A SEARCH FOR DESIGN APPROPRIATENESS USING QUALITATIVE TECHNIQUES

TO CONTRAST THE MOUNTAIN RESORT COMMUNITY CORES

OF VAIL VILLAGE AND BEAVER CREEK VILLAGE

by

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Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF LANDSCAPE ARCHITECTURE

THE UNIVERSITY OF TEXAS AT ARLINGTON

December 2010

ACKNOWLEDGEMENTS

schedule during my time in school, and I thank Johnette Taylor, Berit Hudson, Jim Hanke, Lance Dickinson, Harold Leidner, and Chris Bacala for their professional introduction to landscape architecture and exposing me to so many aspects of this profession. I also thank my fellow students and classmates for all their generosity and willingness to share knowledge and information about all aspects of design and landscape architecture throughout our time together in the landscape architecture program at The University of Texas at Arlington. You have all been incredible inspirations to me and I look forward to seeing our designs come to fruition in the future.

November 22, 2010

ABSTRACT

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This study uses in-depth interviews to contrast the mountain resort village cores of Vail Village, Colorado and Beaver Creek Village, Colorado to determine levels of design appropriateness in each. Design appropriateness for a village core is defined as an outdoor, multi-chambered, visually stimulating environment that encourages and invites human activity and repeat visits to the village core and ski resort (Dorward 1990.) An appropriately designed village core "encourages visitors to wander, explore the special places and unique features of the village, people-watch, and interact amiably with strangers in a diverse mix of gathering places and open-air seating" (Dorward 2006, p. 273.) Design appropriateness in this thesis is measured by visual inventory, review of community design regulations, and design professionals' perceptions of the degree of occurrence of five design principles applied by landscape architect Eldon Beck (Clifford, 2003; Dorward 1990.) The five design principles examined in this study are:

- Pedestrian system as the core community structure
- Site orientation for views
- Site orientation for sun exposure
- Scale
- Diversity (Clifford 2003; Dorward 2006)

Beck's application of these design principles has resulted in village cores at top-rated mountain resorts in North America (Ski's 2010-2011 Resort Guide Top Ten 2010, Top Ten World's Best Ski Resorts 2010.) The village councils and resort planning managers of the mountain resort village cores that Beck has designed continue to consult with him regarding community design regulations and resort expansion. One such mountain resort is Whistler, British Columbia. Ainsworth quotes Mike Kirkegaard, manager of resort planning at Whistler, as saying, "He (Beck) laid out our village so that there is a sense of discovery around every corner. He made sure things were oriented to capture views of the mountains and allowed sunlight to penetrate our public places. We continue to use him as our guide as we are evolving the village" (2010.)

The hypothesis for this study is that Vail Village demonstrates a more appropriate overall design for mountain resort village cores than does Beaver Creek Village, because the application of five design principles that Beck uses stimulates activities that reflect this study's definition of appropriateness. This study uses in-depth interviewing, as described by Taylor and Bogden (1984.) The key informants (interviewees) are design professionals, planners, policy makers, and design critics who are familiar with Vail Village and Beaver Creek Village. They are interviewed as professionals involved with the built environment. They understand how mountain resort cores function. From their professional experience, they possess the critical knowledge of five design principles that Beck applies to mountain village cores, and they have also experienced these village core developments from a user's perspective. This research concludes with a summary of findings that provide landscape architects with a methodology for assessing appropriateness in a mountain resort village core. This summary provides insight into additional design principles used in mountain resort design and differences in opinion from design professionals regarding the meaning of appropriate mountain resort design.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

In this study, two models of mountain resort developments are compared to discover the degree to which the presence of five design principles exists in each village core. The European alpine village styled Vail Village, Colorado and neighboring neo-American alpine architecture village styled Beaver Creek Village, Colorado are examined based on five of the design principles Eldon Beck uses to design mountain resort village cores. These key design principles identified and utilized by Beck to create a welcoming and comfortable visitor experience include:

- Subordination of the automobile or a pedestrian system as the core community structure

- Site orientation for views that make a connection to the surrounding mountains

- Site orientation for spaces and pedestrian corridors that are properly oriented for sun exposure and wind protection

- Scale

- Diversity

According to Dorward (2006), through using these design elements, the villages aspire to create memorable places that bring visitors back for repeat visits. "The underlying design intent is to create a visually stimulating environment that encourages visitors to wander, explore the special places and unique features of the village, people-watch, and interact amiably with strangers in a diverse mix of gathering spaces and open-air seating" (p. 273.) "The goal is to make a dense sensory environment, but one that does not overwhelm" (Wise 2004.) Eldon Beck calls this a

"unique experience" (Clifford 2003, p. 112.) The hypothesis of this study is that Vail Village accomplishes these objectives and presents a better functioning, more comfortable village, and unique experience to visitors, and thus a more appropriate development model than Beaver Creek Village, as a result of adherence to Beck's application of design principles.

The reason mountain resort communities exist at all are the ski slopes attached to them. Worldwide, skiing is a multi-billion dollar industry and has been used by corporations since the 1960s as an attractor for real estate development of homes and condominiums at and around ski resorts. The ski mountain and ski terrain are only part of what attracts visitors to mountain resorts. "The appearance of the base area (village core), which is sometimes combined with a village area, can develop its own charm, attracting people into the area" (United States Department of Agriculture 1984, p. 42.) The design of the village core at the base of the mountain has an immense effect on the experience a person will have at a ski resort. This is significant because a positive experience can translate into whether visitors return to a resort for their next ski getaway or purchase real estate at or nearby the resort (Clifford 2003).

Landscape architect Eldon Beck is a designer of mountain resort base village cores. His work is significant because the resorts he designs function well from a visitor's standpoint. This is evidenced by the continued top ratings and financial success of the core base villages on which he has worked. These mountain resorts include Whistler, British Columbia; Mont Tremblant, Quebec, Canada; Les Arcs, France; and parts of Vail Village, Colorado (Top Ten World's Best Ski Resorts 2010; Ski's 2010-2011 Resort Guide Top Ten 2010.) These villages function well and provide a stimulating, unique visitor experience as a result of the design principles Beck uses (Clifford 2003; Wise 2004; Ainsworth 2010.) "The objective is to promote social vitality, interaction, and commercial exchange through the variables that design can affect: microclimate, sensory quality, scale, and spatial and functional relationships.   In

mountain communities, the designer must work with these variables in a manner that reveals the mountain context" (Dorward 1990, p. 253.)

<div align="center">1.2 A Short History of Skiing and Ski Resort Development in North America</div>

The sport of skiing has grown from relative obscurity to a multi-billion dollar industry worldwide over the past 100 years (Harding 2008.) Since the sport of skiing is the reason mountain resort villages exist, a summary of the historic background of the ski industry in North America helps explain the design origins of core villages.

1.2.1. Early Years of Skiing in the U.S.

Scandinavian immigrants brought skiing to the Midwest and the mining camps of the Rockies and the Sierra Nevada, where it evolved in isolation (Clifford 2003.) In 1880 the mail was actually delivered by more than 50 skiing mail carriers in Colorado (Colorado Ski and Snowboard Hall of Fame 2010.) Although skiing had a long history in Europe, the inaugural Winter Olympics was not hosted until after World War I by Chamonix, France in 1924. "After the 1932 Winter Olympics in Lake Placid, New York, W. Averell Harriman, owner of the Union Pacific railroad, decided to capitalize on a growing interest in skiing to generate passengers for his rail line—by creating a lavish ski resort. Harriman employed an Austrian who was familiar with European ski resorts, Count Felix Schaffgotsch, to find the perfect mountain. In 1935 Schaffgotsch wired Harriman and announced he had at last found the place with "more delightful features than any other place I have seen in the U.S., Switzerland, or Austria for a winter sports center" (Abramson 1992, p. 224.) Count Shaffgotsch had found Sun Valley—the first purpose-built destination ski resort in America (Clifford 2003.) Not only was Harriman the first to develop a ski resort, but he also created a four season resort; with attractions and amenities such as tennis, golf, fishing, rodeo, hiking, and swimming, an accomplishment that mountain resort developers still aspire to today. The first bona fide chairlift was installed at Sun Valley in 1936 (Glick 2001.) Stowe, Sun Valley, and Mont Tremblant were the preeminent destination resorts started before World War II (Fry 1996.)

1.2.2. Post War Expansion

The ski industry became almost nonexistent with the advent of World War II. However, the 10th Mountain Division of World War II, known as the "Ski Troops," trained just 30 miles south of Vail at Camp Hale. These toughened soldiers learned to survive at high altitudes in sub-zero weather. When they returned from Europe after the war, these men had one of the largest impacts on the American ski industry. "Their vision shaped new ski areas and their innovative improvements lured skiers from around the world" (Colorado Ski and Snowboard Hall of Fame 2010)

Following the war, skier numbers exceeded 500,000, as many as 200,000 of which were estimated to have tried skiing as part of their training for the war (Clifford 2003.) In 1955–1956, there were 78 U.S. ski areas, which increased over the next ten years to 580 resorts (Fry 2006.) Most of these ski areas were small, family-owned, day-use ski areas. Capturing tourist business through reorganizing existing mining and ranching towns was common in the Central Mountain states until the late 1960s and began to establish the demand for housing near ski slopes. Today these towns still give visitors to these resorts a glimpse of early American frontier life, providing a unique atmosphere available only in this part of the world (Dorward 1990.)

1.2.3. Advent of the Destination Ski Resorts

Skiing exploded in the 1960s, and purpose-built ski resorts entered the scene to ameliorate the frustrations of trying to retrofit small mountain towns, which often were not ideally located directly at the base of the ski slope. These resort towns also gave developers more control over the emerging programmatic requirements of tourists (Dorward 2006.) The development of much larger destination ski resorts that incorporate newly built core villages included Vail, Crested Butte, Steamboat, Powderhorn, Snowmass, and Purgatory (Clifford 2003.) From this point on, developers began to see ski slopes not only as a recreation attraction, but also as a way to sell real estate. This concept of ski areas as an attractor to sell

condominiums and second homes has governed the industry ever since (Harding 2008.) "By 1969, the skiing industry grossed more than a billion dollars annually. By 1975, there were 745 ski areas in the United States (Clifford 2003.) and the nineteen lifts at the end of World War II increased to more than a thousand (Fry 2006.) However, in the mid-1970s, a shift in the ski industry began to take place, as family-owned, day-use ski areas went out of business when they couldn't afford more lifts, a bigger base lodge, a restaurant, and snowmaking to compete with corporate-owned destination ski areas. At last count, in 2009, the National Ski Association counted 473 ski areas in the U.S. (National Ski Areas Association 2009.)

1.3 Vail Village and Beaver Creek Village

"The resort that led the parade of new ski destinations was Vail. At the time Vail opened in 1962, no one could have envisioned how successful it would become or how far its ripple effects would reach" (Dorward 2006, p. 268.) Vail was unique from many ski resorts such as Aspen, which were established communities before skiing became popular in the 1950s and 60s, because Vail was built specifically to accommodate skiing (Williams 1978.) Pete Siebert, a former member of the 10th Mountain Division and long-time believer in the future of skiing, created Vail from scratch as a planned ski resort. His original idea was to build a top-quality ski resort with a base village modeled after the typical European Alpine towns he experienced while overseas serving in the 10th Mountain Division. This development model was unique in America. Despite the urban sprawl that surrounds the resort today, the original Vail Village is the heart of social life at this mountain resort (Williams 1978.)

First developed just eight miles west of Vail and opened to the public in 1981, Beaver Creek Village is perhaps the last entirely new American ski resort. According to Dorward, "It is unlikely that we will see any more new ski resorts built entirely from scratch; the capital investment required is daunting, and the environmental opposition has grown unrelenting" (2006, p. 271.) Revitalization through development and expansion of existing resorts is the trend today.

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In contrast to Vail, the architecture of Beaver Creek is large in scale, simple in form, and designed to achieve an American alpine style of architecture (Dorward 2006.) This style focuses on the precedent of historic mountain building, energy conservation, and solar energy applications. The village is not necessarily derivative of the Rockies, but is definitely reminiscent of the mountains in general. It is a unique model for innovative mountain architecture, because of its thematic intentions (Dorward 2006.)

<u>1.4 Intrawest and Eldon Beck in the Design of Mountain Resort Village Cores</u>

Landscape architect Eldon Beck, ASLA Fellow, past professor at UC Berkley, and former president of the Northern California Chapter ASLA, was a principal with Royston, Hanamoto, Beck and Abey in Mill Valley, California for 21 years (from 1958 to 1979) before establishing his own firm, Eldon Beck Associates. Over the years, Beck has received many awards for his mountain resort designs (see Appendix E.)

Beck's portfolio of mountain resort village core designs includes Keystone and Copper Mountain, Colorado.; Mammoth and Squaw Valley, California; Stratton, Vermont; Snowshoe, West Virginia; Whistler, B.C. and Mont Tremblant, Quebec, Canada; and Les Arc, France. He has also designed the communities of Sea Ranch on the Mendocino Coast, the Domaine Chandon Winery in Napa, several state parks and community college campuses (Ainsworth 2010.) Beck's introduction into mountain resort design took place as a principal with Royston, Hanamoto, Beck and Abey helping to convert the original Vail Village core to a pedestrian-friendly hamlet through the design of the disguised parking garage in the 1970s. He then moved to Whistler, British Columbia, with Vail's first town manager, Terry Minger, where they shaped that nascent development by establishing building heights, sizes, and forms, and the size and shape of the spaces and pedestrian ways enclosed by the buildings, through the use of the design principles discussed in this study (Clifford 2003, respondent ALP1.) Whistler/Blackcomb was awarded the Overall Resort Design by Snow Country Magazine in

1989, the Honor Award for Community Planning by California Council of Landscape Architects in 1989 (see Appendix E), and the ULI Award for Excellence in 2000 (Takesuye 2001.)

The Vancouver company, Intrawest, has had great success in marketing Beck's new village core development model at Whistler/Blackcomb, Mont Tremblant and even in Europe at Les Arcs in the French Alps (Clifford 2003). Evidence of this success is apparent in British Columbia, Canada. After acquiring Blackcomb Mountain, adjacent to Whistler Mountain in 1986, the real estate development company invested $240 million in the base facilities and saw skier spending soar (Wise 2004.) Visits rose 10 percent per year from 1992 through 1998 at Intrawest ski resorts, while the rest of the ski industry declined 3.6% during the same period (Clifford 2003.) Intrawest—and the industry—committed themselves to Beck's village concept after they saw the bottom line at Whistler and Tremblant (Clifford 2003.) Executive Vice President of Intrawest, David Greenfield, said, "We realized that he was the only one who had the special eye and skills that were needed to create a 'true' resort village. With his help, we began to grasp what it takes. Eldon Beck understands the true underpinnings of why villages in mountain places really work – and what are the main physical, spiritual, and social foundations for those resorts." (Enhancing the Resort Experience 2010.)

The base village is the hub of a ski resort's ability to make money. "The greater its charm, the more customers it will attract, the longer they'll want to stay, and the more money they'll spend." (Wise 2004) This is one reason that Beck's application of design principles is so significant. Skiing is a multi-billion dollar industry worldwide. The mountain resorts Whistler, British Columbia and Mont Tremblant, Quebec, Canada, which Beck designed, and Vail Village, Colorado are consistently cited at the top of the list when it comes to skier surveys of the top resorts in the world and North America (Top Ten World's Best Ski Resorts 2010; Ski's 2010-2011 Resort Guide Top Ten 2010.) The ski mountain and ski terrain is only part of what attracts visitors to mountain resorts. Skiing has been used by corporations since the 1960s as an attractor for real estate sales of homes and condominiums at and around the ski resort. The

design of the village core at the base of the mountain has an immense effect on the experience that a person will have at a ski resort, which can translate into whether visitors return to a resort for their next ski getaway or purchase real estate at the resort. By creating a mountain resort village that functions to capture the imagination and create a unique visitor experience through creating "a visually stimulating environment that encourages visitors to wander, explore the special places and unique feature of the village, people-watch, and interact amiably with strangers in a diverse mix of gathering places and open-air seating" (Dorward 2006, p. 273.) an environment for financial success is fostered as well. Beck identifies key design principles that he uses to achieve these goals. These key design principles which are present in all of Beck's mountain resort village core designs are:

> Pedestrian system as the village structure or subordination of the automobile: "Socially lively cores, where people linger to talk, stroll, eat, and watch other people, are structured to exclude the chaos of vehicular traffic" (Dorward 1990, p. 254.)

> Diversity: "Diversity in terms of architectural detailing and retail content is everything" (Clifford 2003, p. 112.) Diversity in the community core is a prerequisite for dynamism. Without it, monotony and artificiality can barely be disguised (Dorward 1990, p. 253.)

> Site orientation for views: "Taking advantage of views is an issue not only of siting, but also of establishing and protecting view corridors. In mountain landscapes, three-dimensional control is a necessity" (Dorward 1990, p. 47.) This is inclusive of not only views of the environment outside the village, but also views within the village. Sequential revelation/progressive realization of views, spaces and experiences energize the senses, which shut down if everything is unveiled at once.

Site Orientation for Solar Access and Wind Protection: Building heights, street orientations, and sheltering building masses are considerations that can create favorable and comfortable microclimates within the public spaces of a village core. "There should be places for people to linger or sit outdoors that are sited for maximum sun, shelter from the wind, and safety from snow and ice falling from roofs." (Dorward 1990, p. 255.)

Scale: No single design factor is more important to the success of an urban project in the mountains than scale. The mass and height of buildings, together with the dimensions of the outdoor spaces they define, control the perception of scale in the built environment (Dorward 1990, p. 272.)

These design principles will be used in this study to measure design appropriateness. A place where visitors can experience an adventure of discovery makes a village inviting and exciting. According to Beck and Dorward, "The most important criterion is the quality of the visitor experience: The underlying design intent is to create a visually stimulating environment that encourages visitors to wander, explore the special places and unique features of the village, people-watch, and interact amiably with strangers in a diverse mix of gathering places and open-air seating" (Dorward 2006, p. 273.)

<u>1.5 Research Objective</u>

The objective of this thesis is to examine and contrast the influence of design on the neighboring mountain resort base village cores of Vail Village and Beaver Creek Village, Colorado, through a review of each village's design regulations, a visual inventory of each village core, and in-depth interviews of local designers (architects, landscape architects), planners, policy makers, and design critics, to determine perceptions of how the design elements are realized in the two mountain resort core communities. The aim of this study is to

gain a better understanding of the effectiveness, strengths, and weaknesses of two differing design models for mountain resort communities. This thesis demonstrates how five design principles as applied by Eldon Beck allow Vail Village to function better, through encouraging human activity and prompting repeat visits, to provide a more appropriate design as a mountain resort village core, in comparison to Beaver Creek Village.

1.6 Research Questions

This paper raises the following principal questions:

1. How are the five design principles that Eldon Beck uses to design mountain resort village cores applied in the individual village cores of Vail Village and Beaver Creek Village?

2. Do the individual design principles show up in greater degree in one village core than in the other?

3. Does one village core exhibit/fulfill the study's definition of appropriateness to a greater degree than the other?

4. What other design principles can be identified for mountain resort village design?

1.7 Methodology

This thesis will answers the above questions using in-depth interviews of professionals who are familiar with the village cores of Vail Village and Beaver Creek Village and are involved in mountain resort village design. The interview questions (see Chapter 3, section 3.5) will ask participants to explain how they see the five principles of design used by Beck in each village. Although the questions do not directly ask for a comparison, the study looks for respondent language that describes a greater occurrence of each design principle in one village than in the other. The respondents are also asked to describe the elements of appropriateness, as defined in this study, which they experience in each village. It is assumed that this question might lead to a comparison of the villages by respondents, which would indicate a higher level of appropriateness in one village than in the other.

The goal of this study is to extract design principle application that is perceived to be appropriate to mountain resort communities, through exploring these two villages. A list of design principles is also compiled by asking respondents what design principles are important when designing mountain resort communities, in addition to five discussed in the interview.

