I, Amanda D. Thompson, hereby submit this original work as part of the requirements for the degree of Master of Architecture in Architecture (Master of).

It is entitled:
Restoration Retreat: A Sanctuary for Rehabilitation of the Post-Deployment Family

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Restoration Retreat
A Sanctuary For Rehabilitation Of The Post-Deployment Family

A thesis submitted to the Graduate School
of the University of Cincinnati
in partial fulfillment of the
requirements for the degree of

Master of Architecture

in the School of Architecture and Interior Design
of the College of Design, Architecture, Art and Planning

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This thesis investigates how spatial environments can lessen stress and enable rehabilitation of health for post-deployment military families through the design of a recreational retreat situated within the southern Ohio wilderness. The hypothesis derived from sources in Environmental Psychology, Biophilic Theory and architectural patterns, states that interaction with nature is important for physical, psychological and physiological health and recovery.

The military operations over the past decade have created an influx of individuals and families coping with a myriad of issues related to combat and deployment. Constant high levels of stress in this population have contributed to a disintegration of health within the family unit. The magnitude and variation of these resultant familial issues are different for every person; inasmuch, no single proposal (architectural or otherwise) can address the idiosyncratic needs of each individual. This thesis chooses a broader lens to respond to non-medical concerns shared by many post-deployment military families.

Using the hypothesis derived from sources in Environmental Psychology, Biophilic Theory and architectural patterns, I will design an outdoor recreational retreat, to engage the stress symptoms of post-deployment families, with the goal of creating a spatial environment that can help a family and its individuals to recover from deployment and reestablish their family unit through interaction in nature and with each other.
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PREFACE MILITARY LIFE
INTRODUCTION
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INTRODUCTION

During the years of 2006-2008 I was briefly, but intimately introduced to the U.S. Army and the lifestyle of war. Through my experiences I came to understand what the military means to our country, how they operate at home and abroad and how chaotic and disruptive the military lifestyle is to a family unit. The effects of war range from subtle to extreme, and vary for each individual. There is no formula to foresee how someone will react once in combat or once they return home.

The following thesis and project described within this document is both a reaction and proactive measure to support military families across the nation. The hope of the author and of Compass Retreat Center is that with education, communication and service, military families will be able to overcome the many challenges, wounds and disorders that come home along with combat.

BACKGROUND

The function of the military is to protect our country, our allies and our assets. Unfortunately, the protection of family or the family unit is not the top priority, nor can it be. Regardless of intent or responsibility, all military families are affected by war. The physical issues that arise from combat are normally addressed as quickly as the injury demands. The psychological issues however, are more difficult to diagnose and have been often overlooked by military culture in general. In the past this has left many soldiers and families to face these issues alone without any insight into the root of the problems. Innumerable military families and individual lives have been torn apart due to these combat related issues.
WAR TIMELINE

A TIMELINE OF MAJOR MILITARY OPERATIONS SINCE 2000

OND - OPERATION NEW DAWN MISSION IN IRAQ SEPTEMBER 2010 - PRESENT DAY
OIF - OPERATION IRAQI FREEDOM MISSION IN IRAQ MARCH 2003 - AUGUST 2010
OEF - OPERATION ENDURING FREEDOM MISSION IN AFGHANISTAN OCTOBER 2001 - PRESENT DAY
BEARING THE BRUNT OF WAR

A COMPARISON OF THE US POPULATION VERSUS THOSE AFFECTED DIRECTLY BY THE MIDDLE EASTERN MILITARY OPERATIONS

311,173,000  2011 US POPULATION
>2,363,000  OIF / OEF AFFECTED FAMILY MEMBERS
>1,700,000  OIF / OEF DEPLOYED SERVICE MEMBERS
“Every combat warrior fights two wars. For the soldier, the sheer shock of combat is traumatic enough, but the anguish of losing his bearings in its wake may prove to be even more troublesome. Eventually, the battlefield falls silent. But its horrible echoes do not. And for the war that follows --- the inner war --- there is no training. It’s like throwing a dime-store compass into a room full of magnets. Where is North? What’s up, what’s down? It is this loss of direction and basic instincts which most typifies the horror of post-traumatic stress.”

CURRENT SETTING

Due to the Global War on Terrorism, including Operation Iraqi Freedom (OIF), which has now transitioned to Operation New Dawn (OND), and the conflict in Afghanistan, Operation Enduring Freedom (OEF), there is an ever increasing influx of combat veterans and their associated family members whose lives have been forever changed from living through combat. More than 1.9 million U.S. service members have deployed to Iraq or Afghanistan since October 2001.

COMBAT STRESS

The most common effects of combat are Post Traumatic Stress Disorder (PTSD), adrenaline addiction, Traumatic Brain Injury (TBI) and a variety of physical ailments. Most of these issues are not fully detected until a solider has returned home, the normal time frame being from 1 month to 18 months after redeployment. Upon returning home, these conditions can create a variety of unwanted and unforeseen dilemmas for the veterans themselves and their families. Without treatment, the symptoms often worsen as time goes on.

The diagram to the right expresses the time line of PTSD, beginning with the initial trauma to the left. From there a month long observation period begins with any symptoms described as Acute Stress Disorder. After the month mark, continued symptoms can then be checked against the list of PTSD symptoms. Often there are multiple disorders displayed at the same time as PTSD, a conditioned called comorbidity. Because of the possible combination within comorbidity, PTSD has been difficult if not entirely impossible to diagnose. Acknowledgement and awareness of PTSD has risen over the past few years, however treatments and correct, efficient diagnosis is still in transition within the medical community.

Intrusive Recollections
- Daytime Fantasies
- Traumatic Nightmares
- Psychotic Reenactments
- PTSD Flashbacks
- Trauma-Related Stimuli
- Trigger
- Recollections
- Mental Images
- Emotional Reactions
- Psychological Reactions associated with Trauma

Avoidant / Numbing Symptoms
- Reflect Behavioral, Cognitive, and Emotional Strategies patients use to avoid trauma-related stimuli
- Avoiding
- Psychogenic Amnesia
  - Cut off the conscious experience of Trauma
- Psychic Numbing
  - Emotional anesthesis which makes it difficult to feel anything

Hyper-Arousal Symptoms
- Insomnia
- Irritability
- Hyper-vigilance
- Startle

Major Affective Disorder
- Dysthymia
- Alcohol and Substance Abuse Disorder
- Anxiety Disorder
- Personality Disorder

Assessment
- Initial Clinical evaluation of trauma and related symptoms
- Tests and other Evaluations
- Consideration of medication

Socialization to treatment

Anxiety management training

Exposure
- Imaginal Exposure to trauma memory and to related cues
- In-vivo exposure to avoided situations

Cognitive Restructuring

Phasing out Treatment

Limitation of treatment before one month mark

Acute Stress Disorder

One month

Infinite

Post Traumatic Stress Disorder

PTSD Diagram
Redeployment (returning from deployment) is diagrammed above. The multiple routes that a soldier can take depend on whether or not they are injured (a casualty), Active Duty, National Guard or Reservist. There is a clear void in treatment/help for Reservists and the National Guard who return immediately home, to civilian life, from being deployed.
“What a cruel thing is war: to separate and destroy families and friends, and mar the purest joys and happiness God has granted us in this world; to fill our hearts with hatred instead of love for our neighbors, and to devastate the fair face of this beautiful world.”

