). *Introduction to Qualitative Research Methods: A Guidebook and Resource* (Third Edition ed.). New York: John Wiley & Sons, Inc.
- Tuan, Y.-F. (1971). Geography, Phenomenology, and the Study of Human Nature. *Canadian Geographer*, 15(3), 181-192.
- Tuan, Y.-F. (1974). *Topophilia: A Study of Environmental Perception, Attitudes and Values*. Englewood Cliffs, New Jersey: Prentice - Hall Inc.
- Tuan, Y.-F. (1977). *Space and Place; The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- Tuan, Y.-F. (1979). The Eye and the Mind's Eye. In D. W. Meinig (Ed.), *The Interpretation of Ordinary Landscapes: Geographical Essays* (pp. 89-102). New York: Oxford University Press.
- Tuan, Y.-F. (1980). Rootedness versus Sense of Place. *Landscape*, 24(1), 3-8.
- Turner, P., & Turner, S. (2006). Place, Sense of Place, and Presence. *Presence*, 15(2), 204 - 217.
- U.S. Census Bureau. (2000). *Census 2000, Summary Files 1-3; generated by Kyle Beidler using American Fact Finder* <<http://factfinder.census.gov>>. Retrieved November 20, 2006
- Urban Design Associates. (1995). Spring Valley Pattern Book (pp. 1 - 44).
- Violich, F. (1985). Towards Revealing the Sense of Place: An Intuitive 'Reading' of Four Dalmatian Towns. In D. Seamon & R. Mugerauer (Eds.), *Dwelling, Place and Environment; Towards a Phenomenology of Person and World* (pp. 113 -136). Boston: Martinus Nijhoff Publishers.
- von Eckartsberg, R. (1998). Introducing Existential-phenomenology Psychology. In R. Valle (Ed.), *Phenomenological Inquiry in Psychology* (pp. 3-20). New York, NY: Plenum.
- Wentling, J. (1995). *Designing a Place Called Home: Reordering the Suburbs*. New York, NY: Chapman & Hall.
- Whyte, W. (1993). Face to Face in the Center. In M. Quantrill & B. Webb (Eds.), *Urban Forms, Suburban Dreams* (pp. 137-147). College Station, Tx: Texas A&M University Press.

APPENDIX A: IRB APPROVAL FORM



VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY


Institutional Review Board

Dr. David M. Moore
IRB (Human Subjects) Chair
Assistant Vice President for Research Compliance
1880 Pratt Drive, Suite 2006(0497), Blacksburg, VA 24061
Office: 540/231-4991; FAX: 540/231-0959
email: moored@vt.edu

DATE: February 2, 2006

MEMORANDUM

TO: Patrick A. Miller Landscape Architecture
Kyle Beidler EDP

FROM: David Moore 

SUBJECT: **IRB Expedited Approval:** "Sense of Place and Community Design" IRB #
06-036

This memo is regarding the above-mentioned protocol. The proposed research is eligible for expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110. As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a period of 12 months, effective January 31, 2006.

Virginia Tech has an approved Federal Wide Assurance (FWA00000572, exp. 7/20/07) on file with OHRP, and its IRB Registration Number is IRB00000667.

cc: File

Department Reviewer: Dean R. Bork

APPENDIX B: IRB RENEWAL

**Office of Research Compliance**

Institutional Review Board

1880 Pratt Drive (0497)

Blacksburg, Virginia 24061

540/231-4991 Fax: 540/231-0959


E-mail: moored@vt.edu

www.irb.vt.edu

FWA00000572(expires 7/20/07)
IRB # is IRB00000667.

DATE: January 22, 2007

MEMORANDUM

TO: Patrick A. Miller
Kyle BeidlerFROM: David M. Moore 

Approval date: 1/31/2007

Continuing Review Due Date: 1/16/2008

Expiration Date: 1/30/2008

SUBJECT: **IRB Expedited Continuation 1:** "Sense of Place and Community Design", IRB # 06-036

This memo is regarding the above referenced protocol which was previously granted expedited approval by the IRB. The proposed research is eligible for expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110. Pursuant to your request, as Chair of the Virginia Tech Institutional Review Board, I have granted approval for extension of the study for a period of 12 months, effective as of January 31, 2007.

Approval of your research by the IRB provides the appropriate review as required by federal and state laws regarding human subject research. As an investigator of human subjects, your responsibilities include the following:

1. Report promptly proposed changes in previously approved human subject research activities to the IRB, including changes to your study forms, procedures and investigators, regardless of how minor. The proposed changes must not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects.
2. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.
3. Report promptly to the IRB of the study's closing (i.e., data collecting and data analysis complete at Virginia Tech). If the study is to continue past the expiration date (listed above), investigators must submit a request for continuing review prior to the continuing review due date (listed above). It is the researcher's responsibility to obtain re-approval from the IRB before the study's expiration date.
4. If re-approval is not obtained (unless the study has been reported to the IRB as closed) prior to the expiration date, all activities involving human subjects and data analysis must cease immediately, except where necessary to eliminate apparent immediate hazards to the subjects.

cc: File

Department Reviewer: Dean R. Bork

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