<u>1.8 Significance and Limitations</u>

As discussed previously in this chapter, the ability of a mountain resort village to attract, retain, and influence visitors to return for their next getaway is greatly influenced by the village at the base of the ski mountain. The five principles that Beck uses to design can have a direct impact on the experience of a visitor during their recreation vacation. "It has been widely acknowledged that the physical organization, character, and scale of the built environment are fundamental influences on social behavior (see in particular the works of Cooper Marcus & Francis 1998; Kunstler 1993; Whyte 1980), and many of the principles guiding the organization of public spaces are visible in both the village archetype and Beck's resort village plans, particularly the dimensioning and orientation of public spaces" (Dorward 2006, p. 273.) To identify features or conditions in a village that resonate with designers as creating a unique, comfortable atmosphere that continues to attract visitors, should be significant to a landscape architect. Landscape architects like Beck have had, and continue to have, a major role in mountain planning and designing mountain resort communities. They are in an ideal position to be heavily involved in alpine urban design projects where factors such as slope, unstable soil conditions, fragile slope/soil stabilizing vegetation, and wetlands are key determinants in design and development.

While the five principles explored in this thesis are highly influential to the design of mountain resort communities, it is acknowledged that in addition to these, many other design factors and principles affect design. Other limitations to this study include the financial, environmental, or social concerns of mountain resort villages. are not directly addressed in this thesis. Design often affects or is affected by these factors. Creation of a community

environment, design for the local community as opposed to visitors, ski resort gentrification, traffic management, public transportation, and other highly relevant topics are not directly addressed in this study.

1.9 Definition of Terms

The following definitions give background information on words or subjects that are not fully explained within the text.

Appropriateness: Designs that stimulate visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces (Dorward 1990.)

Building Height: As expressed in number of stories.

Diversity: Examples of diversity include projection and recession of building faces, variation in building size and height, and overhead features, such as canopies and balconies, variation in pedestrian path widths, open space size, and elevation changes.

Human Scale: Scale is a measure of relative size, comparing the size of one thing to another. "Human scale typically means. can I tell how big that is by some frame of reference that I can relate to" (respondent AL1.) "In an environment where mountains are the monuments, people seek a humane scale and sociability, not monumentality, in their communities" (Dorward 1990, p. 363.) "The small scale of most vernacular structures is particularly comforting in a setting in which the scale of the natural landform may be overpowering" (Dorward 1990, p. 39.)

Mountain Planning: Planning and layout of pistes, lifts, lodges, and restaurant and refreshment areas and staging areas on a mountain.

Mountain Resort: "These resorts tend to the needs of tourists, with the best equipped resorts providing all the essentials including transportation, food and lodging, recreational opportunities, and the like" (Clark, Gill, and Hartmann 2006, p.5.)

Pedestrian development: A pedestrian oriented development

Resort: "Places to make social contacts, attend social occasions and improve health and fitness" (Huffadine 2000, p.1)*Village Core*: "A viable community has a center like a magnet, its

concentration of higher-density uses pulls people into contact with one another. A typical community core contains restaurants and retail shops, offices and professional services, civic and cultural facilities, entertainment and nightlife, pedestrian amenities and promenades, parks and plazas" (Dorward 1990, p.204.) A mountain resort village core is a pedestrian oriented development.

1.10 Summary

Skiing has been a part of American culture since the 1800s. The first destination ski resort in America was developed in Sun Valley, Idaho, in 1936. Landscape architect Eldon Beck, an influential designer of mountain resort village cores, has worked with the resort development corporation Intrawest on significant high-profile mountain resort projects of Whistler, B.C. Canada; Mont Tremblant, Quebec, Canada; and Les Arcs, France. Beck also had an influential part in the design of the parking structure and other elements in Vail Village. The goal of this thesis is to show how Beck's use of design principles creates a more appropriate model in Vail Village, when compared to the neighboring development of Beaver Creek.

CHAPTER 2

LITERATURE REVIEW

"The demand for access to (mountains) is rising. Growth and spread in population, rising income, and increasing leisure time mean more people than ever have the wherewithal to visit such places. In excess of 50 million do so each year. Select places receive the larger shares."

Clark 2006, p. 1

2.1 Introduction

This literature study contains four primary components: an overview of the history of the skiing industry as documented in chapter 1; a review of five design principles that landscape architect Eldon Beck uses to design mountain resort village cores; legitimization of the way in which Eldon Beck applies these five principles; and a review of literature that illustrates how each of these design principles manifest themselves in Vail Village and Beaver Creek Village. The principles Eldon Beck applies to the design of mountain communities, and the way in which these principles are applied were gleaned from cited sources and phone conversations with Eldon Beck (2010) and Sherry Dorward (2010.) The cited sources, which include Sherry Dorward's *Design for Mountain Communities: A Landscape and Architectural Guide*, which received an ASLA merit award, discuss appropriate application of the design principles discussed in this paper. These sources provide insight into how the use of five design principles "promote social vitality, interaction and commercial exchange" (Dorward 1990, p. 253) within mountain resort village cores, which contribute to the success of these resorts and legitimize Becks work. The Vail Village Urban Design Guide Plan (1980) and Beaver Creek Design Review Board's Design Regulations (1981) are also referenced to gain insight into how

Beck's five design principles are realized in the communities of Vail Village and Beaver Creek Village.

The goal in this literature review is to introduce how the five design principles show up in Vail Village and Beaver Creek Village, while inquiring whether they are appropriate models for resort development according to this study's definition of appropriateness.

<center>2.2 Five Design Principles for Mountain Resort Community Core</center>

"Vail was unique for its time. In its first ski season, the resort already had several small lodges and a quaint main street connecting its surface parking lots to the ski lifts, giving it the look and feel of a small alpine village" (Dorward 2006, p. 269.) In the 1970s, Eldon Beck of Royston, Hanamoto, Beck and Abey helped convert the original Vail Village core to a pedestrian oriented village core, through the design of the disguised parking structure to keep cars out of the core and by setting land aside for Ford Park and Ford Amphitheater (Clifford 2003; Dorward, personal correspondence, November 4, 2010). Since working on Vail Village, Beck has gone on to design many mountain resort villages. He does not design the buildings; he designs the villages by establishing building forms, spaces around the buildings, and the views that the buildings and surrounding landscape frame to make them attractive places. Beck determines the placement, height, and mass of a village's buildings, then leaves the details to others (Clifford 2003.)

According to Clifford (2003, p. 112), Beck's vision can be summed up in a few elements common to all his villages:

- The pedestrian system is the structure of the village. Wherever possible, people and cars are separated.
- Diversity in terms of architectural detailing and retail content is everything. "Diversity is strength; uniformity is the death knell of a village," Beck says, pointing to Tremblant as his greatest success in this regard.
- The villages are carefully oriented to their sites, so that visitors are given glimpses of the best mountain views. The visitor walking through River Run at Keystone, or Vail Village, or the base of Mt. Tremblant is supposed to feel connected to the landscape around him or her" (Clifford 2003, p. 112.)

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In addition to these three principles, Beck also talks about the importance of orientation for maximum solar penetration and shielding of wind into public spaces, and scale, where the overall goal is the creation of a unique visitor experience (Ainsworth 1992; Dorward 1990 and 2006). "The underlying design intent is to create a visually stimulating environment that encourages visitors to wander, explore the special places and unique features of the village, people watch, and interact amiably with strangers in a diverse mix of gathering places and open-air seating," says Dorward (2006, p. 273) when writing about the resort villages that Eldon Beck designs.

2.2.1 Pedestrian Developments

According to Beck, the whole structure of a mountain resort village core should be based on a pedestrian development where people who inhabit these spaces have as little contact with vehicles as possible. "As soon as you get rid of the cars, wonderful things happen," says Eldon Beck. "A pedestrian mountain village should slow people down, because when they slow down, they can stop and look and feel nature," he said. "It makes the village stronger from a social standpoint. People start talking to each other" (Anisworth 2010.) In her book *Design for Mountain Communities*, based on her U.C., Berkley master's thesis, Sherry Dorward (1990) echoes Beck, "Community cores filled with people at ease are not also filled with cars. Socially lively cores, where people linger to talk, stroll, eat, and watch other people, are structured to exclude the chaos of vehicular traffic" (Dorward 1990, p. 254.) "Because many pedestrians use the area (village core), traffic should be limited to vehicles that service business establishments. Access to the village area should be by foot, by mass transportation from parking lots located away from the village, and by bus" (United States Department of Agriculture 1984, p. 42.)

2.2.2 Diversity

Diversity in the village core creates a unique environment and a makes a visitor's experience an adventure and an act of discovery. Variation in building setbacks, facades,

alleyway widths, plaza sizes, building sizes, and the overhead plane stirs excitement in humans and makes them wonder what is around the corner, what will they see or experience next. Variation in levels allows for raised patios where people can take part in that favorite pastime of people watching. Diversity affects perceptions of spatial dimensions and breaks up the volume of a space, while contributing to the creation of drama and a real experience. That's the goal— an experience. "Visitors want an experience that is not typical of their daily lives." Beck says. "They really want a place that is different and is memorable" (Clifford 2006 p.112.)

Diversity in the community core is a prerequisite for dynamism. Without it, monotony and artificiality can barely be disguised. Architecture is not enough, for the core is not just a tighter pattern of buildings and streets (Dorward 1990). Cultural anthropologist and author Dr. G. Clotaire Rapaille's clients include 50 of the Fortune 100 companies (Frontline 2004.) Rapaille, whose market research techniques have grown out of his work in the areas of psychology, psychiatry, and cultural anthropology, has analyzed how people respond to resort settings. According to his findings, architectural homogeneity is a terrible mistake. "When all the buildings look the same, you can't tell where you are" (in Wise 2004.)

> In Italian fishing villages, they painted the houses different colors. Why? Because the fisherman wanted his house to be visible from a distance so that when he was coming into port he could see this pink one next to that blue one and think, 'That's my home.' In the same way, when you're skiing the last run of the day, you should be able to say, 'That's where I'm going. That's where people wait for me, that's where people love me.' (Wise 2004.)

"Beck's master plans always inject a mix of building sizes. This was a particularly successful strategy at Mont-Tremblant" (Dorward 2006, p.273.) Beck seems to share many of Rapaille's conclusions. He also avoids homogeneity—he even creates minor imperfections on purpose. "After I finished working on the village at Whistler, I went around and took pictures of all the mistakes. I thought, 'My golly, the roofs don't quite match, and this column over here is really dumb.' It took me only a little while to realize that all these flaws were actually delightful. They were wonderful little accidents that gave the place humanity." (Wise 2004.) Now, Beck deliberately designs buildings so that they don't quite line up. "There's more value to a corner

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that hangs out a foot than in one that's absolutely true," he says. "It costs a bit more, but it creates a sense of texture throughout the village". (Wise 2004.)

In *The Concise Townscape*, Cullen also writes about diversity as appropriate in the projection and recession of building facades. "Instead of the eye taking in the street in a single glance, as it would in a street with perfectly straight facades, it is caught up in the intricacy of the meander and the result is a repose or dwelling of the mind which is wholly appropriate to the subject, which is a street of houses and not a fluid traffic route "(Cullen 1961, p. 44.) Variation also takes place at the ground and overhead levels with variations in elevation and the provision for overheads, signage, and balconies, which serve to add variation to the visitor experience. Raised seating areas and patios offer places of separation where people can relax and take part in that favorite pastime of people watching. These elevations spur on the excitement of discovery, as Cullen (1961) notes, "Any account of one's emotional reactions to position must include the subject of levels. …The act of descending implies going down into the known and the act of ascending implies going up into the unknown. There is a strange correspondence of… the functional use of levels to join or separate the activities of various users" (p. 39.)

Beck, who spends a lot of time backpacking, talks about using a "stream" as a template for his pedestrian oriented village core. In his designs, he creates "eddies" where people can step out of the main flow of traffic to relax or window shop. These eddies are usually 18 inches above ground level for separation, yet still provide for interaction with those passing by (Clifford 2003.)

2.2.3 Site Orientation for Sun, Wind, and Views

In alpine environments, the orientation of structures should be placed to take advantage of the natural attributes of the site (framing specific vistas and views, positioning building heights and roof lines for solar access, and complementing all natural features), while respecting the environment and mitigating any negative impact (Brent Harley and Associates 2009.) Part of Eldon Beck's formula is to juxtapose views, sunlight, and wind with public

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spaces. Constructing a place where people can meet on a winter day and feel direct sunlight without getting plastered by the wind "means you've created something that's pretty magic" (Ainsworth 1992.)

2.2.3.1 Sun and Wind

Dorward points out the importance of street alignments in creating favorable microclimates within the village core. In the middle latitudes, street alignment makes a significant difference in the amount of winter sun its frontages receives. Streets or pedestrian corridors running north to south, like Bridge Street in Vail, expose both sides of the street to the sun sometime during the day. In contrast, on a street running east to west, the north-facing side is always in shadow, making it less desirable for outdoor activities and usually creating major problems with ice accumulation on shaded pavement (Dorward 1990.) Lynch (1984) comments, "Orientation is most critical in the middle latitudes, since in the far north much radiation is diffuse." (p. 52) Street alignments and site orientation also determine the effect that wind has on pedestrian spaces. The overall siting of a village should be perpendicular to the trend of the valley it is located in. Building massing should block wind and shield public spaces.

2.2.3.2 Views

Site orientation also involves the careful selection and framing of views both within and outside of a core village. According to the U.S. Forest Service, "The base area is perceived not only from outside the area but also from within the area for achieving a solution that protects the visual integrity of the landscape and presents the user of the area with a pleasant atmosphere" (United States Department… 1984, p. 42.) Cullen (1969) remarks, "The device of framing brings the distant scene forward into the ambience of our own environment by particularizing, by making us see in detail through having such detail brought to our attention through the act of netting. The application of this will be obvious in bringing the distant land or townscape to life, in selecting and rejecting to a purpose" (p. 39.) A major goal in designing mountain communities is creating a connection between the surrounding landscape and the community.

This is accomplished through framing views with buildings and landscape elements, which leads to another important factor in the design of mountain communities, that being scale. According to the U.S. Department of Agriculture, Forest Service *Ski Areas Handbook* (1984), "Of utmost concern in the contemporary planning for any mountain resort community is the visual linkage between the development components (such as buildings, lifts, roads, ski runs and utilities) and the existing visual character of the area. In fact, recent use surveys have shown that the highest priority of the majority of skiers is experiencing outstanding scenic quality. To respond accordingly, master planning must develop a framework that allows for retaining or enhancing as much of the visual quality of the area as possible" (p. 13.)

2.2.4 Scale

"It has been widely acknowledged that the factors of scale, physical organization and character of a built environment have influenced human behavior at a fundamental level (see the works of Cooper Marcus and Francis 1998; Kunstler 1993; Whyte 1980)" (Dorward 2006, p. 273.) "No single design factor is more important to the success of an urban project in the mountains than scale. The mass and height of buildings, together with the dimensions of the outdoor spaces they define, control the perception of scale in the built environment." (Dorward 1990, p. 272.) "Beck designed for the human scale of 3–5 stories as opposed to Corshevel, France, which is designed at a much larger scale" (Dorward, personal communication, August 18, 2010) Spaces that are too wide seem overexposed and unenclosed, while narrow spaces with walls that are too tall result in a cold and claustrophobic feeling.

When Beck designs a village, the form and mass of the buildings are determined while simultaneously sculpting the spaces that surround them. "According to Beck, when public spaces get larger than about 150 feet across, they tend to lose the feeling of personal intimacy: 'There need to be boundaries, not just on the sides but also overhead,' he says. 'At the top of the first floor, there should be a whole range of things happening: awnings and signs, balconies,

umbrellas, trees—anything that tends to put a bit of a roof above you. It's the sense of being

contained in all dimensions that gives you a feeling of security and friendliness" (Wise 2004.)

<div align="center">(a)   (b)</div>
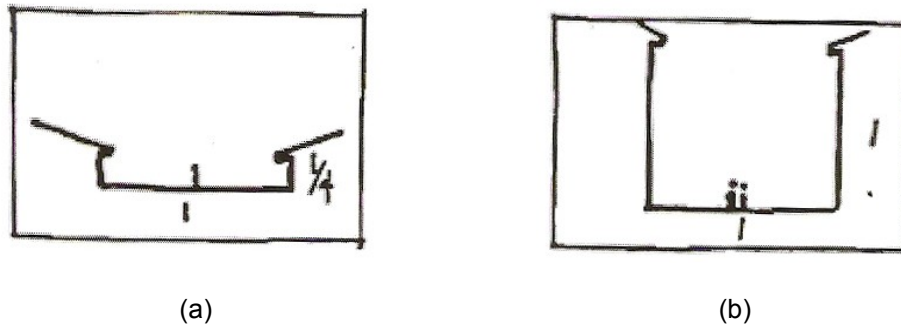
Figure 2.1 (a) Overexposed and (b) Underexposed Pedestrian Space Situations
(Source: *The Vail Village Urban Design Guide Plan, p. 5)*

Scale is a main reason why the development of Vail LionsHead is not as appealing to

visitors as its neighbor Vail Village is. "A master-planned cluster of precast concrete buildings

much larger in scale than the original village (Vail Village), LionsHead has never been as

successful in capturing visitors' expenditures in Vail" (Dorward 2006.)

Both Beck and Dorward believe in the importance of human scale development for

mountain communities, which according to Beck, is two to three stories high (Beck 2010;

Dorward 2010.)

2.2.5 Creating an Experience

The goal of designing with the above design principles is to make a dense sensory

environment that does not overwhelm the visitor. East West Partners, one of Intrawest's largest

competitors, used a similar approach in designing the village during the planning stages of

Northstar on Lake Tahoe. "We talked a lot about what we want people to feel when they're

here," said project director David Tirman. "We want the smell of fresh bread to be coming out of

the bakery in the morning. Or hot chocolate. A roaring fire in the public plaza. We want to

evoke responses" (Wise 2004.) That's the goal—an experience. "Visitors want an experience

that is not typical of their daily lives," Beck says. "They really want to go to a place that is

different and is memorable. If we bring to the mountains the trappings of an urban or suburban area, I think we've really blown it" (Clifford 2003, p.112.) As Dorward (1990, 2006) discusses, appropriate design for this experience invites human activity through creating a multi-chambered container. This sequential pedestrian experience is the result of proper application of the five design principles discussed in this study.

<u>2.3 Five Design Principles in Vail Village and Beaver Creek Village</u>

2.3.1 "The Vail Village Urban Design Guide Plan" and "Beaver Creek Village Design Regulations"

A comparison of the design guidelines in the Vail and Beaver Creek design guides brings to light some interesting observations. It is interesting to note the different focus of these two guides. *The Vail Village Urban Design Guide Plan* puts more emphasis on the pedestrian experience, pedestrian spaces, and the outdoor environment, while Beaver Creek Village *Design Regulations* predominately establish the design theme and put much more focus on the architectural elements, materials, form specifications, and requirements of the village architectural elements.

2.3.2 Pedestrian Communities

Vail:

According to Sherry Dorward, Vail is an exceptional and rare model of a pedestrian mountain resort village where people willingly leave their cars outside the core because the sequence of movement is both interesting and convenient. Motorists have no choice in the matter, as the restricted auto access circulation system is enforced by municipal consensus (Dorward 1990.) The Vail Village core is a pedestrian only environment with the goal of providing a variety of built and landscaped open and enclosed spaces that create a strong pedestrian system framework with visual interest and activity. Building expansion must preserve the few existing service alleys, which are extremely important to minimize vehicle congestion on pedestrian ways (Town of Vail 1980.)

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The Vail Village *Urban Design Guide Plan* states: "(a) major objective for Vail Village is to encourage pedestrian circulation through an interconnected network of safe, pleasant pedestrian ways" (Town of Vail 1980, p.3.) Pedestrianization in the core village is achieved by routing traffic to Vail Village/Vail LionsHead parking structures and keeping vehicle penetration to a minimum in the rest of the village through road constrictions, traffic circles, and signage. All village streets within the core are enclosed with buildings and the pedestrian system is to be viewed as a continuous system (Town of Vail 1980.)