Robert E. Lee, letter to his wife, 1864

“Other things may change us, but we start and end with the family.”

Anthony Brandt

“Homecoming means coming home to what is in your heart.”

Author Unknown
Military families are at high risk for marital problems and family violence.

Service Member
Who deploy to current combat zones are at a high risk for posttraumatic stress disorder, traumatic brain injuries, depression and anxiety. If these conditions go untreated they can adversely affect all individuals within a family.

Spouse
The parent that stays home must take on all parenting roles while the service member is deployed, and at the same time balance all financial and other responsibilities. The shift of roles and being worried about the safety of their spouse, places a lot of extra burden and stress on the spouse at home, which can lead to any number of physical, emotional and physiological issues.

Children
Are at a higher risk for behavioral problems, due to the stress of separation and the changes that occur during and after a deployment.
Deployment adds various strains to the life of a military family. Whether or not the individuals, couple or whole family have been through deployment before, it never lessens its effects. The first step that a family must take is saying goodbye to their loved one, difficult enough under normal circumstances not withstanding the looming uncertainty of events that lead to reuniting. Second, the remaining parent embarks on one of the largest balancing acts there is in life, to be mother and father, caretaker of children and house, cook and shopper, all while continuing with their usual roles in life and at home. By no means an easy task.

Meanwhile the deployed spouse is thrown into a foreign land, their lives depending solely on the individuals surrounding them. These deployed groups become deeply connected due to the nature and severity of life in combat and not unlike freshman in a dorm they depend on each other for entertainment, socializing and rest from the terror that surrounds them.

Once returned home and to civilian life the soldier, regardless of branch and rank, and the family have to undergo yet another trial. Not considered by most people unassociated with military life, post-deployment is a roller coaster of emotions normally beginning with honeymoon-esque happiness and sometimes leading to a bottomless abyss of ambiguity, uncertainty and distraught. Programs to help and support families in this post-deployment phase, have been initiated within the military community, with many aides found within Veterans Affairs (VA). The pages that follow are examples from the Army of what a family can expect during post-deployment, which also include some tips to possibly help them to mitigate the unforseen/ unexpected issues.
MILITARY FAMILY REINTGRATION

The US Department of the Army has created a series of fact sheets for military families to understand the changes and expectations of different family members during post-deployment.

The Expectations for Soldiers

- You may miss the excitement of the deployment for a while.
- Some things may have changed while you were gone.
- Face to face communication may be hard at first.
- Sexual closeness may also be awkward at first.
- Children have grown and may be different in many ways.
- Roles may have changed to manage basic household chores.
- Spouses may have become more independent and learned new coping skills.
- Spouses may have new friends and support systems.
- You may have changed in your outlook and priorities in life.
- You may want to talk about what you saw and did. Others may seem not to want to listen. Or you may not want to talk about it when others keep asking.

Expectations for Spouses

- Soldiers may have changed.
- Soldiers, used to the open spaces of the field, may feel closed in.
- Soldiers also may be overwhelmed by noise and confusion of home life.
- Soldiers may be on a different schedule of sleeping and eating (jet lag).
- Soldiers may wonder if they still fit into the family.
- Soldiers may want to take back all the responsibilities they had before they left.
- Soldiers may feel hurt when young children are slow to hug them.

What Children May Feel

- Babies less than 1 year old may not know you and may cry when held.
- Toddlers (1-3 years) may hide from you and be slow to come to you.
- Preschoolers (3-5 years) may feel guilty over the separation and be scared.
- School age (6-12 years) may want a lot of your time and attention.
- Teenagers (13-18 years) may be moody and may appear not to care.
- Any age may feel guilty about not living up to your standards.
- Some may fear your return (“Wait until mommy/daddy gets home!”).
- Some may feel torn by loyalties to the spouse who remained.
**Tips for Soldiers for Reunion**

- Support good things your family has done.
- Take time to talk with your spouse and children.
- Make individual time for each child and your spouse.
- Go slowly when reestablishing your place in the family.
- Be prepared to make some adjustments.
- Romantic conversation can lead to more enjoyable sex.
- Make your savings last longer.
- Take time to listen and to talk with loved ones.
- Go easy on partying.

**Tips for Spouses for Reunion**

- Avoid scheduling too many things.
- Go slowly in making adjustments.
- You and your soldier may need time for yourself.
- Remind soldier he or she is still needed in the family.
- Discuss splitting up family chores.
- Stick to your budget until you’ve had time to talk it through.
- Along with time for the family, make individual time to talk.
- Be patient with yourself and your partner.

**Tips for Reunion with Children**

- Go slowly. Adapt to the rules and routines already in place.
- Let the child set the pace for getting to know you again.
- Learn from how your spouse managed the children.
- Be available to your child, both with time and with your emotions.
- Delay making changes in rules and routines for a few weeks.
- Expect that the family will not be the same as before you left; everyone has changed.
- Focus on successes with your children; limit your criticisms.
- Encourage children to tell you about what happened during the separation.
- Make individual time for each child and your spouse.

Although helpful generally, the programs available to military families are severely lacking especially when it comes to addressing the family unit. This void is what inspired Lisa Dunster, founder of Compass Retreat Center, to create such an organization. The intent is to deal with the issues of post-deployment families holistically, considering the physical, psychological, physiological and spiritual. Delving into the heart of what makes up a family and then understanding how to instigate healing.
PART 1 ENVIRONMENTAL REHABILITATION

STRESS

BIOPHILIC RESPONSES

ATTENTION RESTORATION THEORY
Stress - Psychological and physical strain or tension generated by physical, emotional, social, economic, or occupational circumstances, events, or experiences that are difficult to manage or endure.\(^1\)

Stress, a factor of living for all individuals, is a product of evolution and more specifically survival behaviors. Established triggers within the environment which induce stress responses have enabled humans to harness extra energy stored within our bodies to better fight or flee dangerous situations, thus improving our chances of survival. Bruce McEwen, describes stress as two distinct actions, the first being an environmental event which is referred to as the stressor, and the second being the bodily response which is the stress response.

**Stress Response** - a cascade of neural and hormonal events that have short- and long-lasting consequences for brain and body alike, or a psychosomatic response.\(^2\)

Short periods of stress can be useful to the human body, especially as stated before, for survival means. However most stress encountered in modern life is not out of support for survival, but instead is a product of culture and lifestyle. Due to day to day activities such as driving, being in constant contact with the world through social networks and news outlets, and spending a majority of the day in an indoor environment, the stress responses that enabled our evolution are not entirely relevant. Regardless, the stressors and stress responses still exist even if their basic functions have changed. The diagram to the right examines some of the physical reactions within the body to stress. Prolonged stress, of any kind, can create innumerous diseases and disorders which affect the quality of life of that individual and can plague whole populations involved in the same environmental stressor event.

This is found to be true of victims of natural disasters, terrorist attacks and military conflicts, where large portions of these populations end up with criteria for depression, anxiety and posttraumatic stress disorder. The over production of stress response hormones can leave the human mind and body crippled, unable to easily restore its normative balance. The disrupted balance of hormones and bodily processes can further perpetuate a stressful state, establishing a new “norm” of existence which, left untreated can morph into further negative physical and psychological responses. As new patterns are established within the stressor-stress response relationship, an individual will develop new triggers to environmental events. Something experienced as mundane and uneventful before, may now be terrifying and debilitating.

Understanding the innate processes of stress within the mind and body can help to inform scientists and designers alike to unlock the solution to stress (disease/disorder) reduction. The environments in which we evolved from and thrived within, may hold some insight into these primitive responses to modern environmental events.

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BRAIN
Stress triggers mental and emotional problems such as insomnia, headaches, personality changes, irritability, anxiety, and depression

MOUTH
Mouth ulcers and excessive dryness are often symptoms of stress

HEART
Cardiovascular disease and hypertension are linked to accumulated stress

DIGESTIVE TRACT
Stress can cause or aggravate diseases of the digestive tract including gastritis, stomach and duodenal ulcers, ulcerative colitis and irritable colon

REPRODUCTIVE ORGANS
Stress affects the reproductive system causing menstrual disorders and recurrent infections in women and impotence in men

SKIN
Some individuals react to stress with outbreaks of skin problems such as eczema and psoriasis

MUSCLES
Spasmodic pains in the neck and shoulders, musculoskeletal aches, lower back pain, and various minor muscular tics are more noticeable under stress.

HAIR
High stress levels may cause excessive hair loss and some forms of baldness

LUNGS
High levels of mental or emotional stress adversely affect individuals with asthmatic conditions

Hair
High stress levels may cause excessive hair loss and some forms of baldness

Lungs
High levels of mental or emotional stress adversely affect individuals with asthmatic conditions

Reproductive Organs
Stress affects the reproductive system causing menstrual disorders and recurrent infections in women and impotence in men

Skin
Some individuals react to stress with outbreaks of skin problems such as eczema and psoriasis

Muscles
Spasmodic pains in the neck and shoulders, musculoskeletal aches, lower back pain, and various minor muscular tics are more noticeable under stress.
**Biophilia** - (Psychology) an innate love for the natural world, supposed to be felt universally by humankind.

The Biophilia theory suggests that due to the process of evolution, humans have an intuitive appreciation for the natural world. Environments that contributed to the survival and reproduction of early humans are particularly effective in creating biophilic responses in individuals.

**Biophilic Response** - biophilia is an emotional response that can be an end in itself (feeling a sense of pleasure and well being) or it can stimulate emotions that motivate behaviors (interest motivates exploration).

Biophilic responses induced by specific environmental stimuli have been confirmed by scientific studies conducted since the 1980's. Emerging from this research is an understanding of what characteristics of the natural environment attract and please the human eye, not just aesthetically but also psychophysiological. The concepts that an individual can be actively involved in the environment; or can try to understand the environment, are two basic ideas that are the framework for clarifying this research.

Within the first, where an individual is actively involved in the environment, the structural properties that facilitate involvement are complexity, referring to the intricacy of visual information within a particular scene, and mystery, referring to interest and curiosity to further investigate an environment. The second concept, trying to understand an environment, include the structural properties coherence, referring to symmetries, pattern and unifying texture, and legibility, referring to visual cues that predict and maintain orientation within a space. These four concepts are further understood within the specific landscape types of a savanna, a body of water and a cave.

**Savanna** - a grassland ecosystem characterized by the trees being sufficiently small or widely spaced so that the canopy does not close. The open canopy allows sufficient light to reach the ground to support an unbroken herbaceous layer consisting primarily of grasses. Savannahs are frequently in a transitional zone between forest and desert or prairie.

The savanna, provided an important concept supporting the survival of early humans, prospect. The generally flat grassy land of the savanna, allowed the dweller to survey the surrounding landscape on foot or by climbing a tree, to assess where food, water, shelter and danger might be. The fact that this landscape could provide all of this information, lead it to be very integral for the evolution and proliferation of the human race. Images of a savanna have been tested in research within environmental psychology, which support the findings that savannas create a biophilic response in humans.

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**Cave** - A hollow chamber in rock, which is accessible from the surface, is large enough for a person to enter, and has usually been formed by natural processes.⁶

Not opposite of savanna, but a compliment, the cave offers a different solution to the needs of early humans, *refuge*. A landscape that could offer a balance of both prospect and refuge would have been the most beneficial for an inhabitant. Complexity and coherence are deeply tied to the success of landscape producing prospect and refuge; only a setting that contains enough prominent landscape features can provide opportunities for refuge.⁷

As universal a biophilic response the savanna is, so too is the response to bodies of water. Spanning cultures and time, *water* has consistently fascinated humans. Similar is the attraction to *fire*. Seemingly opposite, both in moderation hold the power to create and support life, while in excess can easily cause death and destruction. This innate power is inherently understood by the human psyche and establishes a basic attraction to its visual cues. This attraction is on such a subconscious level that it activates our indirect attention, a process that allows the mind to relax and heal itself.

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ATTENTION RESTORATION THEORY

“The attention restoration theory, or A.R.T., set forth by APS Fellow Stephen Kaplan of the University of Michigan. The theory originated in the 1980s, says Kaplan, when he, APS Fellow Rachel Kaplan, and some of their students noticed that people had an astounding preference for scenes depicting natural environments. Kaplan and his collaborators soon discovered there was much more to nature than just a pretty face — they found that exposure to these scenes had a profound restorative effect on the brain’s ability to focus.” Eric Jaffe, *This Side of Paradise: Discovering Why the Human Mind Needs Nature*

As discovered by the Kaplan’s, the human mind has two kinds of attention, direct and indirect. Throughout the chaotic, modern daily life, most people have to function using their direct attention, rarely obtaining indirect attention.

**Direct Attention** - Stimuli requiring mental effort (voluntary, intention or goal-based attention)

**Indirect Attention** - Stimuli requiring involuntary interest-based attention

What the Kaplan’s, Jaffe and many others have found is that exposure to nature-like scenes actives indirect attention and thus being a process that allows the overstimulated, direct attention to rest and recover.

“The attentional restoration theory asserts that restorative experiences occur in settings where we can function primarily in the involuntary mode (i.e., when we can observe or surround ourselves with stimuli that are involuntarily interesting). When we need physical, psychological and energy restoration, we are drawn to nature, and the presence of nature in our environment has a profound effect on reducing levels of stress, thereby helping to restore attentional capacity.”