While the Vail Village core is a pedestrian only environment except for limited service vehicle access, a totally car-free pedestrian system is not achievable throughout the entire village. Some vehicular traffic, such as bus routes and delivery access, must enter certain streets in the village outside the core. As a result, several levels of pedestrianization are recognized and included outside the Vail Village core:

1. Pedestrian-only streets

2. Pedestrian streets for limited delivery traffic and sufficient width for uninterrupted pedestrian walking

3. Pedestrian walks separated from vehicular roadways for trucks and shuttle buses

4. Primary vehicular routes with no pedestrians (Town of Vail 1980)

Beaver Creek:

In Beaver Creek, automobiles are almost entirely excluded from the village and skiers must use a free shuttle bus system from surface parking lots several miles below the entry into the core village. There are no other towns in the American mountains that compare to this system. However, all lodgings do have underground parking, including the village hall parking structure, which runs underneath a ski slope runout (Dorward 1999.) All parking within the village must be within structures (Beaver Creek Design Board 1981.)

Village movement and circulation patterns are accomplished through building siting within the Village. This includes the liberal use of retaining walls, walkways, patio decks, and

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planter areas to establish and direct pedestrian flow and vehicular circulation. Continuous pedestrian circulation without interruptions or barriers is a main priority. Paths and walkways are critical to providing the pedestrian connections of the village. The design of convenient pedestrian routes must be included in every project as part of an integrated master plan system for Beaver Creek (Beaver Creek Design Board 1981.) Beaver Creek Village Design Regulations also suggest the use of design features, such as fountains, benches, sculpture, bridges, and archways, as part of the pedestrian experience with walkways that include points of interest and activities along their routes (Beaver Creek Design Review Board 1981.)

2.3.3 Diversity

Vail Village:

The desire for diversity in Vail is apparent from the Town of Vail design guidelines, which state:

> "A strong street edge is important for continuity, but perfectly aligned facades over too long a distance tend to be monotonous. With only a few exceptions in the Village, slightly irregular facade lines, building jogs, and landscape areas, give life to the street and visual interest for pedestrian travel" (Town of Vail 1980, p.7.)

Vail Village has no standard building setback requirements. Placement of portions of a building adjacent to or in close proximity to the property line is allowed and encouraged to create an intimate pedestrian scale and provide strong pedestrian street definition. The *canyon effect* between buildings is also referenced as an acceptable and desired condition of the pedestrian experience in certain instances. It can be used to provide variety for short linkage connections between larger spaces (Town of Vail 1980.) Elevated patios that "give views into the pedestrian walk (and not the reverse)" (Town of Vail 1980, p. 19) are also encouraged. Color is addressed as a way to introduce diversity into the village core by stating intent to "provide greater latitude in the use of color in Vail Village" (Town of Vail 1980, p.14.) and encouraging color and material change from ground to upper floor levels. The primary building materials found in Vail Village are stucco, brick, wood (and glass). "Existing conditions show that within this small range of

materials, much variation and individuality are possible while preserving a basic harmony"
(Town of Vail 1980, p.14.)

Beaver Creek Village:

Building style uniformity with subtle differences in building materials appears to be the goal within Beaver Creek Village. Beaver Creek Village Design Regulations (1981) suggest vertical wood siding as sheathing on gable ends, and upper levels with heavier rock, and plaster surfaces below. The following materials are allowed with strict guidelines for use on exterior walls: wood siding (either western cedar or redwood) "without heavy pigmentation stain or paint" (Beaver Creek Design Board 1981, p.13), plaster in warm off-white colors to express mass and not to be used as infill panels. The Design Review Board must approve all rock which is to be installed in a random pattern with deep reveals between rock and textured exposed concrete tinted warm tan or brown. Glass may be used on walls with southern exposures to contrast with wall mass.

In Beaver Creek, individual expression of the tenants is encouraged as a way to offer interest to pedestrians. This can be accomplished through elements such as unique window and door openings, balconies, trim, graphics, hanging signs, street furniture, water, paving patterns, surface textures, and color choices that contrast with the character of the rest of the village. While "major wall surfaces should be a neutral backdrop of off-white tones, smaller scale elements such as doors, window trim, signs, soffits, and recessed wall areas should introduce a strong palette of color to the village" (Beaver Creek Design Board 1981, p. 5.)

> "The colors of the Village should relate to the levels of perception discussed in the design theme. From a distance, colors should blend with the natural landscape; the predominate roof color should be the blue-gray tile. Within the streets and public spaces, the enclosing walls should be predominately warm off-white colors tinted from beige and tan to subtle mauves and earth tones. The details such as window trim, soffits, and graphics should be accented with rich color against this subdued background" (Beaver Creek Design Board 1981, p. 14.)

The Beaver Creek Design Guidelines suggest that diversity should appear in the village as a result of tenant efforts.

2.3.4 Site orientation for Sun, Wind, and Views

Vail:

The challenge in Vail's 25-year-old core is not so much to create warm outdoor places as to protect those that exist. The town of Vail adopted urban design guidelines in 1980, which specify that new building and expansions in the core are not allowed to dramatically change the microclimate of existing public spaces (Dorward 1990.) The importance of considering sun access, opportunities for views and pedestrian activity is specifically suggested for plazas, patios, and green areas, which are "important focal points for gathering, resting and orienting and should be distributed throughout the Village" (Town of Vail 1980, p. 7.) Vail design guidelines clearly address sun shade issues when they state the need for long canyon streets to be oriented in a north-south direction and discourage east-west direction streets with this same condition (Town of Vail 1980.)

The importance of sun and shade in the alpine environment is addressed through mention of the sun as a comfort factor during the winter, fall, and spring. The significantly lower ambient temperature of shaded areas when compared to adjacent sunlit areas is considered a negative impact. Shade is to be considered in all building construction for mass and overall height. For adding onto existing buildings, recommendations are made to avoid the extension of shadow patterns on adjacent properties or public right of ways.

View corridors and focal points are addressed in detail in the Vail Village Design Guide and the reader is reminded of how Vail receives its identity from its mountain/valley setting. Views of the mountains, ski slopes, creeks, other natural features, and certain building features are considered orientation reference points and visual focal points that provide a reminder of the mountain environment and should be repeatedly visible. The most significant view corridors are adopted by the Vail Municipal Code and are not considered exhaustive. Analysis of new project impacts on views during development proposal evaluations is given priority, and ordinances protect view corridors from development encroachment (Town of Vail 1980.)
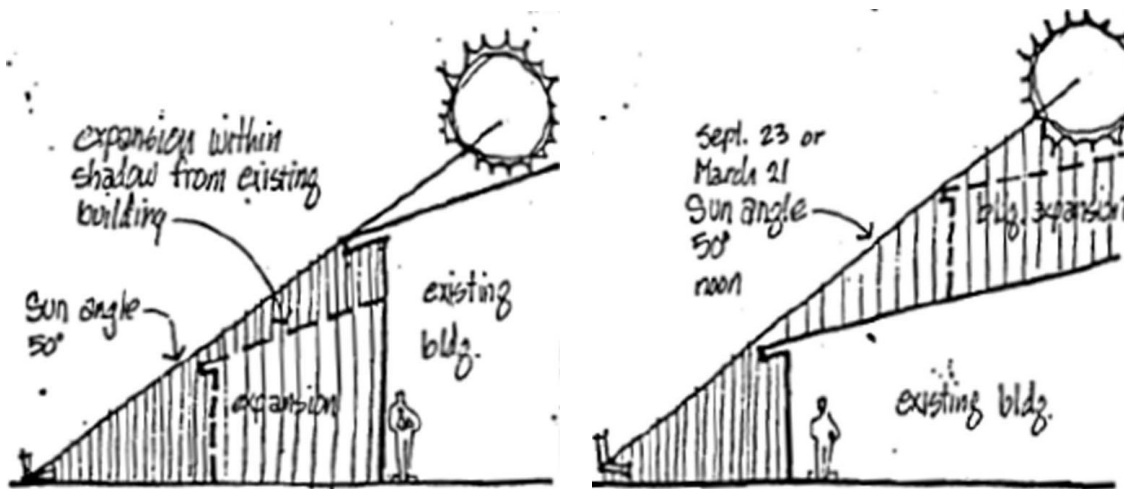
Figure 2.2 Examples of Acceptable Building Additions for Sun Penetration In Vail Village
Source: Town of Vail 1980)

"Specific views to be preserved originate from either major pedestrian areas or public spaces, and include views of the ski mountain, the Gore Range, the Clock Tower, the Rucksack Tower, and other important man-made and natural elements that contribute to the sense of place associated with Vail Village. These views, which have been adopted by ordinance, were chosen due to their significance, not only from an aesthetic standpoint, but also as orientation reference points for pedestrians" (Town of Vail 1980, p.9.)

Beaver Creek:

In contrast to Vail Village, *Beaver Creek Design Regulations* focus on views of the village from a distance outside the village, which emphasize how it complements the natural landscape: "As seen from a distance, the village should be understated and uncomplicated, made up of simple forms and consistent roof lines" (Beaver Creek Design Board 1981, p. 1.) "At a distance the Village is seen either from the mountain looking down, or from the entry road upon arrival" (Beaver Creek Design Board 1981, p. 2.)

When discussing views from within the village; visual expression of the walls becomes the focus, and the one-time "mountain views" are mentioned in the document in reference to the view from within the upper levels of buildings (Beaver Creek Design Board 1981.) The

emphasis of establishing and framing views for the pedestrian visitor, as a way to create a unique experience through connection to the landscape and mountain environment, are not priorities of the *Beaver Creek Design Regulations*.

In his Master of Landscape Architecture thesis *Fundamentals of Mountain Resort Base Village Design*, Harding (2008) states how Beaver Creek sites buildings so that they form strong structural edges delineating a boundary between the ski slopes and the village. This approach is a strong design statement, which clearly separates the interior village core from the greater context of the mountain. While this can be successful in creating a quaint village atmosphere without distractions from the outside, the visual connection to the outside landscape and majestic mountain views are compromised (Harding 2008.) Dorward (1990) explains how Beaver Creek's north-northeast to south-southwest oriented pedestrian corridor should get adequate afternoon sun. "However the five-story height and mass of the buildings on the uphill (north-facing) edge, combined with the narrow width in some places, may make the street less hospitable to outdoor use at most other times" (Dorward 1990, p. 256.)

Discussion of the influence of sun and shade on the pedestrian experience is also lacking in *Beaver Creek Design Regulations.* Mention is made of avoiding the design of patios, decks, and entry ways on the North side of a structure due to both shading and Northwest winds. The main focus is on sun is as it relates to architecture; the shading of buildings during the summer, location of windows along the south of a building, passive solar systems, and direct gain for energy efficient buildings (Beaver Creek Design Board 1981.) Beaver Creek does not seem to be concerned with or focused on creating a comfortable environment or creating a visual connection to the landscape outside the village for the pedestrian visitor.

2.3.5 Scale

Vail Village:

The Vail Village Urban Design Guide Plan states:

"(T)he Village Core is perceived as a mix of two and three story facades, although there are also four and five story buildings. The mix of building

heights gives variety to the street--which is desirable. The height criteria are intended to encourage height and massing variety and to discourage uniform building heights along the street" (Town of Vail 1980, p. 8.)

"The definition of height shall be as it is in the Vail Municipal Code.

1. Up to 60% of the building (building coverage area) may be built to a height of 33 feet or less.

2. No more than 40% of the building (building coverage area) may be higher than 33 feet, but not higher than 43 feet." (Town of Vail 1980, p. 8.)

Vail Village design guidelines establish relationships for scale by treating pedestrian streets as "outdoor rooms" whose walls are formed by the buildings. The shape and feel of these 'rooms' are created by the variety of heights and massing (three-dimensional variations), which give much of the visual interest and pedestrian scale unique to Vail" (Town of Vail 1980, p. 5.) They also acknowledge general rules used by designers to ensure that the perception of exterior spaces is based on "human vision". Vail Village design guidelines assert that external enclosure of a space achieves the most comfort when building walls are approximately one-half as high as the width of the space enclosed. Ratios of one-quarter and less or where building height is greater than width are unenclosed or canyon conditions, which are not considered to be within human scale development. Variation in height from one side to the other is also addressed through the averaging of façade height of both sides to stay within the .5 to 1 ratio as a guide to enclosure "comfortableness" (Town of Vail 1980.) These references to "human vision" and "comfortableness" of the enclosure are significant, because they illustrate that Vail Village is obviously concerned with producing a human-scale atmosphere for its pedestrian development.

Color and material change from ground to upper floor levels are also encouraged as a "common and effective reinforcement of the pedestrian scale of the street, as is the need for transparency on the ground floor of facades of adjacent buildings" (Town of Vail 1980, p. 14.)

Balconies are cited as "strong repetitive features… that give scale to buildings" (Town of Vail 1980, p. 20) by creating overhead comfort for pedestrians below.

Beaver Creek Village:

When Vail Associates developed Beaver Creek, they recognized the importance of distant impressions to their concept of a "remote village with its own identity, an imaginable place…" (Beaver Creek Design Review Board 1981, p. 1.) The village was envisioned as a tight, compact community spanning the valley similar to a bridge. However, today the perception of human scale is not always clearly evident from within the village as it appears to be from a distance (Dorward 1990.) *Beaver Creek Design Regulations* clearly indicate the desire for human-scaled development and the importance of buildings in forming pleasing public spaces, stating:

> … "within the streets and public spaces of the project… the exterior walls become the dominant element, establishing the overall scale, and defining the public spaces and pedestrian circulation routes within the Village" (Beaver Creek Design Review Board 1981, p. 3.)
> (The) relative tightness of spaces within the commercial core area has been established to create the scale of the pedestrian village. In establishing locations and siting, buildings shall relate to adjacent and surrounding structures. It is important to consider the "void" or exterior spaces between buildings which will provide the public spaces, streets and arcades within the Village. (Beaver Creek Design Review Board 1981, p. 25.)

While it appears that the Beaver Creek Review Board desires a properly human-scaled village, Dorward (1990) criticizes these guidelines, stating that the design guidelines make no mention of wall height, "acknowledged as the other essential variable in spatial relationships" (p. 281.) The distance between walls or "tightness" of spaces alone will not control the scale of a village. The actual built dimensions of the Beaver Creek Village core may indicate a community other than human scale, as suggested by Dorward.

It is also interesting to make a comparison of the Vail Village building height limitations to those of Beaver Creek Village:

> "Building height limitation within the Village (Tract A) shall be restricted to 55' from finished grade to a point midway between eave and ridge. Building height limitation outside the Village shall be restricted to 35'

> from finished grade to a point midway between eaves and ridge."
> (Beaver Creek Design 1981, p. 11.)

A 55' building height is significantly higher than the prevalent 33' height in Vail Village. 55' yields a four- to five-story building in Beaver Creek Village where the ground is level around the entire building. However, as Dorward (1990) points out, when building in the mountain environment, the considerable slope of land can produce a building of 55' on the uphill side with a roof up to 100' off the ground on the down slope side of the building. This is the case in Beaver Creek Village, and while it is acceptable to Beaver Creek Village and falls within their design regulations, a 100' plus building may not lend its self to creating the ambience of a human-scaled development.

2.4 Summary

This chapter describes the design principles that landscape architect Eldon Beck uses to create mountain resort community cores. These design principles have produced the resort village cores at Whistler Village, B.C. and Mont Tremblant, Quebec. Beck also helped to pedestrianize Vail Village through the design of certain elements such as the parking garage within the village. In surveys by publications such as SKI Magazine and Travelers Digest (Ski's 2010-2011 Resort Guide Top Ten 2010; Top Ten Worlds Best Ski Resorts 2010), these three mountain resort villages are consistently rated as top North American mountain resort destinations. The consistent popularity of these resort villages illustrates the significance of Beck's use of design principles. A review of the design guidelines of Vail Village and Beaver Creek Village gives insight into how the five principles of design discussed in this study re applied in each village. This review of design guidelines has determined the following:

- Both Vail Village and Beaver Creek Village are considered unique pedestrian developments within North America.

- Beaver Creek Village may not incorporate the concept of diversity to the extent that Vail Village does.

- Site orientation for maximum sun exposure is clearly dictated in Vail Village through stating the importance of street alignments, building mass, and height to reduce shadow patterns in pedestrian ways. Beaver Creek discusses sun in relation to its affect on architecture and energy efficiency, with no discussion on how to ensure solar penetration into public outdoor spaces.

- Site orientation for views seems to be stronger and emphasizes a greater connection to the surrounding mountain environment in the *Vail Village Urban Design Guide Plan* than in the *Beaver Creek Design Regulations* (Town of Vail 1980; Beaver Creek Design Review Board 1981).

- The definition of scale is better articulated and more in line with a "human-scale" development in the *Vail Village Urban Design Guide Plan* than in the *Beaver Creek Design Regulations*. The predominant height in Vail Village is 33 feet and maximum of 43', in contrast to a 55' maximum in Beaver Creek. In Beaver Creek however, there is no height restriction on the downhill side of the building.

The author's intent in this study is to explore these last statements through visual inventory of design principles in each village core and in-depth interviews (see Chapter 3 "Research Methods").

CHAPTER 3

RESEARCH METHODS

> *That's the goal—an experience. "Visitors want an experience that is not typical of their daily lives," Beck says. "They really want to go to a place that is different and is memorable. If we bring to the mountains the trappings of an urban or suburban area, I think we've really blown it."*
>
> Clifford 2003

3.1 Introduction

The purpose of the study is to determine the appropriateness of Vail Village and Beaver Creek Village based on the ability of these base village cores to create a unique visitor experience. This is accomplished through adherence to five design principles used by Beck to create an outdoor, multi-chambered, visually stimulating environment that encourages and invites human activity and repeat visits to the village core and ski resort (Dorward 1990; 2006.) The five design principles are: a pedestrian system as the village structure; diversity; site orientation for views to the surrounding landscape; site orientation for maximum sun exposure; and scale.

These reasons for selecting these mountain resort villages are:

- The close proximity of Beaver Creek Village and Vail Village

- There is adequate literature review about each village

- These villages were developed within a decade of each other

- Contrasting architecture styles of both villages

- The researcher's familiarity with both village cores and surrounding communities from ski vacations prior to this study

Further, "A good qualitative study combines an in-depth understanding of the particular setting investigated with general theoretical insights that transcend that particular type of setting" (Taylor and Bogdan 1984, p.26.)

3.2 The Participants

Participants of this study included architects, landscape architects, planners, design critics, and policy makers who are from Vail Village and Beaver Creek Village or who have been involved in the design and development of these areas. These participants were chosen because of their familiarity with Vail Village and Beaver Creek Village and their histories, as well as with the challenges of circulation during peak population periods, development pressures, and the environmental extremes of an alpine mountain environment. Many of the participants have experience designing mountain resort villages using the five principles of design evaluated in this study. The participants provided their knowledge and opinions based on their professional expertise to determine the presence of: a pedestrian system structure; site orientation that respects views and solar access; diversity; and scale as found in the village cores of Vail Village and Beaver Creek Village. The participants also provided their definition of what is appropriate design and discussed design principles that they believe are important to the design and development of mountain resort village cores.

A list of interview participants was constructed by first contacting Beck and Dorward, both of whom are well acquainted with individuals involved with the design and planning of Vail Village and Beaver Creek Village. Potential participants were asked by telephone to schedule interviews. A follow-up email was also sent (see sample email script in Appendix B and sample phone scripts in Appendix C). Snowball sampling was used, in which respondents were asked to identify additional interview participants who had involvement with and/or knowledge of the design of Vail Village and Beaver Creek Village (Taylor and Bogdan 1984.) This process added 14 participants to the pool of interviewees.

The interviews were recorded and transcribed by the researcher into Microsoft Word documents. The electronic Word files were stored in the office of Dr. Pat Taylor at The University of Texas at Arlington, and the audio files were destroyed.

3.3 Data Collection

Two types of data collection took place in this study:

1) Visual inventory was conducted by the author as a visitor to Vail Village and Beaver Creek Village to informally determine the presence of the five design principles in both base villages. Before visiting the villages, a visual inventory action guide was developed (see section 3.4 "Visual Inventory Action Guide"). Data are collected by recording the information requested in the visual inventory action guide. The results of this visual inventory are displayed in Chapter 4 section 4.2.

2) In-depth interviews were conducted to determine the perceptions of interviewees regarding each village's ability to fulfill this study's definition of appropriateness, and to identify how the five design principles were applied in each mountain resort village.

Data are collected using the qualitative methods of in-depth interviewing as discussed in Taylor and Bogdan (1984) Town Design Guidelines were also compared to design principles (see Chapter 2) to help determine the appropriateness of the design and development in each village core.

3.4 Visual Inventory Action Guide

This section describes the action guide that the author developed before the author's visits to the villages. The purpose of this guide was to help visually record the presence of the five design principles in Vail Village and Beaver Creek Village. This guide includes the five principles along with specific criteria that indicated their presence. Chapter 4 provides the results of this visual inventory in section 4.2 "Visual Inventory".

Pedestrian system as the core community structure:

- Note whether the village has a pedestrian structure system.

- Note whether there are vehicles in the village, and if so, how they interfere with the pedestrian experience.

Site orientation for views:

- Photograph views that make a connection to the surrounding landscape and ski mountain from within the village.

- Note view corridors and points from where photos were taken in plan view.

Site orientation for sun:

- Note shadow patterns and record in plan view at 4:00 p.m. (this single time was chosen because of the author's limited time in each village).

Scale:

- Pace and record the size of major plazas to gain an accurate scale for village core plan view.

- Count building floors for all buildings that face pedestrian ways and plazas for an accurate height assessment.

Diversity:

- Photograph diversity in the forms of:
    - Different contrasting colors used within the village
    - Overhead conditions including balconies, signage, and canopies
    - Building recession and extension
    - Differences in building sizes and heights

- Note raised patios in plan view where people can step out of the main pedestrian flows to sit and relax, eat or window shop.

3.5 Interview Questions

Interview participants were asked to explain how the five design principles were applied in the mountain resort villages of Vail Village and Beaver Creek Village. These questions also

determined perceptions of the interviewees regarding each village's ability to fulfill this study's definition of appropriateness.

1. A *pedestrian development* is said to separate people from cars where ever possible (Clifford 2006.) Are Beaver Creek Village and Vail Village structured as pedestrian developments?

2. *Proper site orientation* preserves view corridors, frames specific vistas and views, and allows maximum solar access through street and building alignments, building heights, and roof lines (Brent Harley and Associates 2009; Dorward 1990.) Tell me about site orientation in Beaver Creek Village and Vail Village.

3. *Diversity* refers to variation in building sizes, setbacks, facades, alleyway widths, plaza sizes, overhead planes, and variation in horizontal levels such as raised patios (Clifford 2003.) Describe the diversity found in Beaver Creek Village and Vail Village.

4. *Scale* refers to the "mass and height of buildings together with the outdoor dimensions they define (Dorward 1990, p. 272.) Describe the scales of Beaver Creek Village and Vail Village.

   (Follow-up question: Are Beaver Creek Village and Vail Village human-scale developments?)

5. *Appropriateness* for a mountain resort village core is defined as designs that stimulate visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces (Dorward 1990). Describe such appropriateness at Beaver Creek Village and Vail Village.

6. Are there other design principles important to mountain resort villages?

3.6 Challenges to Research

Challenges to research include a self-imposed seven-month time frame set by the researcher to finish this thesis, which affects the depth of study possible. Additionally, the degree of the respondents' exposure to the study sites could impact this study. Two

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respondents commented that they were not as familiar with Beaver Creek Village. These individuals were much more familiar with Vail Village, which they visited on a regular basis. The researcher's home distance of 850 miles from the study sites could also be considered a challenge. Interviews were completed over the phone as a result of this distance. The amount of time possible for visual inventory of design principles in the village cores was limited to three days, as a result of time constraints and this distance.

Another challenge to the research was minimizing the number of questions, to retain the attention of each respondent and obtain the required information in a reasonable time frame. In addition, some respondents referred to what a village's design guidelines said, rather than describing what they personally experienced in the village. After spending so much time working on design guidelines, these written documents may have become more important to an individual than what was really developed there. The interviewer addressed this issue by asking the respondent what they actually saw when they were physically in each village, in regard to the specific design principle that the question asked about.

3.7 Study Limitations

Limitations to this study include:

- Only five design principles are explored in this study. There are many other design principles that shape these village cores.

- This study does not directly explore environmental and ecology factors or financial and economic factors.

- This study does not reveal the perceptions of the actual visitors or users of these villages.

3.8 Method for Selecting Study Location

According to Taylor and Bogdan (1984), "A good qualitative study combines an in-depth understanding of the particular setting investigated with general theoretical insights that transcend that particular type of setting" (p. 26.) Factors that affect the methodology for site

selection included the author's visits to both mountain resorts previous to this study and familiarity with both village cores and surrounding communities, the close proximity of Beaver Creek Village and Vail Village, Vail Village as an initial model for Eldon Beck's use of five design principles, adequate literature review of both communities, and contrasting architecture styles of both communities.

3.9 Predictable Outcomes

The hypothesis for this study was that Vail Village would be seen as more appropriate based on this study's definition of appropriateness and a greater occurrence of each of the five design principles in Vail Village than in Beaver Creek Village. The exception to this assumption was that both developments are pedestrian-oriented developments. It was assumed that designers might take exception or not totally agree with the definition of appropriateness. Additionally, it was predicted that there would be many additional design principles identified as important to the design of mountain resort communities.

3.10 Summary

The interview participants of this study included architects, landscape architects, planners, design critics, and policy makers familiar with the design and development of Vail Village and Beaver Creek Village. A visual inventory was conducted to document the appearance of the five design principles within each village core. In-depth interviewing was used to determine the participant's perceptions of the presence of five design principles that Beck uses to design mountain resort villages. These interviews also sought to verify the definition of "appropriateness" in design for mountain resort village cores and to find additional design principles that are considered important to mountain resort design. Challenges to research, study limitations, and site selection methods were presented. It was predicted that Vail Village will be seen as a more appropriate village core than Beaver Creek Village based on this study's definition of appropriateness.

CHAPTER 4

RESULTS AND DISCUSSION

"The trend of mountain visitation is accelerating and there is every reason for us to encourage the practice. High altitude tourist encounters can be a joyous experience and an educational one as well."

Clark 2006, p. 6

4.1 Introduction

This section provides findings from the author's visual inventory and from interview data. Interviews were conducted with sixteen professionals who have been intimately involved with the design, planning, and development of design guidelines for Vail Village and Beaver Creek Village or who can give their perceptions of design principles found in the village cores, based on their professional experience and familiarity with both villages. Participants included three landscape architects, three architects, one participant who is both a landscape architect and architect, six planners, one participant who is a landscape architect, architect, and certified land planner, one former town manager, one MBA, and one managing director of a research and consulting company. Nine of the participants are company presidents.

The sixteen participants were interviewed to establish their perceptions of how the five design principles that Beck uses to design mountain resort villages occurred in Vail Village and Beaver Creek Village. The interviews were transcribed and then analyzed using a grounded theory approach to obtain a deeper understanding of what was studied in the literature review and first-hand experience with informants to make sense of the data collected (Taylor and Bogdan 1984.)

4.2 Visual Inventory

The author conducted an informal visual inventory to document the presence of five design principles, using the Visual Inventory Action Guide found in Chapter 3 section 3.4. The following plans and photos document the author's findings.

4.2.1 Village Pedestrian System Structure Visual Inventory

4.2.1.1 Beaver Creek Village Pedestrian System

It is clearly evident that Beaver Creek Village is a totally pedestrian oriented development with no cars within its village core.

4.2.1.2 Vail Village Pedestrian System

Vail Village has a pedestrian system structure. There are a few slow-moving or parked service vehicles and passenger vehicles within the core. Pedestrians walk down the middle of all streets and clearly have the right-of-way within Vail Village. Signs are posted to restrict entry into the village core to only authorized vehicles.

Figure 4.1 Vehicle Entry Restriction Signs

4.2.2 Site Orientation for Views Visual Inventory

Visual inventory of views to the surrounding landscape were documented by taking photos from within the village cores. These views are documented in figure 4.1 (Beaver Creek Village) and figure 4.4 (Vail Village), with numbered arrows and corresponding numbered views (figures 4.2–4.3, 4.5–4.8) showing where views are experienced.
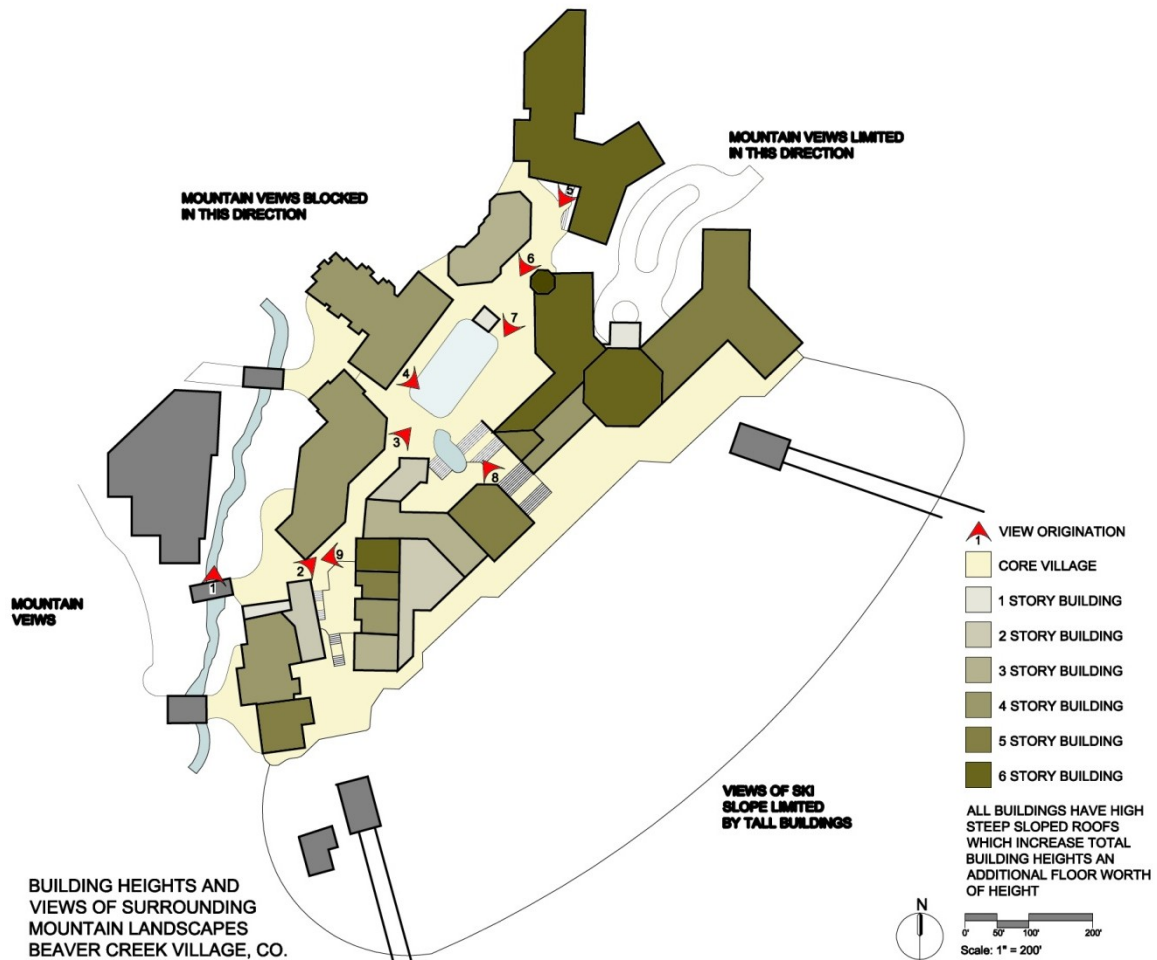
Figure 4.2 Building Heights and Views within Beaver Creek Village
(Source: Base plan adapted from Harding 2008, p. 56)
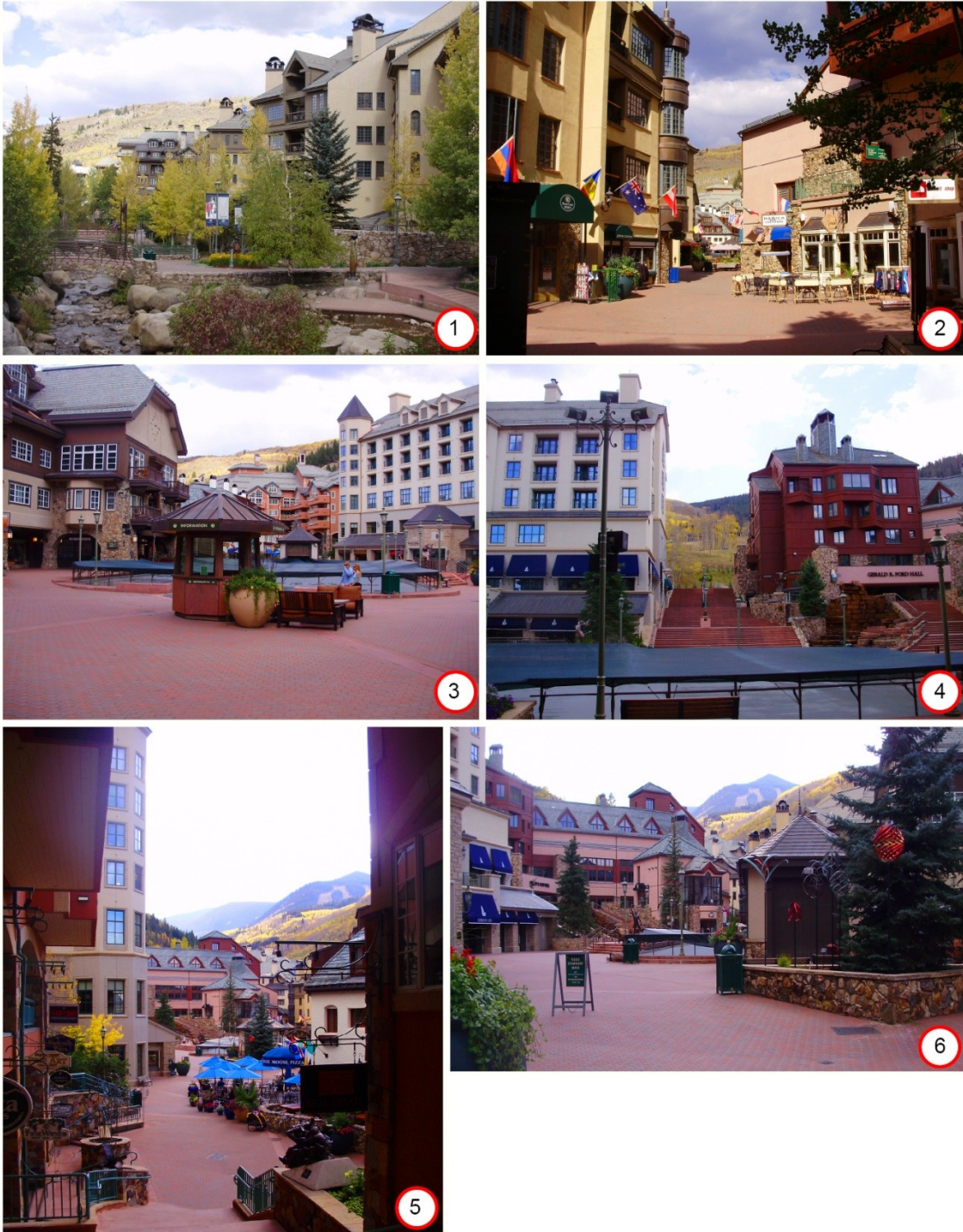
Figure 4.3 Beaver Creek Village Site Orientation Views 1 through 6 (Refer to Figure 4.1)
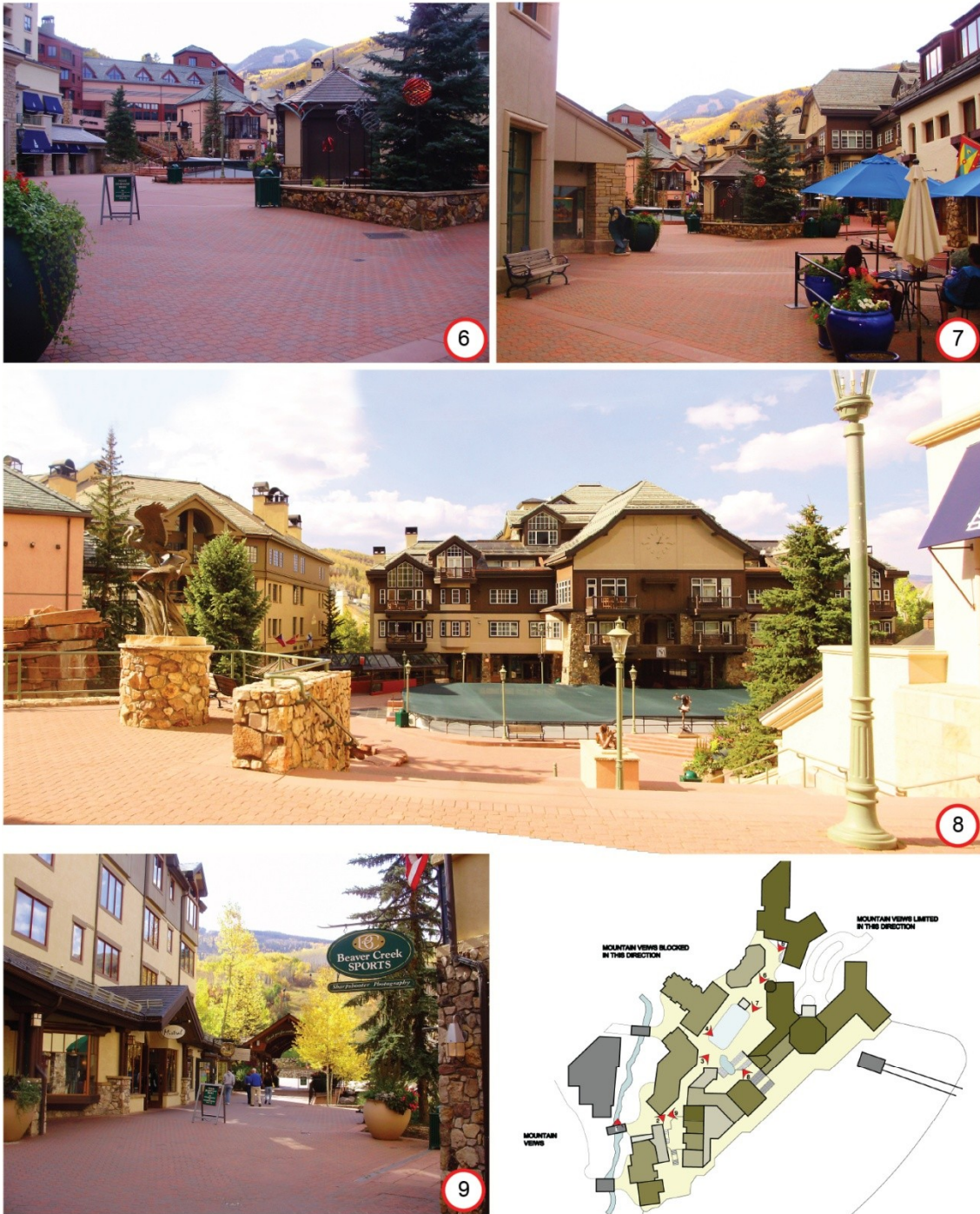
Figure 4.4 Beaver Creek Village Site Orientation Views 6 through 9 (Refer to Figure 4.1)

VIEWS OF SURROUNDING
MOUNTAIN LANDSCAPE

VIEWS OF
SURROUNDING
MOUNTAIN
LANDSCAPE

VIEWS OF SURROUNDING
MOUNTAIN LANDSCAPE

VIEW ORIGINATION

CORE VILLAGE

1 STORY BUILDING

2 STORY BUILDING

3 STORY BUILDING

4 STORY BUILDING

5 STORY BUILDING

6 STORY BUILDING

ALL BUILDINGS HAVE HIGH
STEEP SLOPED ROOFS
WHICH INCREASE TOTAL
BUILDING HEIGHTS AN
ADDITIONAL FLOOR WORTH
OF HEIGHT

N

0'   50'   100'   200'
Scale: 1" = 200'

BUILDING HEIGHTS AND VIEWS OF SURROUNDING MOUNTAIN LANDSCAPES
VAIL VILLAGE, CO.