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PART 2 RETREAT ORGANIZATION

LINEAGE OF THE IDEA OF CAMP

COMPASS RETREAT CENTER ORGANIZATION

COMMUNITIES SERVED

SERVICE: THE HEART OF THE MATTER

RETREAT PHASES
  NEUTRAL GROUND
  REESTABLISHMENT
  RESTORATION
  REUNION
Before continuing on with Compass Retreat Center (CRC), the idea of the camp needs to be understood. The summer camp was born out of the Victorian era, during a time when the American Western Frontier changed to the Western United States. When rugged, wilderness became tamed and Manifest Destiny became fulfilled, life as it had been known would forever be changed. As the US became more modernized, a prevailing thought was that the people, more specifically the middle-class, white, male became overcivilized. Emasculated in the feminized Victorian home, summer camp became the wistful, last hope to save a boy from becoming too soft and to help shape boyhood into budding manhood. The summer camp became a place to play out romanticized versions of both childhood and modern views of the US. Here a boy could play soldier, understand the importance of discipline of both body and mind, while engaging one of the major injustices of this country, the removal of Native Americans from their ancestral lands, by imitating pieces of their culture.¹

The other intention of the idea of camp was to preserve “wilderness” for current urbanites and their future generations. This movement was active throughout the US, but is known most iconically in New York City’s Central Park. Unbeknownst to the movement, or at least not in a medical sense, an entire subset of psychology would be born out of the notion that nature and our environment has an effect on how healthy, happy and prosperous we are. As camps evolved from borrowed military layouts, there became an increasing intention to highlight natural features within the landscape through the built camp

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By the 1940s the suburban plan of the garden city had become a major influence in the development of the summer camp layout. At the turn of the 20th century most camps were temporary, the layouts haphazardly planned by the director of that camp. Due to ease, lack of planning skills or simply the need for control, these first camps were laid out in military order, normally consisting of a hallow square, with tents on three sides and the gathering hall/ dining facility on the fourth side. As time progressed, the lodge was placed away from the square, leaving an opening for views of a body of water. As camps became permanent a shift in layout design began. Camp directors sought out the expertise of design professionals (architects, landscape designers, engineers) to create master plans for camps to follow and grow by. Perhaps the best known camp designer from this time was, Julian Harris Salomon. Salomon worked for the National Park Service during the Great Depression, as part of the New Deal to create Recreational Demonstration Areas. This program created forty-six parks in twenty-four states between the 1930s-1940s. The concept behind the RDA program was to create recreational camping areas close to urban areas so that any American could go enjoy nature and have the camping experience. Salomon helped to test, design and compile the camp layouts and building designs which were implemented in the RDAs. From these designs multiple books were published for the Park Service demonstrating camp building design and layouts. One of Salomon’s most intriguing designs came for the master plan for the Fresh Air Fund, which had a piece of land that was designed to be three separately run camps.

The Fresh Air Fund, a non-profit out of New York City providing summer camp experiences to the children of the inner city regardless of gender, race or economic background, received a donation in late 1940s of a three-thousand acre site, called Sharpe Reservation. By the early 1950s, the master plan conceived by Julian Harris Salomon was under construction. Applying knowledge learned from his RDA projects, Salomon expanded the ideas of unit design into yet a smaller increment, called a village. For Camp Bliss, the first camp constructed on the reservation, this consisted of three groups of four tents or cabins situated around a village hall, a scaled down version of a lodge. Within the camp there were three villages, with a centralized area including a dining hall, showers and all administration buildings.

Edward Larrabee Barnes, who at the time was beginning to receive praise for his modernist houses, designed the buildings of Camp Bliss. An article in Architectural Forum printed in 1955 applauded the camp design stating, “The program of intimate groups… is well in advance of most camp practices. Its architecture is even further ahead”.

1 Julian Harris Salomon, Campsite Development. (New York: Girl Scouts of America, 1959) 20-65
Barnes used the modernist theories of structural logic, continuous space, connections between the interior and exterior, creating visual interest without ornamentation and using commonplace materials to expand the existing camp aesthetic. Ties to primitivism are found in both the summer camp culture and in the Modernist movement, which allowed modernist designers to further explore this concept within the camp setting. Barnes, who understood the camp movement to protect childhood, accented this in his structures by designing buildings with children’s functions in a distinctly different language then those that are for administration and auxiliary to the camp. The dining hall, village halls and tents all speak to the wilderness tent aesthetic. While the director’s house, counselors’ quarters and staff buildings are all modular, modernist boxes. The material use and detailing of each building all had a similar craft, but the overall effect was a heightening of the experience within the children’s spaces while blending the other buildings into the background.²

COMPASS RETREAT CENTER

Compass Retreat Center believes in celebrating the importance of family. Their hope and belief is that families can overcome stress and the obstacles that life brings if they are equipped and make relationships a priority. The priority is holistic healing. At the retreat they will help re-pack your family “toolbox” so that you have useful and usable resources that provide life-changing impact.

PARTICIPANTS

Members of any branch of the military as well as the National Guard and Reserves, their spouses, and children are welcome to attend camp for a week. While there the whole family will work on healing of mind, body and spirit through family activities, workshops, small group encounters, team-building and trust-building exercises. However, due to the reality of reintegration the optimal time for participation is no sooner than six months post-deployment.

LOCATION

By stepping outside the home environment, participants can discover new ways to communicate. Through activities, small group encounters and workshops, participants will also learn techniques that will help build stronger relationships.
Lisa Dunster - Founder/President
Lisa is the founder and President of Compass Retreat Center. As a veteran of the Ohio Army National Guard (1987-1999), and the first Gulf War, she recognizes the sacrifice service members make defending and protecting America. She also knows a call to active duty initiates changes that impact the entire family.

Lisa is a 1990 graduate from the University of Cincinnati, with a B.A. in Communication Arts. After graduating she found herself answering the call to service when her National Guard Unit shipped out for Saudi Arabia in support of the first Gulf War. Following her return she decided to pursue a second degree, a M.Ed. from Xavier University graduating in 1997. For the past fourteen years she has served as a high school English teacher. She has always enjoyed working to inspire students to goal set and live their best. http://www.oprah.com/money/80-Leaders-in-Training/3

Karl J. Schaulin - Secretary/Chief Operating Officer
Director of Global Household Care Quality Assurance/ Procter and Gamble Company. Karl’s passion for Compass Retreat Center stems from the opportunity to give something back to those families that have already given this country so much. He says, “I have traveled all over the world, and every time I come back to the U.S.A., I walk through customs feeling proud of being a citizen of this great country. I know I wouldn’t be as blessed without the sacrifices that our veterans and their families have given us. I can also appreciate that our veterans’ sacrifices extend far beyond the actual call of duty. I am privileged to help families through this time of transition in whatever way I am able.”

Steve Schrader - Vice President / Chief Financial Officer
Chief Financial Officer / Oncology Hematology Care
Steve says, “the reason I am interested in helping is that I have the highest respect for those that put their life on the line to protect our freedoms and our families. Although we can’t repay them for that sacrifice the least we can do is help them transition back into society and their family after their service.”

Richard J. Chernesky
Partner in Corporate Department / Dinsmore & Shohl LLP
Richard is a member of the National Lawyers Association, Ohio State Bar Association / Corporate Law Committee, Dayton Bar Association, is a Member of the Board of Trustees for Sinclair Community College, Member of the Board of Directors for Mike-Sell’s, Inc. and a Member of the Board of Directors for International Display Systems, Inc. He has served the community in several other board positions throughout his career as well.

Susan Warm
Retired Student Assistance Counselor at Sycamore High School
In the 10 years she worked there she counseled adolescents and their families, made referrals to outside agencies, facilitated support groups, and worked with teachers and administrators to help students be as successful as they could be. She still facilitates two support groups at Sycamore.
She has a specialty in group work and served for three years (2004-2006) on the board as secretary of the Association for the Specialists in Group Work. She currently does volunteer jobs at Crossroads Community Church including mission trips to South Africa and New Orleans. She is leading a Go Cincinnati Project in Warren County in May. Susan says, “I have a heart for kids and their families. I am so appreciative that men and women are willing to serve to defend our country and my family in particular. I can’t imagine how hard it must be to pick up the pieces of their former lives and move ahead, sometime knowing they will be serving again. Anything I can do to help the process of coming home, excites me. If it combines, families, kids, a ropes course and a few horses thrown in, I’m there.”