Figure 4.5 Building Heights and Views within Vail Village
(Source: Base plan adapted from Harding 2008, p. 50)

Figure 4.6 Vail Village Site Orientation Views 1 through 6 (refer to Figure 4.2)

Figure 4.7 Vail Village Site Orientation Views 7 through 11 (refer to Figure 4.2)

VIEWS OF
SURROUNDING
MOUNTAIN
LANDSCAPE
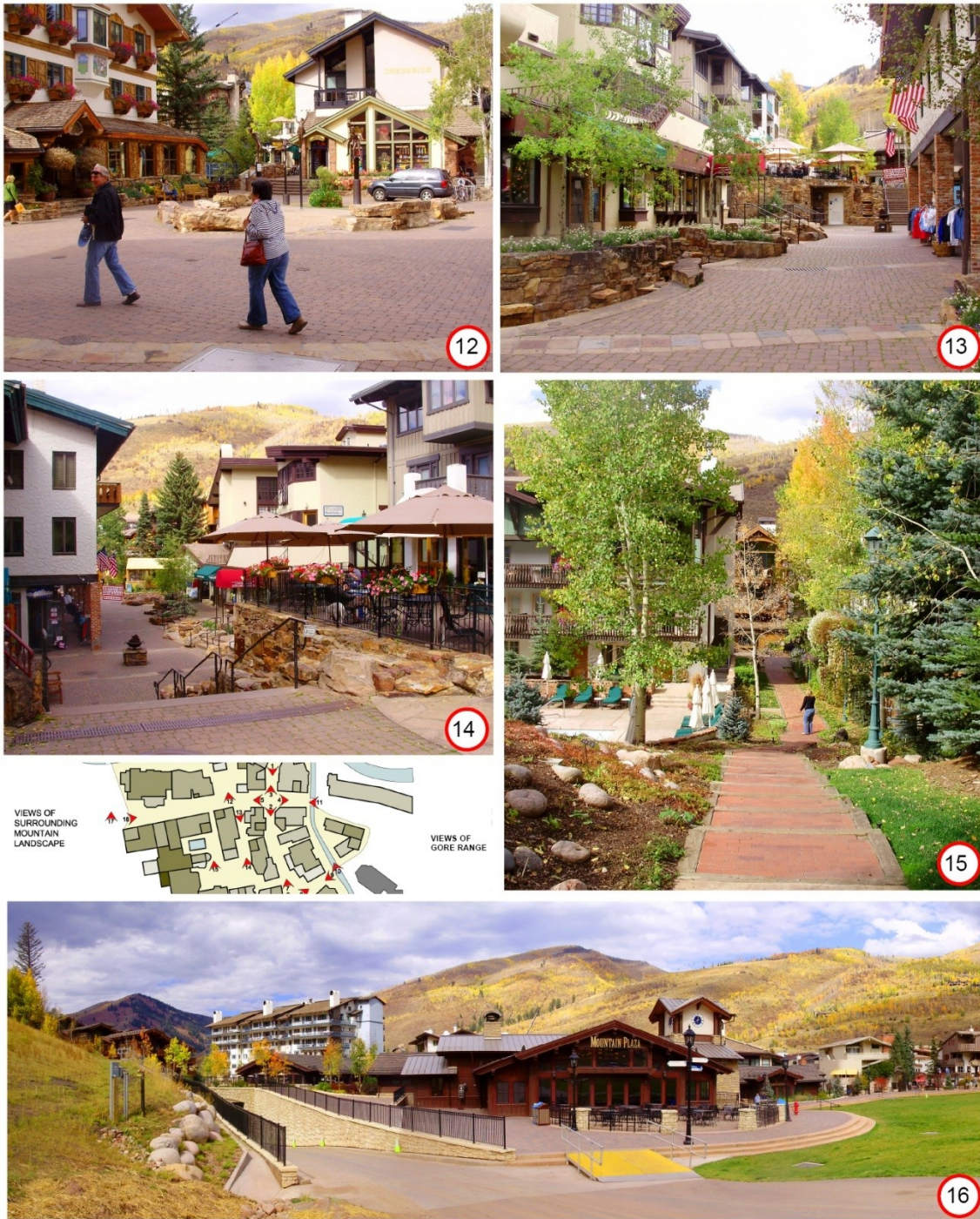
VIEWS OF
GORE RANGE

Figure 4.8 Vail Village Site Orientation Views 12 through 16 (refer to Figure 4.2)

VIEWS OF SURROUNDING
MOUNTAIN LANDSCAPE

VIEWS OF
SURROUNDING
MOUNTAIN
LANDSCAPE

VIEWS OF
GORE RANGE

VIEW ORIGINATION

CORE VILLAGE

1 STORY BUILDING

2 STORY BUILDING

3 STORY BUILDING

4 STORY BUILDING

5 STORY BUILDING

6 STORY BUILDING

ALL BUILDINGS HAVE HIGH
STEEP SLOPED ROOFS
WHICH INCREASE TOTAL
BUILDING HEIGHTS AN
ADDITIONAL FLOOR WORTH
OF HEIGHT

N

0'   50'   100'   200'
Scale: 1" = 200'

BUILDING HEIGHTS AND VIEWS OF SURROUNDING MOUNTAIN LANDSCAPES
VAIL VILLAGE, CO.

Figure 4.9 Vail Village Site Orientation Views 17 through 18 (Refer to Figure 4.2)

Shadow patterns were noted and recorded in plan view for Beaver Creek Village at 4:00 p.m. on October 3, 2010 and for Vail Village at 4:00 p.m. on October 1, 2010. This single time was chosen as a result of the author's limited time in each village and home distance from the site. Figures 4.9 and 4.10 illustrate how the shadows occurred in the village cores during these times.
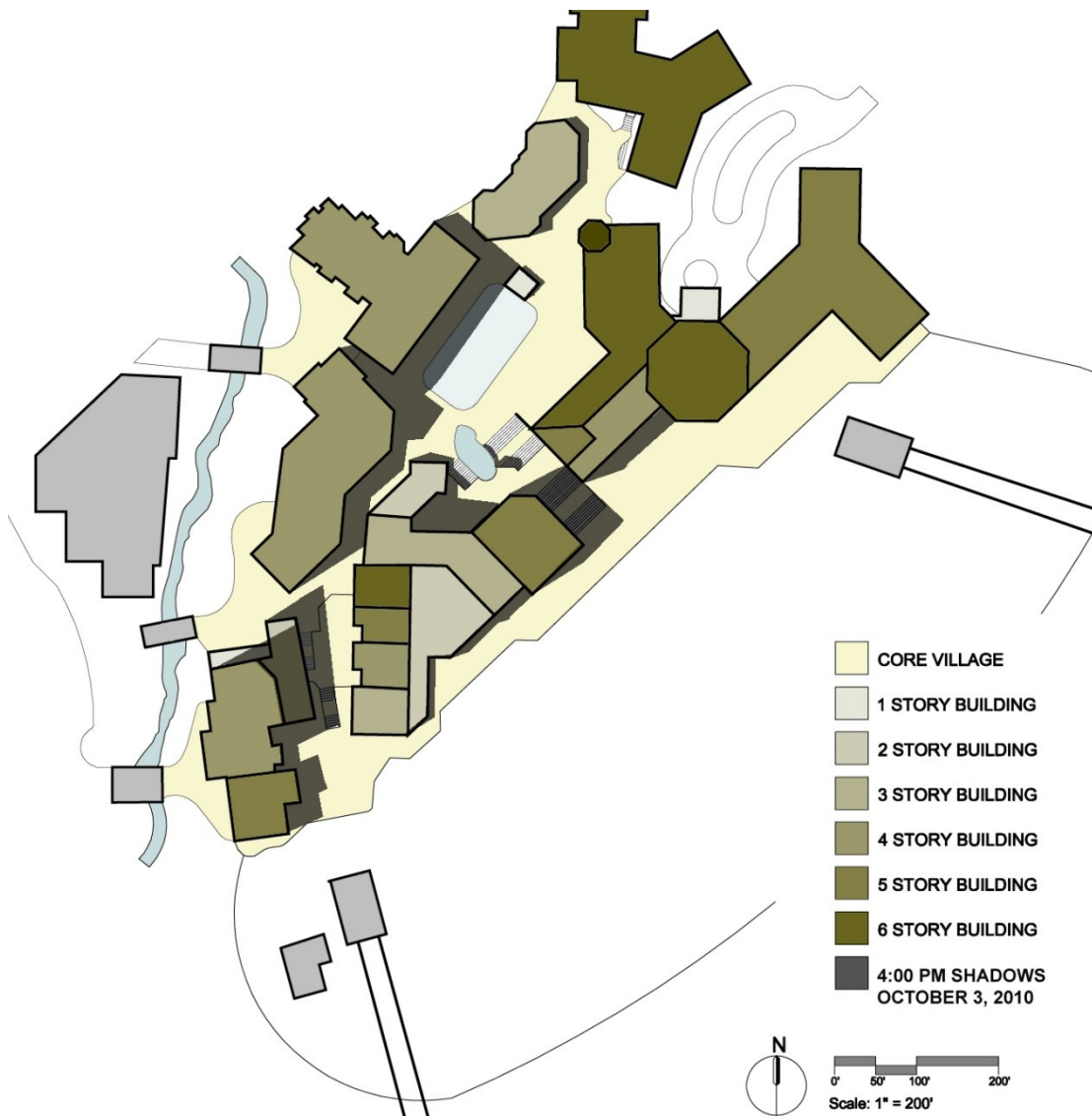
Figure 4.10 Beaver Creek Village 4:00 P.M. Shadows, October 3, 2010
(Source: Base plan adapted from Harding 2008, p. 56)

CORE VILLAGE

1 STORY BUILDING

2 STORY BUILDING

3 STORY BUILDING

4 STORY BUILDING

5 STORY BUILDING

6 STORY BUILDING

4:00 PM SHADOWS
OCTOBER 1, 2010

N

0'   50' 100'   200'
Scale: NTS

Figure 4.11 Vail Village 4:00 P.M. Shadows, October 1, 2010
(Source: Base plan adapted from Harding 2008, p. 50)

4.2.4 Scale Inventory

Scale was inventoried by counting building floors and pacing distances within pedestrian spaces to establish pedestrian area dimensions within the village cores. Floor heights were documented in color-coded plan views for each village. Figures 4.12 and 4.13 illustrate the inventory findings for scale.

Figure 4.12 Beaver Creek Village Building Heights and Plaza Dimensions
(Source: Base plan adapted from Harding 2008, p. 56)

Figure 4.13 Vail Village Building Heights and Plaza Dimensions
(Source: Base plan adapted from Harding 2008, p. 50)

4.2.5 Diversity Inventory

Photos were taken to document diversity within the villages. In each village, the researcher looked for and photographed examples of building size and height variation, extension and recession, overhead conditions, raised patios, and raised walk areas.

Diversity in roof line, entry canopies and arcade overhead, balconies, entry ways and signage

Diversity in entry way and store fronts, patio with umbrella overhead and signage

Diversity in roof line, over head and entry way features, window openings and building height

Diversity in storefronts, signage, projection, and entry ways

Diversity in signage, a raised patio, umbrella overhead, window openings and color

Figure 4.14 Beaver Creek Village Diversity

Diversity in seating, raised patio/eating areas, building size and projection/recession, building entry ways and color

Diversity in building entry ways, roof line, raised patios, overhead features, balconies, signage, color, seating, building projection/ recession and size variation

Diversity in building entries, canopies/arcade overhead features, raised separation from main pedestrian flow, raised patio and entry ways

Diversity in building entries, overhead features and canopies, raised separation from main pedestrian flow, raised patio and entry ways

Diversity with raised patio, umbrellas and semi-enclosed eating areas, seating, variation in building size and projection and recession, balconies and color

Pathway width variation, vegetation, entryway and balconies

Figure 4.15 Vail Village Diversity

4.3 Recruiting of Participants

As discussed in Chapter 3, interview participants were recruited by phone and e-mail correspondence, based on their design experience and knowledge of the village cores of Vail Village and Beaver Creek Village. The snowball technique was also employed by asking participants for recommendations of other design professionals who were knowledgeable about the two villages (Taylor and Bogdan 1984.) The snowball technique yielded 12 design professionals, of whom the researcher was unaware.

4.4 Interview Analysis

All interviews were conducted by telephone and recorded using an RCA digital voice recorder. The researcher then personally transcribed all the audio files. After transcription, the interviews were analyzed using a grounded theory approach. The grounded theory method seeks to discover "theories, concepts, hypotheses, and propositions directly from data, rather than from *a priori* assumptions, other research, or existing theoretical frameworks" (Taylor and Bogdan 1984, p. 126).

4.5 Themes from the Data

To identify themes from the collected interview data, the grounded theory method was used (Taylor and Bogdan 1984, p.126.) Themes were discovered by reading and re-reading the interview transcripts until no new themes emerged from the data. It is important to note that, as Taylor and Bogdan state, there are "no guidelines in qualitative research for determining how many data are necessary to support a conclusion or interpretation. The best insights sometimes come from a small amount of data" (1984, p. 139.) The following themes regarding the five design principles discussed in this study emerged from analysis of the interview transcripts:

4.5.1 Pedestrian Villages

4.5.1.1 Both villages are pedestrian villages

This is a qualitative study. Respondents agreed that Beaver Creek Village is a pedestrian only village and was designed that way from the very beginning. Respondent P1 said, "Beaver Creek Village was developed in the '80s with much more modern thinking on some of the ideas of pedestrian circulation, in the way they completely designed the village with subterranean parking underneath a lot of that project. So I would tell you their village is absolutely vehicle free."

Vail Village was also considered to be a pedestrian village, even though service deliveries are allowed into the village core during limited time frames in the early morning and evening. Emergency vehicles and a certain number of residents/tenants also have grandfathered rights to vehicle access into the Vail Village core. The general consensus was that this limited number of vehicles did not affect the pedestrianization of the Vail Village core. Two respondents remarked that vehicles in the village core actually enhance the pedestrian experience. One respondent (P2) offered, "Cars are important. A downtown resort is like a downtown anywhere else. There is a role for automobiles. If you look at downtown Aspen, one reason it's vital is that it does accommodate cars at a speed in balance with pedestrians." Respondent P6 commented, "Overall I think it (vehicles in the core) enhances the design a little bit. I think it gives it more of a real context within Vail Village. I would say I like this context a little bit better." In Beaver Creek Village, respondents confirmed there is no vehicle penetration into the village core. Service deliveries occur in garages beneath the village, with service entrances to the buildings below ground.

4.5.1.2 Organic evolution versus master-planned community

The first question identified a theme that resurfaced or was introduced at various points of an interview throughout many of the interviews. Vail Village was perceived as and considered to be a village that grew organically and morphed or evolved over time, while

Beaver Creek Village was a master-planned community from the very beginning. This affected the pedestrianization of each village. When Vail Village was first built in the '60s, it was not a pedestrian village, but by the early '70s, the need to pedestrianize was realized and the village took various steps to exclude vehicles from the village core as much as possible. Beaver Creek Village on the other hand, was seen as a totally pedestrian development from the beginning.

4.5.1.3 Vail Village parking capacity

Three respondents commented on Vail Village's parking capacity as a major contributor to the success of Vail Village as a pedestrian environment. When comparing Vail Village and Beaver Creek Village, Respondent L1 said, "I think there is more pedestrian flow in Vail Village. Probably because of sheer size, and the relationship of the interstate to the core pedestrian village is closer, and the parking garage is much larger." "Vail Village is certainly a pedestrian-oriented village, and the way that they're successful in doing that is that they capture all the cars and visitors in the structured parking lot" (respondent MBA.)

4.5.1.4 Beaver Creek Village is disorienting

Four respondents made note of Beaver Creek Village as a disorienting experience. "You're parking under the building, and I think this can be disorienting to figure out where you come out of the parking garage, versus Vail, where you have a parking structure you walk out of and you see the village and automatically know where you are. So Beaver Creek, I think, is a little bit more difficult for the first-time visitor not knowing where they are" (respondent MBA.) Respondent P1 stated, "The first time I went there, I struggled as far as where I was supposed to go. I just followed the crowd." "In Beaver Creek, it's different, not necessarily good or bad. You come up from the underground parking structure and you pop up, so you don't have that sense of pedestrian entry that you do with the covered bridge (in Vail Village)." "They did what they had to do to make it work. You have to go up this mountain road to get there, and then you go into this parking structure and pop up someplace and don't really know where you are" (respondent ALP1.)

4.5.2 Views

4.5.2.1 Vail Village has multiple view corridors worth keeping

Although comments were made that the initial builders/development of Vail Village did not regard view corridors as important, respondents cited many references to the great views from within Vail Village. Nine respondents made specific positive reference to the views from within Vail Village. Commenting enthusiastically about the views from Vail, respondent A1 exclaimed, "They're gorgeous views that are worth saving! Long-range views of the mountains out to the East and up towards the ski mountain!" Respondent P6 said, "One dramatic vista would be looking down Gore Drive to the Gore Range into the East. It's a nice experience walking down that street and it impresses people. There is a nice view as you come out of the parking structure looking up Bridge Street at the mountain." Respondent TM mentions the same views: "While you're walking down Gore Creek drive and you're able to sight the Gore range, well that's the postcard shot you always see in Vail. Or there's the view from the parking structure looking over the clock tower at the ski mountain." When comparing Vail Village to Beaver Creek Village, respondent MBA claimed, "In Vail Village, you have more views of the mountains, more open views, and more views from different locations I think." Respondent P1 mentioned, "We always want people to have that connection to the natural environment and the attraction which is the ski mountain."

4.5.2.2 Progressive realization adds to pedestrian experience/orientation in Vail Village

Two of the respondents commented on how views were important and are used to pull pedestrians to into different areas of the village and helped create an environment of discovery within Vail Village. However, the quality of views is considered to be more important than sheer number of views.

> "Over the years, we have filled in some areas that have had open-ended views because we felt that the sense of discovery and walking around the village was more important than necessarily having views everywhere. So we have specific views that are captured and the key objective in Vail Village is that every now and then you get a stunning view. But we haven't tried to maximize views everywhere because of the conditions of trying to get pedestrians and shoppers to walk by every store in the

village. Making sure those stores are as successful as they can be has higher benefits than maintaining a maximum number of views" (respondent AL1.)

"In Vail Village, the main street is oriented obviously north-south essentially, although interestingly, it is a curvilinear street which adds appreciably to the interest. There is a procession of experience as you move from the parking structure and the highway and cross over the creek through the covered bridge. You move through the pedestrian street moving south towards the mountain, and there is a degree of discovery and a process of discovery and pedestrian concealment that is part of that whole experience. I think people find this charming, whether they are conscious of it or not" (respondent ALP1.)

Respondent P5 mentioned the mountain as a source of orientation within Vail Village: "You see the mountain the whole time and you know where to go." Some of it's a little bit like a mystery as you're walking along. All of a sudden it unveils itself. Especially the ski mountain." Respondent P6 adds, "Vail Village has some site orientation instances that are very specific and dramatic."

4.5.2.3 Vail Village has codified protected view corridors

Respondents repeatedly acknowledged Vail Village's use of protected view corridors.

Respondent P1 said yes, certain views in Vail Village are "legally established and surveyed view corridors from certain points throughout the village where the town made a conscious decision to make sure the public would forever have access to certain scenic views. And I would say there's only about a half dozen of those. We don't allow buildings or any other development to build up into those view corridors. We try to keep the connection as much as possible between the pedestrian village and the mountain. We always want people to have that connection to the natural environment and the attraction which is the ski mountain.

Respondent A1 says of Vail Village, "The thing that I believe drove the orientation of most of the site is how it faces the ski mountain. That was the first and foremost priority when they built Vail. There are protected view corridors, and the village master plan has pretty strict design guidelines within its core to limit the size of the buildings, and of course, nobody can infringe upon a codified view corridor, which there are few in town."

4.5.2.4 Beaver Creek Village doesn't frame views as well as Vail Village

Seven respondents specifically mentioned that Beaver Creek Village does not frame views as well as Vail Village. "I don't think Beaver Creek works quite as well. It doesn't create

those frames; perhaps it doesn't have the full opportunity" (respondent P2.) Respondent A4 pointed out, "I think that in Beaver Creek, the buildings are much higher so you definitely feel more closed in and you don't have quite the same visual access to the ski mountain as you do in Vail. The buildings are oriented so they almost wall off the primary pedestrian areas from views to the mountains." Respondent MBA said, "The pedestrian views are not in my opinion Beaver Creek's strength. In Vail Village you have more views of the mountains, more open views, and more views from different locations, I think."