Bill Reigle
Director of Human Resources / Empire Foods
A Senior Human Resource (HR) Executive with over 25 years of progressive experience gained in union and non-union environments. He has specific emphasis in employee relations, recruiting, benefits and performance management. He is a skilled negotiator and dedicated executive with proven ability to develop others, build strong teams and solve difficult HR issues. Bill is a graduate of the University of Cincinnati and an avid Bearcat fan.

Jimmy Clark
Account Management Executive Advisor / WellPoint, Inc.
Adjunct Instructor, Business and Technology / Brown Mackie College
His love and respect for the military began at an early age. His father, James Roland Clark, Jr., a Vietnam veteran, was active-duty Air Force until Jimmy was 5 and has served in the Air Force Reserves since. Jimmy’s grandfather, James Roland Clark, Sr., a veteran of World War II, was a two branch serviceman - Army and Navy. Jimmy shares these words, “My family has a rich and proud military history - both past and present service men and women. Compass provides a unique way for me to honor them and a way to serve the current men, women, and their families of the National Guard and Reserves who have so bravely served and sacrificed for me and my family.

Gene Colina
M.S.W., L.I.S.W-S, Director
M.S.W. – Ohio State University, 1971
LISW (Licensed Clinical Social Worker), State of Ohio
Gene has 38 years experience in individual, group, couple and family therapies with people from a wide variety of backgrounds and age groups in the Tri-State. These groups include inner city, residential treatment of youths aged 6 to 21, rural comprehensive mental health, school consultation, out patient therapy, court involved high-conflict and co-parenting therapy, and therapy with veterans from all the U.S. involved wars since W.W. I. In his practice he has treated almost every problem imaginable.
P U R P O S E

Grounded in the belief that holistic healing involves all four quadrants of wellness, CRC works off of the idea of a compass to address the following concepts:

Psychological Health
- Create a peaceful environment that encourages dealing with emotional stress
- Provide character building workshops
- Offer small group encounters that allow veterans and family members alike to process their experiences
- Encourage ongoing support via referrals

Physical Health
- Assist in family healing by helping them invest quality time with each other through retreat activities
- Offer exercise opportunities throughout the week and encourage them to make physical activity part of the family life

Spiritual Health
- Offer ministerial staff for spiritual counseling, reconciliation, reflection, and prayer
- Offer meditative and study opportunities throughout the sessions

Social Health
- Aid families in identifying family deterioration habits and behaviors
- Assist in new family communication strategies
- Encourage interaction with other families and the development of an extended network of new friends and contacts
As of the current date, CRC has had three retreats and has sponsored 52 families. Each retreat has been held at a unaffiliated summer camp, which has to be rented during an off week of their normal operation. This has been a drawback for CRC, because families can generally only attend a week long camp session in the summer months when children of out of school. If one of those weeks cannot be secured, then that leaves many families who cannot attend. A positive to renting different camp, is to see what facilities work for goals of CRC and military families so that when there is funding to build their own retreat, there will already be a foundation for what extra facilities they would want to add.

GOALS
CRC is in the process of establishing funds and financing in order to design and build their first retreat. Although this accomplishment will be celebrated, there is much more work to be done. There are currently over 1.9 Million service members who have been deployed since 2001, which leaves a huge number of families in need across the US. In order to support that wide of a base of people, CRC would need to have a retreat at a minimum in each region, but more ideal would be to have a retreat in each state. This would ensure that all post-deployment military families could have access to a retreat within a few hours of their home. A positive side effect is that retreats would be in contact with not only more military families, but also more communities. The community component of these retreats is vital for the recovery of the post-deployment family as well as the nation.
Community is the social fabric that weaves human lives together. It is as inherent in human nature, as walking upright. Social groups are one of the reasons the human race survived and thrived in this chaotic and ever-changing world. In order to continue to thrive, people must rely on their social groups, or communities, to support them socially, emotionally and physically. Without communities an individual will wither away and perish. No culture or individual has to have the same concept of community, more important is that there is a community regardless of its reality. Within CRC there is focus on these multiple layers of community, beginning with the individual within a family unit, then the family unit within the retreat community and perhaps military community, with all of these situated within the greater community.
THE HEART OF THE MATTER

The issue of getting soldiers to want to attend a retreat centered around their health was a topic of discussion during an interview with CRC’s horse therapy coordinator and Vietnam Veteran, Bruno. His personal experience directs him to think that most soldier do not want to admit to health problems, physical or emotional, because it exposes weakness, something they have been professional trained to deny. So the question remains, what would make a soldier want to attend CRC?

Our discussion continued, eventually acknowledging that the main reason a person joins the military is to serve their country. This idea of service then defines who a member of the military is for their entire life. This becomes a piece of their identity. If CRC could implement a program that brought combat veterans into the retreat to give service to other combat veterans, then maybe there could be a positive cycle, a pass it forward mentality that would generate a new community and help all veterans to achieve a better quality of life.

A missing piece to this puzzle however is that where all veterans and their families have an individual and specific understanding of military life and deployment, the general public and greater community have very little. To achieve healing of military families and service members, there needs to be support and understanding within their communities, so that they can depend of their social groups to get them through the difficult and tumultuous transitions throughout deployment.

In summary, service needs to be paid to the veteran for their sacrifices made on our behalf, while simultaneously encouraging further service from the veteran towards other veterans, the community of the retreat and their families. By orienting all retreat community members towards service, a baseline of understanding, purpose and motivation can achieve common ground among everyone. This will allow for more openness, communication and accomplishment, because the entire retreat community will be functioning towards mutual goals. The next phase of the retreat would initiate service, communication and education of the greater community within the retreat setting. The goal is to instigate healing through service for not only the communities within the retreat, but also the wider public, to create an even larger community.
RETREAT PHASES

TIME LINE

The diagram below describes the cycle of deployment and its relationship with CRC. The vertical axis represents a continuum from deployment, the top bar, to civilian life, the bottom bar. There are three shapes that transform horizontally across the diagram and through time. The largest is the greater community, the medium-sized rectangle represents the family unit and the smallest unit is the soldier. The red dashed line divides what occurs before the retreat and what is the retreat. Each of the phases will be discussed in more detail on the following pages.
This phase of the diagram visualizes the effect of deployment on a family. The process of preparing to leave and then departing create such turmoil in the life of a family that they often feel disconnected from the greater community. The difficulty of the situation sets their mental state in a different place and not unlike many individuals who undergo enormous trauma, the mortality of life becomes so weighty that the petty worries of everyday life are insignificant, making it difficult to relate to those in civilian life. The void where the soldier once occupied is harsh and experienced by all family members, regardless if this can be expressed. Throughout the deployment, the family must live on, must find a way to navigate the life at home with a loved one away, in a combat zone.
Redeployment is the process of returning home for service members. This involves a series of relocations, gradually moving out of the combat zone to larger bases and in the case of deployments in the Middle East, a stay in Kuwait. Reintegration is the objective of these short stays, in order to reacquaint a soldier with social norms and to gradually ease the stress of combat, as an interviewed soldier said, to allow for “controlled craziness”. Reintegration continues once the Veteran has returned to the US, each military branch has its own program to follow, but generally there are classes and sessions on how to live in a civilian work post-combat. These issues are of serious importance, however they do not cover all of the issues of family and family reintegration. For this reason the Veteran is shown as being home but not incorporated into the family and community yet. This area that the Veteran resides in is know as the transition zone. The diagram also alludes to the fact that the family unit has changed and compensated for the void of the service member, which has in turn resituated their position within the community. Although the service member will have been missed terrible, the family has had to continue on with daily life and has had to find a way to live without them. This can be a horrific realization for both the veteran and the family.
The first phase of the Retreat, Neutral Ground intends to remove the veteran from the greater community, so that they can refocus their attention and give service to the Retreat, and other veterans and families. By acclimatizing the individual within the Retreat, they are able to begin to relax or lower their anxieties by means of the attention restoration theory, which will be discussed in more depth in Part 2.