The ski mountain was also mentioned as not being very prominent from the village. "In terms of standing in the village and looking up and being able to see the ski mountain, it is almost nonexistent. From a pedestrian side of things, the village pretty well blocks the mountain" (respondent P5.) Respondent P4 did identify the view looking West over the covered bridge. "Beaver Creek has views over the covered bridge towards portions of the ski mountain to the southwest. That was a specifically selected view." (See picture 4 in figure 4.2.) Respondent P4 also makes a case for a less than stellar view of the ski mountain from within the village. "There is a large set of stairs towards the center where the fountain is and you get a nice little vignette out that way, but it's a pretty steep angle, so you don't get much of a mountain view." There were many references to preservation of view corridors in Vail Village. Respondent P3 mentioned Vail Village being "much different than in Beaver Creek Village where there are no recorded or planned view corridors as a legal matter."

4.5.3 Solar Access

4.5.3.1 Solar exposure is a challenge in both villages

Vail Village was cited by respondent L2 as having decent sun exposure, "Bridge Street runs north and south and you get good solar exposure down the street, reasonably good." One respondent remarked of Vail Village,"I don't think that solar orientation of streets and so forth was that prime an influence. It was mainly laid out based on accessing the mountain from something like the parking garage and paralleling creeks that set natural property lines."

Another respondent (P5) said, "In Vail Village the building heights are low and pretty varied, so you get good solar access." P6 commented that in Vail Village, Gore Drive runs East to West but it "takes advantage of the view more than it does the solar access. I think that street is great real estate and pedestrian experience. But like I said, it is not ideally oriented for solar access." Respondent ALP1 also commented on this East/West street in Vail Village by saying, "The cross streets work reasonably well. At the end of the day, Western exposure and Western Sun is always a problem." Concerning the main North/South street, this respondent said," Bridge Street orients relatively favorably in terms of exposure at high noon. The street is aligned pretty much with a north-south orientation and permits exposure."

"Beaver Creek, I don't know if you call that successful quite frankly. The buildings tend to be much taller. And I'm not sure they're oriented very well, so that there are some sun/shade issues. The main plaza does actually capture quite a bit of sun during the day" (respondent P5). Respondent L1 said, "Beaver Creek, just by its exposure is a shadier place. In the afternoon the sun goes down earlier. I think Vail, depending on the time of the year, has some shady areas". "The density of Beaver Creek is significantly greater than that of Vail, which adds to problems associated with favorable solar access a lot of the time," said respondent ALP1. AL1 mentioned, "I have not analyzed this, but my impression is, from walking around there, that it (Beaver Creek Village) is more in shadow than Vail Village." Respondent P1 said, "In Beaver Creek Village, buildings are much taller than in Vail. They are multiple, multiple stories higher. I would suggest that they probably have a lot more shade pockets in their project because of the height of their buildings and the physical shape of their buildings." "People have criticized Beaver Creek for being a little too dense with the taller buildings. There are taller buildings with more shadows and less opportunity to see views," said respondent A3.

4.5.4 Diversity

4.5.4.1 Greater diversity in Vail Village

Respondents replied that Vail Village has greater diversity than Beaver Creek Village:

"I would say the diversity within Vail Village streetscape is probably a higher degree. It's probably a result of the fact that it grew much more organically over the years. I think there's a richer diversity within that environment in Vail, if you walk along any of the primary streets in Vail. Planters, raised patios at the front side of restaurants; it's just due to the nature of how that village was built out over the years. There are a lot more ins and outs both horizontally and vertically. It's a much richer palette; it's much more eclectic" (respondent P3.)

"I think we have maintained that essential Vail quality, which is irregular facades, little nooks and crannies of plazas and alley ways, and we have created, I think successfully, guidelines that don't allow a buzz cut of one single building height. Parking lots have filled and buildings have been rebuilt, and yet I think there is still a striking diversity of the outdoor rooms, which is what we have focused on in Vail. There is a lot of up and down and in and out and a lot of around the corner and various sized rooms, and I think it's highly successful" (respondent AL1.)

I think (there is) less diversity in Beaver Creek. The buildings are taller and similar, and because they're taller, the visitor doesn't perceive the building height changes, if there are changes in height. I don't sense as much in and out. The buildings are made out of different kinds of materials (from those in Vail Village), and there's less informality and less weird angles. So I think the diversity is lower in Beaver Creek" (respondent AL1.)

Respondent P4 said of Vail Village: "There are different architectural styles and all your colors, stucco, and smaller buildings that have an a lot more variation in the proximity of the storefronts to the street. So it's a lot more interesting and friendly. There is much more stone and the colors are, I think, much closer in value in Beaver Creek Village."

"You know, in Vail Village, you come out of a parking structure and walk across the covered bridge and you walk up Bridge Street, and you have hotels and retail shops on either side of Bridge Street all the way up to the ski lift. Beaver Creek is very similar, partly by design I'm sure. But it's a different experience, because you're dealing with less vitality as far as shop fronts and those ins and outs and spaces between buildings, raised planters, whatever it is that you find in Vail that your experience is as a pedestrian walking up to the Vistabon ski lift, it's almost sensory overload" (respondent P3.)

L1 commented, "In general, there's more of a variety of scale and diversity in Vail Village. In Beaver Creek, the scale is much larger and consistently larger. It's not as diverse in terms of the series of spaces." Mention was made of the design guidelines of Beaver Creek Village having an effect on diversity in Beaver Creek Village. After describing the diversity in Vail Village respondent ALP1 says:

"Beaver Creek, on the other hand, I think lacks the diversity because there are design regulations and guidelines, which are very strenuous or onerous, dictating

materials and color and streetscape character, storefront design, signage, streetscape elements, etc. And while it has diversity, it doesn't have the complexity, if you will, that Vail Village does."

L2 describes the diversity in levels, overheads and recesses in Vail Village by saying:

"In Vail Village, the pedestrian street is only 35 feet wide, but then you have stepped up sidewalks and with covered sidewalks on each side as well. These are both nice features. You have the higher speed traffic through the middle and the lower speed traffic in front of the buildings on each side. And then introduce the smaller nodes and plazas around the village and each store could have a recessed area for seating in addition to those public areas. So it's always a series of spaces created for different uses."

4.5.4.2 Less diversity and more uniformity in Beaver Creek Village

Respondent A1 makes the point that:

"Beaver Creek doesn't have a lot of diversity. Their design review guidelines are a lot stricter and, in my opinion, seem to have homogenized Beaver Creek. Vail's are a little looser and they allow the designer more freedom as far as materials and architectural style. Their design review guidelines are much more liberal and dictate a much more interesting fabric for Vail than it has for Beaver Creek. Beaver Creek is much stricter. They even dictate palettes of color in stone that can be used and it's much more homogenized. It's not very diverse at all.

Respondent P1 observed:

"My personal experience in Beaver Creek is, the product you see in Beaver Creek is tall with minimal articulation in the façades both horizontally and vertically. They seem to be very tall buildings with the same footprint on each floor plate. There is no stepping in and very minimal balconies and features like that."

"There are changes in detail and color and roofline, things like that in Vail Village. In Beaver Creek you are clearly dominated by a codified design theme," said respondent A4.

"I would say that Beaver Creek has less diversity. It's much more unity in terms of architecture and palette and materials. This isn't necessarily good or bad; it gives a unity to it that I think people like. Even though the buildings are taller and more modern, they are part of the family. There's much more of that going on in Beaver Creek than there is in Vail Village" (respondent TM.)

Respondent P2 remarked, "I think Beaver Creek is fairly uniform. Vail Village, as I said before, has a greater variety." Finally, respondent L1 said, "Beaver Creek is more uniform."

4.5.4.3 Diversity of store fronts

Several respondents mentioned the importance of diversity of uses in store fronts. Respondent MBA discussed how Beaver Creek Village made an effort to create diversity at the pedestrian level:

> "Part of the diversity is actually the diversity of the uses and the storefronts, so you have retail stores of various varieties and restaurants with outdoor dining. That to me is as important as scale or roof lines, because that's more what the pedestrians interact with. In Beaver Creek, because of a much higher density village, it doesn't have as much diversity in scale and mass and roof lines; but I think at the pedestrian level, they have worked pretty hard to create a lot of diversity in restaurants and outdoor dining, benches, an ice rink. So they've created some of that diversity at the pedestrian level as well."

Respondent P6 seemed to have a different view of the storefront diversity in Beaver Creek Village:

> "Beaver Creek feels like a development that happened all at once, so I think it could use more diversity in the architecture and some of the storefronts. Maybe part of that is that the scale of the buildings is a little bigger. In Vail, there is certainly some diversity in the horizontal elements. You have more of a retail level on the ground floor and a retail scale, and generally office and residential expressions above. There are some raised patios, which are nice pedestrian elements for both the people that are walking by and those who are up a couple of steps."

4.5.4.4 Elements of diversity clearly articulated in Vail Village descriptions

The language of respondents to questions about diversity clearly indicated that there are more instances of diversity within Vail Village than within Beaver Creek Village.

> "I think there's a richer diversity within that environment in Vail, if you walk along any of the primary streets in Vail. Planters, raised patios at the front side of restaurants; it's just due to the nature of how that village was built out over the years. There are a lot more ins and outs both horizontally and vertically. It's a much richer palette; it's much more eclectic" (respondent P3.)

4.5.5 Scale

4.4.5.1 Vail Village is smaller scale and more human-scale than Beaver Creek Village

Vail Village was seen as smaller scale and more human-scale than Beaver Creek Village by many of the respondents. Respondent P3 remarked, "Vail Village is low to medium scale in comparison to Beaver Creek."

"In Beaver Creek Village, the scale and mass is much greater. The buildings are taller and in comparison to the pedestrian ways, there are locations in my opinion where the buildings seem overwhelming. There are some places in Beaver Creek where the width of the pedestrian area is wider. Then the taller buildings are still comfortable, but there are some other locations where you have narrow pedestrian ways and the massive scale of the buildings makes it feel canyon-like. In Vail Village they don't have that feeling in the major pedestrian ways. You have smaller mass and scale, three- to four- to five-story buildings, and in many cases on a wider pedestrian street with smaller scale buildings and you get a more open feel" (respondent MBA.)

"Vail is very much more of a residential scale of building, and Beaver Creek is more multiple-family condominium style proportions. There are some larger buildings that have been built around the periphery of the main Vail Village core and actually, they don't feel out of proportion. Beaver Creek feels more dense and urban. Vail Village is a little more quaint and small" (respondent P5.)

Respondent TM brought up the topic of return-on-investment in this response: "I think most people in a mountain environment like the human scale. Because of the cost of the project and the profitability margins, Beaver Creek had to have much more mass and much more scale, which you can get away with in Beaver Creek because of the slope in the topography. But I would suggest that this is much more real estate and square-foot driven than it is community driven or human comfort driven. Again, these are my personal views. But there are users that prefer one over the other, so that's fine."

According to respondent L1, "In general, there's more of a variety of scale and diversity in Vail Village. In Beaver Creek, the scale is much larger and consistently larger."

Respondent P6 pointed out how the larger buildings create less comfortable spaces:

"In Beaver Creek, certainly the scale of the buildings are bigger. It still seems to be a comfortable space for people and people like it. People like that village as well, but I think the scale in Vail Village certainly has a better feel to it. Some of the buildings in Vail have been built larger lately and closer to the scale of Beaver Creek, and once the construction is finished, the reaction from people is well, maybe that's a little too large."

Respondent ALP1 discussed the combination of defining elements of scale:

"The street width of Vail Village is really a very important design element and contributed to the success of the experience in Vail. I think the width of the street, if my memory serves me correctly, is something like 20 feet from wall plane to wall plane on Bridge Street and that sets up an adequate width to pass each other when walking through there carrying skis in the winter time. But the width of that street combined with the predominant three-story buildings on either side contributes to a very nice pedestrian scale. Conversely in Beaver Creek, well, there's an attempt made to have narrow streets and to make them curvilinear and it is much more an urban design that is a sequence of spaces as well as small connections. That street width is greater than Vail's and also the buildings are much more massive and taller, so it has a much more higher density European flavor in terms of scale. I think for some, this is not as attractive or it doesn't feel as good as the Vail Village streetscape does."

4.5.5.2 Vail Village is more human-scale than Beaver Creek Village

Respondent P4 said, "There's a more human scale to the architecture by association with the space in Vail." Respondent A3 gave the following explanation:

> "I would say Vail Village is developed more appropriately for human scale. People seem to feel more comfortable in Vail Village. People have criticized Beaver Creek for being a little too dense with the taller buildings. There are taller buildings with more shadows and less opportunity to see views. They are quite different. One experience to the other is quite different."

> "Of the two, I personally find Vail Village has more of a human scale. But again, it depends on how you define that. You can walk through a village in Europe that has narrow streets defined by four and five story buildings, and it still feels very human scale. You don't feel overpowered; it's not New York City, it's not skyscrapers or anything like that. So I think anything under five stories is generally going to feel human scale and the closer you get to two to three stories, as long as you have an enclosure, that's going to have a slightly higher human scale." (Respondent AL1)

"I think Beaver Creek Village is a much larger scale. It's less human-scale than Vail Village. The buildings are taller and much bigger. They occupy a lot more ground area and they have much more mass" (respondent A1.)

4.5.5.3 Beaver Creek Village is human scale

The following respondents considered Beaver Creek Village to be human scale.

Respondent MBA felt that Vail Village was considered more human-scale in comparison to Beaver Creek Village but said:

> "Beaver Creek has some of that human scale as well, and once again, it's more how they've treated the ground levels of the buildings and what's happening on the exterior. Beaver Creek, yes, in overall comparison to other communities, yes, it is (human scale)" (respondent MBA.)

Respondent AL1 offered a definition of human scale to explain how Beaver Creek Village is a human-scale development:

> "Human scale typically means, Can I tell how big that is by some frame of reference that I can relate to? I think it has to do with the proportions of the details and enclosure and your ability to perceive the height of the building and perceive the roof lines. There is a point at which you feel overwhelmed as a pedestrian in some places. I don't think that occurs in Vail or Beaver Creek."

AL1 further elaborated, "In Beaver Creek, the buildings are taller and there is a pedestrian level, and window mullions and flowerpots and doors and mostly transparent façades of the ground level. So that makes it human scale. There is generally a pretty strong differentiation between the base of the building and the upper floors, which helps give that a pedestrian human scale."

Respondent P2 said, "I think Beaver Creek is fairly uniform, and your first impression is a little more massive scale. Vail Village, as I said before, has a greater variety of differing scales in town. The original core Bridge Street is indeed more of a village scale." When asked if both villages were to be considered human scale, respondent P2 replied, "Yes."

4.5.5.4 Beaver Creek Village is not human scale

Some of the respondents felt that Beaver Creek Village was not human scale. When asked if both villages were human scale, Respondent P1 said, "Beaver Creek, no. When you go to Beaver Creek, the buildings are much taller and tend to encircle you in one area. ALP1 gave the following response to the same question: "I believe that Vail Village is definitely, but I do not believe that Beaver Creek is." A1 replied, "Beaver Creek, probably not so much. Vail, definitely is."

4.5.5.5 Vail Village more comfortable and Beaver Creek Village not as comfortable

The following comments state that Vail Village feels more comfortable from a pedestrian standpoint than Beaver Creek Village does to the respondents. "I think for some, this is not as attractive or it doesn't feel as good as the Vail Village streetscape does. (respondent ALP1.) Respondent A3 said, "People seem to feel more comfortable in Vail Village." And respondent P6 said, "In Beaver Creek, certainly the scale of the buildings are bigger. It still seems to be a comfortable space for people and people like it. People like that village as well, but I think the scale in Vail Village certainly as a better feel to it."

4.5.5.6 Marketplace demands drive building height/mass in Beaver Creek Village

Respondent TM gave the real reason for the building sizes that contributed to the previous statements about Beaver Creek Village not providing as comfortable an environment as Vail Village. "It's not because those buildings are prettier or because they feel more

comfortable to be around. That's nonsense! You should try to make them as good as you can, but it's all about, I have to get this return on my investment! So what I'm saying is, these things are all driven by economic values and as a place ages, and as Vail is a $1,000 a square-foot, $1,500 a square-foot and you get new speculators coming in, there is enormous pressure to go bigger and taller so they can get their return. It has nothing to do with good design and it has nothing to do with the comfort of people. It has to do with an economic model to try to maximize profit." TM then explained, "Europeans have held the line on this type of thing much better than we have over the years in terms of scale."

4.5.6 *Appropriateness and the Pedestrian Experience*

4.5.6.1 Agree with the definition

Three respondents offered that they agreed with the definition of appropriateness as designs that stimulate visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces. (Dorward 1990.) Respondent L2 said, "That's a great definition." Respondent P2 agreed saying," I think the statement is accurate." Respondent P6 replied, "Well I don't disagree with the definition. I think that works."

4.5.6.2 Both villages appropriate

Six of the respondents felt that both Beaver Creek Village and Vail Village were expressions of appropriateness. Respondent L2 said, "A single element in Beaver Creek that created the interchange of guests in an amiable way was the ice arena." The respondent described how the ice rink (see figure 4.9) created this interchange:

> "Once you create a space like that, it draws people in and then surrounding it, you can watch that activity. Maybe only five or 10 people are engaged in that activity, but hundreds of people are watching from the rail or in restaurants or around that space. There's a sense that something is going on that is well-managed, that it's fun, safe, secure, not threatening. You're in an environment where you can relax and enjoy your experience.

Respondent P4 expressed how he sees both Beaver Creek Village and Vail Village as appropriate:

> "I think they are both appropriate, they are both diverse, but they shouldn't be exactly the same and from a historic setting, neither of them relates to the historic setting of the

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area. You know they are both emulating other mountain communities—typically European mountain communities, and I think they both tend to address mountain architecture. I think they both do stimulate people to wander, people-watch, explore spaces by virtue of the success of each, right? I mean you've been to both of them and I bet you did some people-watching and some wandering. That may be too simple, but I believe they both do that."

Respondent P3 stated. "I think both are appropriate. There's ample examples in both being very different and distinct, but there are similarities that tie them together." Respondent P3 offered only vague descriptions of what these "ample examples" were. "They (the villages) have a good mix of public and private space. There's good attention to detail as far as the interface between public and private, especially the entry to shops or restaurants and the street." "Appropriateness, I would say, extends to things that make pedestrians feel safe and secure, such as lighting. I would say both villages have probably struggled a little bit with nighttime lighting, specifically Beaver Creek, because their guidelines prescribed low-level lighting." While lighting does contribute to appropriateness in a mountain resort village, the situation described here does not seem to foster a stimulating experience for visitors to Beaver Creek Village.

Respondent P6 stated, "Certainly the pedestrian core of Vail Village meets this definition quite well and Beaver Creek as well." The respondent then discussed how art, nooks, little courtyards, and architecture contribute to pedestrian stimulation:

"I think you need some attractions with something to continue to draw you down the street. Public art is part of that and having nooks and little courtyards and areas where they can see a sculpture or courtyard down the street. I think the architecture of entryways is very important to be inviting and to be able to look down the street and see several entrances into buildings. And I think Vail Village and Beaver Creek have both done fairly well. The art in Beaver Creek is good, and in Vail Village it's certainly getting better" (respondent P6.)

Respondent ALP 1 explained:

"Well I think both villages accomplish your definition and appropriateness in many ways. They just do it in a different way. There is that significant time frame difference and significant financial implications, cost of development, so many factors that come into play that I don't think you can simplify it as much as you have in your definition, even though a lot of your definition does apply and it does apply to both of those."

Figure 4.16 Beaver Creek Village Ice Rink

The respondent continued with an explanation of the differences in entry experiences to the base of the mountain. The entry to Vail Village is described as a progression from the parking structure "down the steps, through the covered bridge, over the creek, and then onto Bridge Street and the Vail complex working their way to the base of the mountain" and then to the lifts.

> "They're passing the shops and it creates in all, a wonderful procession to the village that makes it quite unique and special. Then also along that Main access, you can pursue things laterally, East-West if you will, and into smaller passageways, which in turn lead into interior courtyards that kind of become the focus for buildings that are off the Main Street"(respondent ALP1).