The intention of this phase is to allow a veteran to see with their own eyes the potential of the Retreat, in the hopes that they would want to take part in a session with their own family. Although most of the time spend during the Neutral Ground phase will be towards service, either in building projects, general retreat maintenance or by meeting with fellow veterans, there will be some time set aside for the service members to experience part of the outdoor recreational aspects of the Retreat. This phase may not occur for every veteran that later attends a full retreat, however this phase will help align the service member in preparation for phase 2, the reestablishment phase.
REESTABLISHMENT

Phase 2, entails the veteran and their family to attend a 7 to 10 day retreat. As the diagram suggests, the goal is to reestablish the family unit. This is achieved by seeking to understand the needs of each individual, communicating those needs, establishing expectations between individuals, which then enables reconnection between individual family members. Through the retreat’s interface sessions, outdoor recreational activities and overall environment, a family can find common ground and continue the healing process. This is the main phase and function of Compass Retreat Center, with most facilities and spaces dedicated to its operation. Time in this phase is especially scheduled to ensure individual interactions between each family member.

vet er a n : s p ou s e
v e t e r a n : c h i l d
spous e : child
v e t e r a n : v e t e r a n s
spous e : s pou s e s
ch i l d : c h i l d r e n

F044  Service member and family, Phase 2 of Retreat
The third phase returns to the concept of service, except this time an entire family revisits the Retreat to facilitate a session for a new group of families. For the fresh families, it is comforting to be in the company of someone who has been where they have been and has experienced the retreat, and hopefully its benefits. For the returning family it is an opportunity to give back, see how far they have come and continue to grow and heal. Working as a unit and individually in groups, the original family unit will develop deeper bonds together and expand their community through meeting other families.
The fourth phase may only occur once or twice a year, but will be a vital lifeline of communication for both retreat attendees and for the greater community. During the Reunion phase, past attendees as well as community members join together for day sessions to long weekends of education, outdoor recreational activities and general play. The goal is to instigate continued relationships from Retreat sessions past and to create new connection with other families and with local community members. A scheduled service project will be completed during this phase, in service to the retreat and for future attendees. The intention of including members of the community who have not been involved in the military is to both educate them on the lifestyle and effects of deployment, but also to allow them to share their resources with the Retreat community. This cross-pollination will create a symbiotic relationship for every individual involved and help to create a richer, more understanding greater community.
PART 3 ARCHITECTURAL RESPONSE

SITE
PROGRAM
DESIGN CONCEPTS
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SITE

F047  East Fork Lake State Park
Compass, is currently searching for a 1000 acre site to construct a retreat on. This would be large enough to house all of the outdoor activities and buildings while leaving plenty of open space to be in nature and for future growth.

The geographic site of this thesis project is within East Fork Lake State Park, which is situated in southern Ohio, 40 mile east of Cincinnati. The project site is a 1000 acre peninsula located on East Fork Lake, allowing for 2/3 of the site to be bounded by water. The other 1/3 is connected to the North side of the State Park, with an access road, boat ramp and 10 miles of existing bridal trails.

Utilizing the existing access road as the main entry to the Retreat, a car park, one mile from the lake will allow for attendees to leave their vehicles in a safe area for the duration that they are at the Retreat. Form this point the attendees travel only on foot, by horse or if necessary ATV. Limited vehicular access will be available for Retreat functions.

Different paths are designed for specific forms of transportation. Foot paths will have the most character and material detail, while also being ADA accessible. Accessibility is considered for all paths to ensure equal experience for all attendees regardless of mobility ability.

From the automobile departure point, there are paths that bridge to the Retreat site. Geographically the site has an 150 foot topographical change. A 1/3 of the site is a plateau which creates a spine, off of which dramatic valleys have been created for water drainage to the lake. The landscape gradually slopes near the spine and becomes steeper close to a drainage trough or to the lake.
The Retreat design takes advantages of these geographical terrains to pair program and topography to support intended functions within the landscape. The diagram to the left examines this relationship. Programs that are used during all Retreat phases reside on the level terrain, for ease of access, centralized location and views over the rest of the site.

The rest of the program is divided into Villages which are identified by their main activity function, for example the Barn Village includes the horse barn and is the beginning and end of all bridal trails. Also included in the villages are a group of cabins and a shared community space.

outdoor activities:
- high ropes course
- low ropes course
- archery
- paint ball
- climbing wall
- horses
- the blob
- zip-line
- canoeing
- swimming
- water sports
- inflatable water island

(36) Cabins
(14) Two person outposts
(4) Bathroom facilities
(22) Single family cabin
   (1) master bedroom
   (2) children bedrooms
   (1) bathroom
   central gathering area / hearth

(1) Lodge
   Meeting rooms
   Arts and crafts room
   Daycare center for children ages 0-3

(1) Dining Hall
   Stage
   Outdoor dining / gathering area

(12) Outdoor Pavilions
    groups meetings + activities

(3) Playgrounds
   for different age groups

(1) Barn
   Horse stalls
   Storage rooms for tack and food
   Indoor arena
   Water room
When we need physical, psychological and energy restoration, we are drawn to nature, and the presence of nature in our environment has a profound effect on reducing levels of stress, thereby helping to restore attentional capacity.

Dan Kopec, Environmental Psychology for Design

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“When we need physical, psychological and energy restoration, we are drawn to nature, and the presence of nature in our environment has a profound effect on reducing levels of stress, thereby helping to restore attentional capacity.”

“The attentional restoration theory asserts that restorative experiences occur in settings where we can function primarily in the involuntary mode (i.e., when we can observe or surround ourselves with stimuli that are involuntarily interesting).”

Stimuli requiring mental effort is Directed attention (voluntary, intention or goal-based attention)
Stimuli requiring involuntary interest-based attention is Effortless or Indirect attention

Design Concepts:
Throughout all buildings there needs to be a connection to nature and to natural elements.
-Views (Interior courtyards and exterior landscapes)
-Material use

Supporting Concepts:

Connection to the Earth
“A house feels isolated from the nature around it, unless its floors are interleaved directly with the earth that is around the house.” Pg 786, A Pattern Language.
“Connect the building to the earth around it by building a series of paths and terraces and steps around the edge. Place them deliberately to make the boundary ambiguous—so that it is impossible to say exactly where the building stops and earth begins.” Pg 787, Christopher Alexander, Sara Ishikawa and Murray Silverstein, A Pattern Language

Outdoor Room
“A garden is the place for lying in the grass, swinging, croquet, growing flowers, throwing a ball for the dog. But there is another way of being outdoors: and its needs are not met by the garden at all.” Pg 765, A Pattern Language.
“Build a place outdoors which has so much enclosure round it that it takes on the feeling of a room, even though it is open to the sky. To do this, define it at the corners with columns, perhaps roof it partially with a trellis or a sliding canvas roof, and create “walls” around it, with fences, sitting walls, screens, hedges, or the exterior walls of the building itself.” Pg 767, A Pattern Language.

South Facing Outdoors
“People use open space if it is sunny, and do not use it if it isn’t, in all but desert climates.” Pg 514, A Pattern Language.
“Always place buildings to the north of the outdoor spaces that go with them, and keep the outdoor spaces to the south. Never leave a deep band of shade between the building and the sunny part of the outdoors.” Pg 516, A Pattern Language.

Indoor Sunlight
“If the right rooms are facing south, a house is bright and sunny and cheerful; if the wrong rooms are facing south the house is dark and gloomy.” Pg 615, A Pattern Language.
“Place the most important rooms along the south edge of

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the building, and spread the building out along the east-west axis. Fine tune the arrangement so that the proper rooms are exposed to the south-east and the south-west sun. For example: give the common area a full southern exposure, bedrooms south-east, porch south-west. For most climates, this means the shape of the building is elongated east-west.” Pg 617, A Pattern Language.

Sleeping to the East
“This is one of the patterns people most often disagree with. However, we believe they are mistaken.” Pg 657, Christopher Alexander, Sara Ishikawa and Murray Silverstein, A Pattern Language

“Give those parts of the house where people sleep, an eastern orientation, so that they wake up with the sun and light. This means, typically, that the sleeping area need to be on the eastern side of the house; but it can also be on the western side provided there is a courtyard or terrace to the east of it.” Pg 659, Christopher Alexander, Sara Ishikawa and Murray Silverstein, A Pattern Language

Wings of Light
“Modern buildings are often shaped with no concern for natural light–they depend almost entirely on artificial light. But buildings which displace natural light as the major source of illumination are not fit places to spend the day.” Pg 525, A Pattern Language.

“Arrange each building so that it breaks down into wings which correspond, approximately, to the most important natural social groups within the building. Make each wing long and as narrow as you can – never more than 25 feet wide.” Pg 529, A Pattern Language.

Positive Outdoor Space
“Outdoor spaces which are merely “left over” between buildings will, in general, not be used.” Pg 518, A Pattern Language.

“Make all the outdoor spaces which surround and lie between your buildings positive. Give each one some degree of enclosure; surround each space with wings of buildings, trees, hedges, fences, arcades, and trellised walks, until it becomes an entity with a positive quality and does not spill out indefinitely around corners.” Pg 522, A Pattern Language.

Courtyards which Live
“The courtyards build in modern buildings are very often dead. They are intended to be private open spaces for people to use—but they end up unused, full of gravel and abstract sculptures.” Pg 562, A Pattern Language.

“Place every courtyard in such a way that there is a view out of it to some larger open space; place it so that at least two or three doors open from the building into it and so that the natural paths which connect these doors pass across the courtyard. And, at one edge, beside a door, make a roofed veranda or porch, which is continuous with both the inside and the courtyard.” Pg 564, A Pattern Language.
“Build the fire in a common space – perhaps in the kitchen – where it provides a natural focus for talk and dreams and thought. Adjust the location until it knits together the social spaces and rooms around it, giving them each a glimpse of the fire; and make a window or some other focus to sustain the place during the times when the fire is out.”

Christopher Alexander, Sara Ishikawa and Murray Silverstein, A Pattern Language
**HEARTH + FIRE**

“There is no substitute for fire.” Pg 839, A Pattern Language.

“The concept of involuntary or effortless attention makes a great deal of sense in an evolutionary context because it ensures that the cognitive apparatus focuses on urgent issues deriving from a dangerous and uncertain world. For this reason, we are automatically fascinated by fires, loud sounds and many other specific and important patterns of stimuli.” Pg 83, Environmental Psychology for Design.

**Design Concept:**
The hearth and fire will by their nature generate gatherings of individuals and the community, enabling communication. Placement of each should be at the most central and communal space within a building, with views of them from most if not all other spaces.

- Gathering
- Communication
- Glimpses of fire from all spaces within building

**Supporting Concepts:**

**Zen View**
“The archetypal zen view occurs in a famous Japanese house, which gives this pattern its name.” Pg 642, A Pattern Language. “If there is a beautiful view, don’t spoil it by building huge windows that gape incessantly at it. Instead, put the windows which look onto the view at places of transition—along paths, in hallways, in entry ways, on stairs, between rooms. If the view window is correctly placed, people will see a glimpse of the distant view as they come up to the window or pass it: but the view is never visible from places where people stay.” Pg 643, A Pattern Language.

**Common Areas at the Heart**
“No social group—whether a family, a work group, or a school group—can survive without constant informal contact among its members.” Pg 618, A Pattern Language.

“Create a single common area for every social group. Locate it at the center of gravity of all the spaces the group occupies, and in such a way that the paths which go in and out of the building lay tangent to it.” Pg 621, A Pattern Language.
“Unless the spaces in a building are arranged in a sequence which corresponds to their degrees of privateness, the visits made by strangers, friends, guests, clients, family, will always be a little awkward. Lay out the spaces of a building so that they create a sequence which begins with the entrance and the most public parts of the building, then leads into the slightly more private areas, and finally to the most private domains.”

Christopher Alexander, Sara Ishikawa and Murray Silverstein, A Pattern Language
Design Concept:
Each building and space should be designed with increasing levels of privacy and intimacy.

Supporting Concepts:
Circulation Realms
“In many modern building complexes the problem of disorientation is acute. People have no idea where they are, and they experience considerable mental stress as a result.” Pg 481, A Pattern Language.
“Lay out very large buildings and collections of smaller buildings so that one reaches a given point inside by passing through a sequence of realms, each marked by a gateway and becoming smaller and smaller, as one passes from each one, through a gateway, to the next. Choose the realms so that each one can be easily named, so that you can tell a person where to go, simply by telling him which realms to go through.” Pg 484, A Pattern Language.

Couple’s Realm
“The presence of children in a family often destroys the closeness and the special privacy which a man and wife need together.” Pg 649, A Pattern Language.
“Make a special part of the house distinct from the common areas and all of the children’s rooms, where the man and woman of the house can be together in private. Give this place a quick path to the children’s rooms, but, at all costs, make it a distinctly separate realm.” Pg 650, A Pattern Language.

Children’s Realm
“If children do not have space to release a tremendous amount of energy when they need to, they will drive themselves and everybody else in the family up the wall.” Pg 652, A Pattern Language.
“Start by placing the small area which will belong entirely to the children—the cluster of their beds. Place it in a separate position toward the back of the house, and in such a way that a continuous playspace can be made from this cluster to the street, almost like a wide swath inside the house, muddy, toys strewn along the way, touching those family rooms which children need—the bathroom and the kitchen most of all—passing the common area along one side (but leaving quiet sitting areas and the couple’s realm entirely separate and inviolate), reaching out to the street, either through its own door or through the entrance room, and ending in an outdoor room, connected to the street, and sheltered, and large enough so that the children can play in it when it rains, yet still be outside.” Pg 654, A Pattern Language.