Respondent ALP1 described this as a different process from what is experienced in Beaver Creek Village, where "there's not that clear delineation from parking structure to the mountain. There's not that main street. There's a series of pedestrian ways, passageways, and plazas and so forth that moves you from the area and that's down valley towards the base of the mountain." ALP 1 seemed to see this as a negative situation, stating: "The other problem with Beaver Creek that was necessary to overcome was the significant grade change as you

move towards the mountain. There is a significant rise there, so you have to negotiate that with steps and escalators and people movers, etc."

Respondent MBA said, "I think both Beaver Creek and Vail Village accomplish that." Several specific examples of how spaces are animated for visitor stimulation within Vail Village include: "There are many places to interact with people. For example there's the little children's area in the plaza where the children's fountain is in the summer. So you do see people sitting there hanging out and people watching or sitting there talking with a stranger."

Respondent MBA said, "And I think you get some of that at Beaver Creek as well." However, instead of offering examples of how visitor stimulation is accomplished in Beaver Creek Village the respondent offered challenges and negative situations to a pedestrian experience. "I think that the challenge in Beaver Creek is getting back to mass and scale. But I think the challenge of Beaver Creek as far as the social fabric in the village, is the lack of sun." Respondent MBA then jumped back to Vail Village to cite a positive example before continuing with examples of non-stimulating pedestrian situations in Beaver Creek Village. "So the sun pockets in Vail Village really create the places where people want to hang out and that's both in summer and winter. I think structurally, Beaver Creek has those places, but they're not as successful because they don't get as much sun." These examples of unsuccessful situations lead one to believe that Beaver Creek Village is not as stimulating an environment for pedestrians as Vail Village is.   Respondent MBA ended with an example of a stimulating pedestrian feature found in both villages:

> "One of the keys to what you are talking about is not having straight pedestrian walk areas, so if you look at Bridge Street in Vail and the main pedestrian way in Beaver Creek, both of them curve a little. They don't necessarily meander, but they definitely curve so it's not like this straight shot down. So that's part of what creates interest and a sense of exploration."

4.5.6.3 Vail Village is more appropriate

Five respondents felt Vail Village was a more appropriate solution to fulfilling the definition provided for appropriateness. P2 stated:

"I think that both of them strive, and are largely successful in achieving, those types of spaces to encourage the interaction you describe. I think Vail is more successful largely because it serves more people. And I think it provides a couple of different locations that are different from each other and yet still achieves some of that interaction and activity that you describe. So there is a little more diversity of spaces, a little more variety and there is more variety of people. People are there for a variety of different purposes and so it is a little more urbane. Beaver Creek has an ice rink in the middle of it, which has pros and cons, but mostly, it just doesn't have the body heat that it needs. It doesn't have enough people; it just isn't a large enough community to be as successful as I think Vail is."

"Well, in Beaver Creek I have a much different feeling than in Vail", said respondent P1, who cited Vail Village's many benches, which "tend to be located in some pockets" and "definitely encourage people to have a seat and watch the world go by." P1 continued by mentioning "several pocket parks, within the village… fountains and playgrounds for kids. Whereas, in Beaver Creek, I would say from personal experience that with the exception of the ski yard in the summer, there are no green pocket parks." P1 attributed this to Beaver Creek Village being a private development company, whereas Vail Village is in the Town of Vail with a responsibility to provide "an urban experience that includes parks and such" (respondent P1.)

Respondent A1 put it this way: "I think Vail does a very good job. It has a lot of nooks and crannies. It has a lot more evolutionary process. It has side streets, little courtyards, little pocket parks they've developed off the streets." Respondent A1 contrasted these features to Beaver Creek Village, which "is more or less just one big plaza with the buildings surrounding it. I don't think there's as much opportunity to get off the beaten path. There are always opportunities to interact with people, but I think Vail, just because of its evolution, does it a whole lot better.

Respondent A4 began by describing "loops" of streets and pathways in Vail with "a bunch of things to discover, a lot of corners and twists and turns, and if you will, dead ends. But most of them suggest that you can move around and have kind of almost a continuing discovery experience as you shop." Beaver Creek Village was once again described as:

"… big plazas surrounded by retail, and fewer, if any, dead ends and places to go back around, and when you do, you oftentimes run into non-retail or non-shopping façades. You know, you walk down and all of a sudden you're against the parking structure or

you're on the down side of the hotel, and there's a portico or time share there but that's not really a shopping experience. So I would say that Beaver Creek is not quite as successful as Vail Village in that regard."

Respondent P5 began by discussing the provided definition of appropriateness saying, "I believe that's the model that Vail Village was developed on." Description of the features that satisfy the definition of appropriateness followed:

"The streets are somewhat curvilinear so that when you're walking down the street, there is something around the corner and you don't necessarily see what's coming up next. It kind of invites you to walk down and explore. So Vail Village does that. There are lots of nodes and plazas and places where people can stop and interact. Most notable is the children's fountain. which is a huge gathering spot because you can get in the fountain itself. Kids are in the water and they're just jumping around and there's water flowing and that kind of thing. Between those nodes and plazas, you have some pretty successful retail storefronts. It definitely makes for an environment where you can wander all day long, basically in a first-floor shopping experience. It makes it very comfortable to interact with people" (respondent P5.)

Respondent P5 continued with examples of why Beaver Creek Village is not as successful as Vail Village: "Beaver Creek is a lot smaller" and "you exhaust your shopping experience pretty quickly there. There are not a lot of restaurants, just a few, and there's not a lot of square footage of commercial. It (Beaver Creek Village) does not have the same type of feel as far as getting you to wander around and search out and find different places." P5 described how a pedestrian arrives at one end of the plaza and basically turns around and goes to the other end. "You get a lot of spectators around interacting at the ice rink. I don't think it is as successful as Vail Village in that regard. And some of it has to do with design, but I think a lot of it is the fact that there just isn't all that much to look at."

The respondent made an analogy of the two villages as a strip mall versus a mega mall. Referring to Beaver Creek Village, respondent P5 said, "There's just not a lot to keep your interest there for a long time. But I kind of get the sense that the people that come and stay there exhaust those experiences pretty quickly, and then they head over to a place like Vail where there's more variety and things to do." A3 added, "If you're a young single guy that's looking to interact with other people, it doesn't really exist in Beaver Creek."

Figure 4.17 Vail Village Children's Fountain

(Sources: http://www.flickr.com/photos/photoshopguy42/3328580497/:
http://www.flickr.com/photos/36183002@N06/3675852949/)

4.5.6.4 Features in Vail Village supporting visitor stimulation, exploration and interaction

The following conditions and features were specifically mentioned and attributed to Vail Village by some respondents, as contributing to a favorable environment that encourages and stimulates visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces. (Dorward 1990.)

Vail Village has more:

- People than Beaver Creek Village: Respondent P2

- Benches: Respondents P1, AL1

- Pocket Parks: Respondents P1, A1, TM

- Plazas: Respondent AL1

- Fountains: Respondents P1, MBA, P5, TM

- Playgrounds: Respondents P1, MBA, TM

- Little courtyards: Respondent A1

- Side streets/loops, alleys: Respondents A1, A4, ALP1, AL1

- Discovery experience: Respondents A4, P5, TM, L3, AL1

- People watching: Respondent MBA

- People interaction: Respondent P5

- Streets curvilinear: Respondents MBA, P5

- Retail storefronts: Respondent P5

- Music: Respondent TM

- Landscape: Respondents TM, AL1

- Raised terrace/dining decks: Respondent AL1

- Eddies: Respondent AL1

- Concerts/outdoor activities: Respondent L2

Figure 4.18 Vail Village Pirate Ship Park

(Source: http://www.flickr.com/photos/jlindseyphoto/182241499/)

The following conditions were seen by some respondents as more favorable in Vail Village than Beaver Creek Village:

- More diversity in restaurants, shops and nightclubs than Beaver Creek Village: Respondent A3

- More entertainment than in Beaver Creek Village: Respondent A3

- More public/people interaction than in Beaver Creek Village: Respondents MBA, P5, L1, P2

4.5.6.5 Features in Beaver Creek Village supporting visitor stimulation, exploration and interaction

The following conditions and features were specifically mentioned by some respondents and attributed to Beaver Creek Village as contributing to a favorable environment that encourages and stimulates visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces (Dorward 1990):

- Ice rink: Respondents L2, P5, TM

- Ski yard: Respondents P1, L1

- Art/sculpture: Respondent P6

- Valar Center: Respondent A3 (This is under the ice rink, not visible to pedestrians and it is an indoor activity.)

"If you're a young single guy that's looking to interact with other people it doesn't really exist in Beaver Creek" (respondent A3.)

"In Beaver Creek, you'll see a lot more flowerpots and not so many planters per se. So you don't have a variety of vegetation and a sense that it is coming from the ground, the real ground. The plants are brought in if you will, as opposed to a planter that is this kind of wall around a planting area that existed before the street or building was built" (respondent AL1.)" This condition of absence of landscaping within the core of Beaver Creek Village was a result of the village being built on top of a parking structure. Respondent ALP1 added, "When you start putting parking underground, you very quickly determine a floor plate in terms of dimensional

requirements that changes the character of the village appreciatively. So you will see a major difference between Vail and Beaver Creek as a result of that requirement" (respondent AL1.)

4.5.7 *Other Design Principles Important to Mountain Resort Villages*

Respondents P1, A1, A4, MBA, P5, P6, and AL1 commented that the interview covered most of the key principles. The following list of design principles was obtained when interview participants were asked if there were other design principles important to the design of mountain resort villages:

- Mass

- Form

- Density

- Sense of Enclosure

- Variety

- Continuity

- Containment

- Quality of the experience

- Functionality of the resort to move people from place to place

- Retail located along easiest, most popular route

- Placement of commercial uses on the first floor as zoning principle

- No offices or residential on the first floor

- Ground level transparency

- Visibility and importance of resort retail physical design

- Proximity of parking to the main and secondary recreation uses

- Easy access to all projects within village

- Easy transition and integration of all transportation types (skiing, vehicle, service, emergency, bus, lift, bikes, and so on)

- Balance between moving people to the recreation area and attracting them to retail

- A walkable community

- Connectivity to social hubs and population centers

- Practical functioning of resort for snow removal and service delivery

- Accommodation of winter conditions such as snow and ice fall from roofs and planter placement

- Diversity of purpose serving a homogeneous population

- Non-resort activities with a more urbane interaction of people in addition to rather artificial or single-purpose recreation interaction

- Design for a variety of user groups

- Establishment of more functional parameters for both locals and day users

- Understanding the folks that live in resort from a functionality standpoint

- Circulation and public infrastructure

- Environmental protection

- Riparian corridor protection

- Customer feedback

- Balance pressure and demand for more product availability, while still maintaining why everybody wants to visit

- Level of economic investment – return-on-investment

- How to generate year-round activity and year-round revenue

- Whole is more important than its parts

- Way finding

- Be true to your roots through history, tradition, materials (Aspen should look like Aspen) and (Vail should look like Vail)

- Palette that is authentic to the place

- Programmatic issues

- Success has many fathers and failure is an orphan

- Land use controls

- Control sprawl, leave open space

Contrasting themes that showed up in respondent interviews were as follows:

- Town municipality versus resort

- Evolving town versus master-planned community

- Nature versus urban experience

- All ages/types of people versus family-oriented resort

- Vail Village and Vail LionshHead Village as separate independent communities versus connected developments dependent on each other

4.6 Summary

In this study, a grounded theory approach (Taylor and Bogdan 1984) was used to analyze transcriptions of interviews with design, planning, and business professionals in the mountain resort village design profession. Many themes were discovered regarding the degree to which five design principles occur in Vail Village and Beaver Creek Village, in the collected data from the interviews with these professionals. The interview transcripts were read multiple times until no new themes emerged. The data showed that both Beaver Creek Village and Vail Village are pedestrian-oriented developments and the limited vehicles do not affect pedestrianization in Vail Village, but may actually enhance the pedestrian experience. The Vail Village parking garage was viewed as more successful and easier to orient from and not as disorienting as Beaver Creek Village's parking. The multiple views in Vail Village were protected from development, worth keeping, a source of orientation, and create a discovery environment within the village. Views were not considered a strong asset for Beaver Creek Village, which respondents described as enclosed and walled off from the surrounding landscape by tall buildings.

The most successful view mentioned was looking over the covered bridge to the ski mountain in the West. Solar exposure was a challenge in both villages but was considered more successful in Vail Village as a result of lower buildings. Diversity was considered to be greater in Vail Village, while Beaver Creek Village was considered more uniform by respondents. Diversity showed up most in first floor storefronts within Beaver Creek Village. Scale of Vail Village was considered smaller and a more comfortable human scale than that of Beaver Creek Village. The definition for appropriateness was generally considered accurate. Some professionals thought the definition was correct but too narrow. Some respondents felt both villages were appropriate, while others saw Vail Village as more appropriate with more stimulating spaces, features, and people. While the five principles that Beck uses to design mountain village cores were recognized as a core set of principles, there were many suggestions of additional principles to consider.

CHAPTER 5

FINDINGS

5.1 Introduction

Several themes emerged from the analysis of the respondent interview transcripts. This section presents the findings, in the form of conclusions drawn from the themes that appeared in the interviews with professionals in the field of mountain resort design. These professionals are familiar with the village cores of Beaver Creek Village and Vail Village.

5.2 Research Findings

Most notable among themes, were the varying opinions about whether both villages are appropriate based on a mountain resort village core's ability to stimulate visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces (Dorward 1990.) It is interesting to note that some professionals believed that Vail Village was more appropriate and others believed both villages were appropriate. None of the respondents believed Beaver Creek Village was more appropriate than Vail Village. There were also many more specific examples of features and spaces within Vail Village than in Beaver Creek Village that attribute to and serve as activators for the definition of appropriateness.

5.3 Answering the Research Questions

This section provides the study findings in the form of answers to the research questions posed in Chapter 1, section 1.6.

How are five design principles Eldon Beck used to design mountain resort village cores applied in the individual village cores of Vail Village and Beaver Creek Village?

According to respondents, the five design principles show up in each village as a result of their establishment, preservation, and enforcement, as set out in the community design

guidelines found in *The Vail Village Urban Design Guide Plan* and *Beaver Creek Design Review Board Design Regulations.* Vail Village was perceived as a more organic development that evolved over time, whereas Beaver Creek Village was a master-planned community from the beginning. Respondent P3 summarized this by saying, "Master plans and guidelines were developed for both areas. Beaver Creek has a much more contrived and preordained master plan and Vail Village is more of a reactionary response, 'Here's what we created in the early '60s. I think it's a good thing. Let's preserve it.'"

Throughout the interviews, respondents made repeated reference to these design documents and Vail Village as an evolving village. When commenting on views and solar access, respondent P3 gave an example of how design principles are applied and preserved: "Vail through their master plan and guidelines have pretty specific policies and goals as far as preserving those things you mentioned, solar access and preserving views." Respondent P1 remarked, "Vail design standards try to encourage a more north-south orientation. That way, there will be more penetration of the sun into pockets on streets and other and other projects. In regard to a more organic evolution, respondent L2 commented, "Vail Village was not designed as a pedestrian village in the beginning. It evolved over a period of time. No one knew how large the village would be." While respondent P3 offered, "Vail Village essentially grew pretty organically. Its start was really unplanned and resulted from a series of real estate subdivision filings…"

The master-planned community of Beaver Creek Village also has guidelines that dictate how design principles are applied. "The same intent exists in Beaver Creek where the master plan was very deliberate and looking at each property and prescribing and recommending building heights, mass roof forms, overhangs." (respondent P3.)

Do the individual design principles show up in greater degree in one village core than in the other?

Interview participant responses indicated that each of the five design principles appear in greater degree or more favorably within Vail Village as opposed to Beaver Creek Village. The exception to this was in question number 1, where the general perception was that both villages were pedestrian villages. However, there were comments that set Vail Village apart, indicating that the pedestrian atmosphere in Vail Village was more effective. Speaking of an easy pedestrian experience between parking and the town and ski lifts, L1 commented, "I think that Vail Village gives you an opportunity to do that, with that large parking garage there and also the buses. It's a little more difficult to do in Beaver Creek. You have to have more patience, you have to have time. For instance, if you have kids—getting into the parking lot, parking, getting on the bus, taking the bus up, and that can be a tough experience especially if you're going skiing."

> "Beaver Creek also physically separates people and cars in my opinion, and it's not as pedestrian friendly, because if you do park in the village visitor space up in the parking structure, you're parking under the building and I think this can be disorienting to figure out where you come out of the parking garage versus Vail where you have a parking structure where you walk out and you see the village and you automatically know where you are"(respondent MBA.)

"They did what they had to do to make it work. You have to go up this mountain road to get there, and then you go into this parking structure and pop up someplace and don't really know where you are," said respondent ALP1, speaking of Beaver Creek Village.

The principle of framing views to make a connection to surrounding landscape and enhance the visitor experience was more prevalent in Vail Village. Specific views to the mountain in Vail Village were cited. Respondent A1 said, "In Vail, the orientation, and the thing that I believe drove the orientation of most the site, is proximity and how it faces the ski mountain. There are protected view corridors … and of course, nobody can infringe upon a codified view corridor."

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Respondent TM spoke of specific views that pedestrians take in while in the village. "While you're walking down Gore Creek Drive and you're able to sight the Gore range, well that's the postcard shot you always see in Vail. Or there's the view from the parking structure looking over the clock tower at the ski mountain." Beaver Creek Village was frequently cited as not framing views or feeling closed off. Respondent A4 pointed out, "I think that in Beaver Creek the buildings are much higher, so you definitely feel more closed in and you don't have quite the same visual access to the ski mountain as you do in Vail. The buildings are oriented so they almost wall off the primary pedestrian areas from views to the mountains." Respondent P5 spoke of the mountain as a source of orientation within Vail Village. "You see the mountain the whole time and you know where to go. Some of it's a little bit like a mystery as you're walking along. All of a sudden it unveils itself, especially the ski mountain."

The principle of allowing solar access into the village was a challenge for both Beaver Creek Village and Vail Village, but Vail Village was described as more successful at achieving this. Respondent L2 described decent sun exposure in Vail Village. "Bridge Street runs north and south and you get good solar exposure down the street, reasonably good." "In Vail Village the building heights are low and pretty varied, so you get good solar access" (respondent P5.) While respondent P1 said, "In Beaver Creek Village, buildings are much taller than in Vail. They are multiple, multiple stories higher. I would suggest that they probably have a lot more shade pockets in their project because of the height of their buildings and the physical shape of their buildings."

The design principle of diversity was more prevalent and successfully applied in Vail Village. When commenting on diversity, respondent P3 said, "I would say the diversity within the Vail Village streetscape is probably a higher degree and probably a result of the fact that it grew much more organically over the years. I think there's a richer diversity within that environment in Vail if you walk along any of the primary streets in Vail. Planters, raised patios at the front side of restaurants. It's just due to the nature of how that village was built out over

the years. There are a lot more ins and outs both horizontally and vertically. It's a much richer palette; it's much more eclectic." While respondent P2 commented, "There is something in my mind that works a little better in Vail, because it is older and has sort of hierarchies of age in the place as well. Beaver Creek is a little more formulaic and uniform." The use of this term uniformity is key when considering Eldon Beck's statement, "Diversity is strength; uniformity is the death knell of a village" (Clifford 2003, p. 112), especially when considering that two other respondents used the same term. Respondent P2 remarked, "I think Beaver Creek is fairly uniform. Vail Village, as I said before, has a greater variety." And respondent L1 said, "Beaver Creek is more uniform."

Vail Village also was perceived to have a more comfortable and human scale according to several of the respondents. "I think Beaver Creek Village is a much larger scale. It's less human scale than Vail Village, the buildings are taller and much bigger, they occupy a lot more ground area and they have much more mass." (respondent A1.) Respondent A3 said:

> I would say Vail Village is developed more appropriately for human scale. People seem to feel more comfortable in Vail Village. People have criticized Beaver Creek for being a little too dense with the taller buildings. There are taller buildings with more shadows and less opportunity to see views. They are quite different. One experience to the other is quite different.

When asked if both villages were human scale, Respondent P1 said, "Beaver Creek, no. When you go to Beaver Creek, the buildings are much taller and tend to encircle you in one area. ALP1 gave the following response to the same question, "I believe that Vail Village is, definitely, but I do not believe that Beaver Creek is." A1 replied, "Beaver Creek, probably not so much. Vail, definitely is." Respondent TM targeted the real culprit behind Beaver Creek Village's large scale in the following comment:

> "I think most people in a mountain environment like the human scale. Because of the cost of the project and the profitability margins, Beaver Creek had to have much more mass and much more scale. So they went to 10, 12, 15 stories, which you can get away with in Beaver Creek because of the slope in the topography. (Researcher's note: based on personal observation, this is an exaggeration. The buildings within the core of Beaver Creek Village are a maximum of 10 stories high.) This arising towards the mountains, you can back large buildings into that slope and you don't have a sense that

they are so towering upon you. But I would suggest that this is much more real estate and square-foot driven than it is community driven or human comfort driven. Again these are my personal views. It's not because those buildings are prettier or because they feel more comfortable to be around. That's nonsense! You should try to make them as good as you can, but it's all about, "I have to get this return on my investment! Therefore I have to have a bunch more square feet."

Does one village core exhibit or fulfill the study's definition of appropriateness to a greater degree than the other?

Respondents accepted this study's definition of appropriateness by stating, "That's a great definition" (respondent L2.)   Respondent P2 commented," I think the statement is accurate," and respondent P6 replied, "Well, I don't disagree with the definition. I think that works." Descriptive examples and details were offered for how Vail Village accomplishes the definition of appropriateness. "Well, in Beaver Creek, I have a much different feeling than in Vail, said respondent P1. "Vail has numerous amounts of benches and those benches tend to be located in some pockets and definitely encourage people to have a seat and watch the world go by." P1 continued explaining, "Vail also has several pocket parks, within the village. Vail has fountains and playgrounds for kids. Whereas, in Beaver Creek I would say from personal experience, with the exception of the ski yard in the summer, there are no green pocket parks." Respondent A4 further described the discovery experience in Vail Village, "Vail Village has a lot of loops that might be kind of small in terms of a real shopping Mecca, but there are a bunch of things to discover; a lot of corners and twists and turns, and if you will, dead ends. But most of them suggest that you can move around and have kind of almost a continuing discovery experience as you shop."

Respondent ALP 1 described a similar situation when describing the pedestrian experience in Vail Village:

"They're passing the shops and it creates in all, a wonderful procession through the village that makes it quite unique and special. Then also along that Main access, you can pursue things laterally, East-West if you will, and into smaller passageways, which in turn lead into interior courtyards that kind of become the focus for buildings that are off the Main Street.

Respondent A1 gave the following description of how Vail Village encourages visitors to wander and explore a diverse mix of public and private places: "I think Vail does a very good job it has a lot of nooks and crannies. It has a lot more evolutionary process. It has side streets, little courtyards, little pocket parks they've developed off the streets."

Respondent TM described how Vail Village tries to:

"… make it inviting for pedestrians and families to be a part of (the village), to make it exciting to walk into these areas and wonder what's around the corner with little pocket parks and fountains. Groups playing music and bringing landscape in, making the parking structure a park not a parking structure.

Further explanation was offered for how the parking structure has been disguised:

"The parking structure, it's not a parking structure, it's a park. There's a restaurant there and the 10th Mountain division Museum is there. All of a sudden you're not on the interstate anymore and you're not in a parking structure! You're someplace else. You have these views and you go up to the covered bridge, which is another entry point saying, "I'm not changing but I'm moving into an even more refined pedestrian environment." In the summer there's flowers and landscaping. You're not in New Jersey or Kansas anymore. You go up the street and people are on bikes, people are hiking, there are kids in strollers, there are pocket parks, the entry into Ford Park, the Pirate Ship Park at the end. So there are a lot of these little places to go and explore and they're all human scale. There are a bunch of fountains which are animated and give you a sense of being in some place that special where you can get out and enjoy the landscape, the mountains, and Colorado high country.

After explaining that Beaver Creek Village is a more urban atmosphere, respondent TM summarized by saying, "Some people may prefer one over the other. I prefer as close to nature at all times in these places, because that's why you're there. That's why most people are there. So I prefer the most authentic and natural the landscape can be and the least urban devices as possible such as escalators and elevators and parking structures. I think you have a better experience when it's more natural."

Comments that referenced Beaver Creek Village as less appropriate than Vail Village included respondent P5's analysis: "Beaver Creek is a lot smaller" and "you exhaust your shopping experience pretty quickly there. There are not a lot of restaurants, just a few, and there's not a lot of square footage of commercial. So Beaver Creek does not have the same type of feel as far as getting you to wander around and search out and find different places." P5

described how a pedestrian arrives at one end of the plaza and basically turns around and goes to the other end. "You get to the end and see you're there and turn around." Commenting about Beaver Creek Village's ice rink, P5 said, "They have kind of a nice ice rink there in the middle of the plaza. You get a lot of spectators around interacting at the ice rink. I don't think it is as successful as Vail Village in that regard. And some of it has to do with design, but I think a lot of it is the fact that there just isn't all that much to look at." P5 wrapped it up by saying of Beaver Creek Village, "There's just not a lot to keep your interest there for a long time. But I kind of get the sense that the people that come and stay there exhaust those experiences pretty quickly and then they head over to a place like Vail where there's more variety and things to do." A3 echoed this sentiment with the following comment about Beaver Creek Village; "I think for the first day that you're there there's plenty to do and you're satisfied, but after a few days people tend to want to leave Beaver Creek and see what else is there. So they go to Vail or Edwards because there's not enough entertainment for a long time." A3 explained that Beaver Creek Village markets itself to families, then explained, "Now if you go to Vail, I think that Vail, because of its topography and orientation, lends itself more to exploration. Vail Village itself is also pretty concentrated and you can see it all in a couple days, but there's a more diverse offering of restaurants, shops, nightclubs that would appeal to a broader audience. Certainly families like Vail and singles like Vail."

Respondent MBA explained the challenges within Beaver Creek Village: "I think the challenge of Beaver Creek as far as the social fabric in the village, is the lack of sun." MBA explained how Vail Village is successful in this regard. "So the sun pockets in Vail Village really create the places where people want to hang out and that's both in summer and winter. I think structurally, Beaver Creek has those places, but they're not as successful because they don't get as much sun."

Respondents stated that Vail Village has: more people than Beaver Creek Village, benches, pocket parks, children's parks, plazas, fountains, a children's fountain, playgrounds,

little courtyards, side streets, loops, alleys, discovery experience is, people watching, people interaction, curvilinear street, retail storefronts, music, landscape, raised terrace and dining decks, and eddies. In contrast, respondents said that Beaver Creek Village has: an ice rink, ski yard, art and sculpture, one hard-to-find park outside the core that locals know about.

What other design principles can be identified for mountain resort village design?

Many additional design principles were identified by respondents when answering question number six. The additional design principles cited as important considerations for mountain resort village cores were discussed in chapter 4, section 4.5.7, "Other design principles important to mountain resort village cores."

5.4 Summary of Findings

Through the presentation of the themes and analysis of the interviews, several theories can be proposed as provided in this section. Vail Village and Beaver Creek Village are both pedestrian-oriented villages. However, based on responses from the interviews, it can be inferred that Vail Village is a more comfortable pedestrian experience for visitors and locals, based on the proximity of the parking garage to the village and the ease with which pedestrians are able to orient themselves upon exiting the parking garage and while proceeding throughout the rest of the village. The greater number of views in Vail Village were indicated as pedestrian reference points used for way finding along a visitor's path to their destination. These views help visitors avoid the disorientation described by respondents that takes place in Beaver Creek Village. Vail Village is shown to have less shade issues, and the appearance of sun pockets are deemed to be higher in number than in Beaver Creek Village. In high altitude climates, these sun pockets are extremely important to create comfort for mountain resort visitors.

The findings in this research show that diversity takes many forms within Vail Village and it is more prevalent throughout the village than in Beaver Creek Village. Diversity adds interest to the village and helps to create a stimulating experience for pedestrians. The scale of Vail Village was also considered by respondents to be more human-scale and comfortable than

the scale of Beaver Creek Village. It was apparent that the buildings within Beaver Creek Village are higher and of greater scale than those in Vail Village. The larger buildings found in Beaver Creek Village are the source of challenges and less success in creating sun pockets, creating views to the distant landscape, or the ski mountain, and create a less comfortable, less human-scale environment when compared to Vail Village.

Vail Village was indicated to fulfill this study's definition of appropriateness to a greater degree than Beaver Creek Village. Vail Village has a greater variety and number of spaces that stimulate visitors to wander, explore, people-watch, and interact with others, which results in a higher quality experience for most people. A caveat to this would be that if you are looking for a more urban experience, Beaver Creek Village might seem like a more comfortable experience.

There were many suggestions for additional design principles that were not covered in this study. Respondents however, did agree that the five design principles discussed in this study were core design principles relevant to mountain resort village design. These design principles are universal in the design and development of communities. The findings in this study should be considered by landscape architects who want to design mountain resort communities. The design principles discussed are relevant to a large variety of urban design projects.

5.5 Relevance to the Field of Landscape Architecture

Many of the professionals who design village cores for mountain resorts and mountain planning today are landscape architects. Mountain resort tourism is expanding around the globe. Clark said, "The demand for access to (mountains) is rising. Growth and spread in population, rising income, and increasing leisure time mean more people than ever have the wherewithal to visit such places. In excess of 50 million do so each year. The trend of mountain visitation is accelerating and there is every reason for us to encourage the practice. High altitude tourist encounters can be a joyous experience and an educational one as well" (Clark 2006, p. 1.) It is currently estimated that there are 3,169 operating ski resorts of

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varying sizes on the globe today. (Tachibombo 2009;) Of these, 473 are in the U.S. (National Ski Areas Association 2009.) This thesis has shown how base village improvements can attract people and positively affect a person's experience at the resort (United States Department of Agriculture 1984; Wise 2004.)


Figure 5.1 Ski Resorts in the World
(Source: Tachibombo 2009)

Landscape architects are well positioned to make a positive impact on the future design and development of alpine environments and mountain resort areas, through village design, land analysis, and mountain planning. A case in point is the *All Season Resort Guidelines* for the province of British Columbia, Canada, prepared by landscape architects at Brent Harley and Associates. The landscape architect who is well versed in design principles that make a village inviting and comfortable to visitors will most likely be as great an asset to mountain resort developers as Eldon Beck has been. (Ainsworth 2010; Enhancing the Resort Experience 2010.) Understanding the variables that design can affect—microclimate, sensory quality, scale, and spatial and functional relationships (Dorward 1990)—is key to any design project. The additional design principles discussed by design professionals in this thesis should serve

as a guide for further study by landscape architects who wish to have a positive impact on the projects they work on.

<div align="center">5.6 Recommendations for Further Research</div>

The following recommendations for further study were obtained from findings in this study and discussions with landscape architects who design mountain resort village cores:

1. Analyze visitor expectations and perceptions of the occurrence of design principles in Vail Village and Beaver Creek Village.

2. Compare Vail Village to a similar large resort community such as Whistler, B.C., and compare Beaver Creek Village to a similar small resort community such as Deer Valley.

3. Analyze regional transportation options/possibilities for mountain resorts.

4. Explore whether totally successful sustainability is enjoyable to the user.

APPENDIX A

INTERVEIW QUESTIONS

1. A pedestrian development is said to separate people from cars wherever possible, (Clifford 2006.) Are Beaver Creek Village and Vail Village structured on pedestrian developments?

2. Proper site orientation preserves view corridors, frames specific vistas and views, and allows maximum solar access through street and building alignments, building heights and roof lines. (Brent Harley and Associates 2009; Dorward 1990.) Tell me about site orientation in Beaver Creek Village and Vail Village.

3. Diversity refers to variation in building sizes, setbacks, facades, alleyway widths, plaza sizes, overhead planes and variation in horizontal levels such as raised patios. (Clifford 2003.) Describe the diversity found in Beaver Creek Village and Vail Village.

4. Scale refers to the mass and height of buildings and the outdoor dimensions they define. (Dorward 1990.) Describe the scales of Beaver Creek Village and Vail Village.

   (Follow-up question: Are Beaver Creek Village or Vail Village human-scale developments?)

5. Appropriateness for a mountain resort village core is defined as "designs that stimulate visitors to wander, explore, people-watch, and interact amiably with strangers in a diverse mix of public and private spaces" (Dorward 1990.) Describe appropriateness with regard to Beaver Creek Village and Vail Village.

6. Are there other design principles important to mountain resort villages?

APPENDIX B

SAMPLE EMAIL REQUESTING INTERVIEW

Dear Mr./Mrs. John Doe:

I am completing my Master of Landscape Architecture degree at The University of Texas at Arlington. My thesis topic deals with the design of the mountain resort village cores of Vail Village and Beaver Creek Village and I am asking for your participation in this research.

My interest in this subject was sparked by the combination of skiing and outdoor adventures throughout the world and graduate studies in landscape architecture and urban design. It has become clearer to me that proper application of design principles can greatly affect human enjoyment of mountain resort village cores.

I would like to ask for your participation in a telephone interview on the topic that will take approximately 60 minutes of your time and is completely voluntary and confidential.

Please call or email me if you have any questions and do let me know when I can contact you? Your participation is very much appreciated.

Sincerely,

Jared Sylor
Master of Landscape Architecture Candidate, December 2010
Program in Landscape Architecture
The University of Texas at Arlington

1811 E. Cedar Elm
Arlington, Texas 76012

Phone: (214) 680-1214
Email: jared.sylor@mavs.uta.edu
Email: jaredsylor@gmail.com

APPENDIX C

SAMPLE SCRIPT FOR INITIAL CALL TO SCHEDULE INTERVIEW

Hello Mr. / Ms. _____

My name is Jared Sylor. I am a graduate student in the Program of Landscape Architecture at The University of Texas at Arlington working on my master's thesis. I am calling to request your participation in a voluntary interview for an important research project. The interview will take approximately 60 minutes of your time and your experience and insight will be valuable to the study. My research concerns the design of the mountain resort village cores of Vail Village and Beaver Creek Village.

What would be a convenient date and time for us to discuss this subject or would you be available now?

Thank you for your time and I look forward to talking with you on _____.

I can be reached at (214) 680-1214 or you can e-mail me at jaredsylor@gmail.com.

APPENDIX D

SAMPLE PHONE SCRIPTS

Hello Mr. / Mrs. John Doe,

My name is Jared Sylor; I am a graduate student at The University of Texas at Arlington. I recently contacted you about participating in a research study. Your participation is voluntary. Please ask questions if there is anything you don't understand. You can choose to decline, not answer questions or quit with no adverse consequences to you or other parties at any time during the interview.

The study is entitled "A Search for Design Appropriateness using Qualitative Techniques to Contrast the Mountain Resort Community Cores of Vail Village and Beaver Creek Village." The purpose of this study is to obtain a clear understanding of how design principles are applied in the mountain resort village cores of Beaver Creek Village and Vail Village, Colorado. There is no compensation or direct benefit for participation.

The interview will take approximately 60 minutes. The interview will be recorded using a RCA VR5220 digital recorder. Your name will be removed as soon as the transcripts are coded with an alphabetic code system. The file will then be submitted via file transfer protocol (FTP) to Santa Monica, California based company called Verbalink.com for a verbatim transcription (typed manuscript of recording). Transcriptions and a copy of the records from this study will be stored in the office of Dr. Pat D. Taylor in room #203 of the Architecture Building at UTA for at least three (3) years after the end of this research. The results of this study may be published and/or presented at meetings without naming participants as a subject.

Confidentiality

If, in the unlikely event, it becomes necessary for the Institutional Review Board to review your research record, then The University of Texas at Arlington will protect the confidentiality of those records to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from your participation may be made available to other researchers in the future for research

purposes not detailed within this consent form. In these cases the data will contain no

identifying information that could associate you with it or with your participation in any study.

Questions about this research or your rights as a research subject may be directed to

Pat D. Taylor at (817) 272-2801. You may contact the Chairperson of UT Arlington Institution

Review Board at (817) 272-3723 in the event of a research related injury to the subject.

Do you agree to participate in this research study?

Time:
Date:

Interviewer Signature:_____

APPENDIX E

ELDON BECK AND ASSOCIATES AWARDS

1997   **Golden Nugget Grand Award**
Best Resort Master Plan· River Run Village, Keystone, CO
Pacific Coast Builders Conference and Builders Magazine

1995   **Honorable Mention**
The Alameda Redevelopment, Phase One, Santa Clara University, CA
Northern California Turf and .Landscape Council

1995   **Honorable Mention**
Scott Garden, Los Altos Hills, CA
American Society of Landscape Architects

1994   **Chapter Award**
Town of Vail Cemetery Master Plan
American Planning Association, Colorado Chapter

1992   **Merit Aw.ard**
Landscape/Fire Management Report for The Sea Ranch, Sonoma, CA
American Society of Landscape Architects, Northern California Chapter

1992   **Merit Award**
Domaine Chandon Winery, Napa Valley, California
American Society of Landscape Architects, Northern California Chapter

1992   **Honor Award**
Palm Drive Entrance, Santa Clara University, Santa Clara, CA
Northern California Turfgrass Council

1992   **Outstanding Facility Award**
Tim Korth Tennis Courts, Saint Mary's College, Moraga, CA
United States Tennis Association

1991   **Honor Award · Landscape Planning and Analysis**
Landscape/Fire Management Report for The Sea Ranch, Sonoma County, CA
California Counci1!American Society of Landscape Architects

1991   **Merit Award · Landscape Architectural Design**
Domaine Chandon Winery, Napa Valley, California
California Council/American Society of Landscape Architects

1989   **Overall Resort Design**
Whistler Village, British Columbia
Snow Country Magazine

1989   **Honor Award · Community Planning**
Whistler Village, Whistler, British Columbia
California Council of Landscape Architects

1989   **Merit Award · Planning and Analysis**
Master Plan for Public Art
Harbor Bay Business Park, Alameda, California
California Council of Landscape Architects

1979   **Gold Nugget Grand Award · Pacific Coast Builders**
Harbor Bay Isle, Alameda, California

1977   **Merit Award · Most Innovative Land Plan· Pacific Coast Builders**
Baywood Village, Harbor Bay Isle, Alameda, California

1977   **Honor Award · The Highway and its Environment**
Vail Transportation Terminal, Vail, Colorado
U.S. Department of Transportation

1977   **Grand Award · Associated Landscape Contractors of America**
Prudential Office Research Center, Sunnyvale, California

1976   **Award for Excellence in Site Development · Champaign County**
Parkland College, Champaign, Illinois

1970   **Merit Award · American Association of Nurserymen**
The Wall Street Journal Building, Palo Alto, California

1969   **Honor Award · American Institute of Architects**
De Anza College, Cupertino, California

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BIOGRAPHICAL INFORMATION

Jared Sylor grew up learning to ski on the ski hills of rural Western New York. He mowed greens and did golf course maintenance while earning an Associates of Landscape Development from the State University of N.Y. at Alfred and spent a summer in golf course construction for the Aberdeen Golf Course in Cleveland, Ohio, before moving to Texas and completing a bachelor of science in speech communications from Texas A&M University-Commerce. While still in school, Jared took advantage of various overseas travel opportunities and spent a year abroad teaching English in Thailand, where he travelled to Nepal to hike the Annapurna trail, experiencing the mountain villages of the Nepali people and the surrounding beauty of the Himalayas. Since then, he has continued to ski, hike and climb in Colorado, Oregon, Canada, Chile, Switzerland, Jordan, and other mountainous areas.

Jared worked in document production for A.T. Kearney, and did plumbing and Yellow Pages sales before taking Auto CAD classes and searching for work in a landscape architecture office. Working as an assistant to Harold Leidner of Harold Leidner Landscape Architecture, Inc. for over two years confirmed Jared's desire to pursue a career in landscape architecture, and he enrolled in classes in the University of Texas at Arlington's master of landscape architecture program. Jared will pursue a career in a landscape architecture office and licensure as a landscape architect after finishing a Master of Landscape Architecture degree. He hopes to combine his love of alpine environments and travel with a rewarding, successful career in the profession of landscape architecture.