Hierarchy of Open Space
“Outdoors, people always try to find a spot where they can have their backs protected, looking out toward some larger opening, beyond the space immediately in front of them.” Pg 558, A Pattern Language.
“Whatever space you are shaping—whether it is a garden, terrace, street, park, public outdoor room, or courtyard, make sure of two things. First, make at least one smaller space, which looks into it and forms a natural back for it. Second, place it, and its openings, so that it looks into at least one larger space. When you have done this, every outdoor space will have a natural “back”; and every person who take up the natural position, with his back to this “back”, will be looking out towards some larger distant view.” Pg 559, A Pattern Language.
INTIMACY GRADIENT

Ceiling Height Variety
“A building in which the ceiling heights are all the same is virtually incapable of making people comfortable.” Pg 877, A Pattern Language.
“Vary the ceiling heights continuously throughout the building, especially between rooms which open into each other, so that the relative intimacy of different spaces can be felt. In particular, make ceilings high in rooms which are public or meant for large gatherings (10 to 12 feet), lower in rooms for smaller gatherings (7 to 9 feet), and very low in rooms or alcoves for one or two people (6 to 7 feet).” Pg 881, A Pattern Language.

Entrance Transition
“Buildings, and especially houses, with a graceful transition between the street and the inside, are more tranquil than those which open directly off the street.” Pg 549, A Pattern Language.
“Make a transition space between the street and the front door. Bring the path which connects street and entrance through this transition space, and mark it with a change of light, a change of sound, a change of direction, a change of surface, a change of level, perhaps by gateways which make a change of enclosure, and above all with a change of view.” Pg 552, A Pattern Language.

Entrance Room
“Arriving in a building, or leaving it, you need a room to pass through, both inside the building and outside it. This is the entrance room.” Pg 623, A Pattern Language.
“At the main entrance to a building, make a light-filled room which marks the entrance and straddles the boundary between indoors and outdoors, covering some space outdoors and some space indoors. The outside part may be like an old-fashioned porch; the inside like a hall or sitting room.” Pg 625, A Pattern Language.

Tapestry of Light and Dark
“In a building with uniform light level, there are few “places” which function as effective settings for human events. This happens because, to a large extent, the places which make effective settings are defined by light.” Pg 645, A Pattern Language.
“Create alternating areas of light and dark throughout the building, in such a way that people naturally walk toward the light, whenever they are going to important places: seats, entrances, stairs, passages, places of special beauty and make other areas darker, to increase the contrast.” Pg 646, A Pattern Language.

Eating Atmosphere
“When people eat together, they may actually be together in spirit—or they may be far apart. Some rooms invite people to eat leisurely and comfortably and feel together, while others force people to eat as quickly as possible so they can go somewhere else to relax.” Pg 844, A Pattern Language.
“Put a heavy table in the center of the eating space –large enough for the whole family or the group of people using it. Put a light over the whole table to create a pool of light over the group, and enclose the space with walls or with contrasting darkness. Make the space large enough so the chairs can be pulled back comfortably, and provide shelves and counters close at hand for things related to the meal.” Pg 844, A Pattern Language.
“No homogenous room, of homogenous height, can serve a group of people well. To give a group a chance to be together, as a group, a room must also give them the chance to be alone, in one’s and two’s in the same space. Make small places at the edge of any common room, usually no more than 6 feet wide and 3 to 6 feet deep and possible much smaller. These alcoves should be large enough for two people to sit, chat, or play and sometimes large enough to contain a desk or a table.”

Christopher Alexander, Sara Ishikawa and Murray Silverstein, A Pattern Language
**Research:**

“No homogenous room, of homogenous height, can serve a group of people well. To give a group a chance to be together, as a group, a room must also give them the chance to be alone, in one’s and two’s in the same space.” Pg 829, A Pattern Language.

“Make small places at the edge of any common room, usually no more than 6 feet wide and 3 to 6 feet deep and possible much smaller. These alcoves should be large enough for two people to sit, chat, or play and sometimes large enough to contain a desk or a table.” Pg 832, A Pattern Language.

Edward Hall defined four basic interpersonal distance zones:

- **Intimate** 0 - 18 inches  
  Shared common bond
- **Personal** 18 inches – 4 feet  
  Friends
- **Social** 4 feet – 12 feet  
  Common purpose, acquaintances
- **Public** 12 feet – 25 feet  
  Same place, same time

**Design Concept:**

Small, intimate spaces need to be created within larger rooms and spaces so that a few individuals can convene and feel comfortable and at ease.

- Lower ceiling height
- Few seats, or built in benches
- Optional table surface
- Contrast of light on center of area compared to darker edges
- View into larger space

**Supporting Concepts:**

**Interpersonal Space**

“We tolerate less interpersonal distance when we feel strong, secure or safe, and require more when we feel weak, insecure or at risk. Personal space is a subjective experience.” Pg 67, Environmental Psychology for Design.

**Building Edge**

“A building is most often thought of as something which turns inward –toward its rooms. People do not often think of a building as something which much also be oriented toward the outside.” Pg 753, A Pattern Language.

“Make sure that you treat the edge of the building as a “thing”, a “place”, a zone with volume to it, not a line or interface which has not thickness. Crenellate the edge of buildings with places that invite people to stop. Make places that have depth and a covering, places to sit, lean and walk, especially at hose points along the perimeter which look on to interesting outdoor life.” Pg 755, A Pattern Language.

**Activity Pockets**

“The life of a public square forms naturally around its edge. If the edge fails, then the space never becomes lively.” Pg 600, A Pattern Language.

“Surround public gathering places with pockets of activity – small, partly enclosed areas at the edges, which jut forward into the open space between the paths, and contain activities which make it natural for people to pause and get involved.” Pg 602, A Pattern Language.

**Stair Seats**

“Wherever there is action in a place, the spots which are the most inviting, are those high enough to give people a vantage
point, and low enough to put them in action.” Pg 604, A Pattern Language.

“In any public place where people loiter, add a few steps at the edge where stairs come down or where there is a change of level. Make these raised areas immediately accessible from below, so that people may congregate and sit to watch the goings-on.” Pg 605, A Pattern Language.

Bed Alcoves
“Every child in the family needs a private place, generally centered around the bed. But in many cultures, perhaps all cultures, young children feel isolated if the sleep along, if their sleeping area is too private.” Pg 677, A Pattern Language.

“Place children’s beds in alcoves or small alcove-like rooms, around a common playspace. Make each alcove large enough to contain a table, or chair, or shelves—at least some floor area, where each child has his own things. Give the alcoves curtains looking into the common space, but not walls or doors, which will tend once more to isolate the beds too greatly.” Pg 679, A Pattern Language.

Sequence of Sitting Spaces
“Every corner of a building is a potential sitting space. But each sitting space has different needs for comfort and enclosure according to its position in the intimacy gradient.” Pg 673, A Pattern Language.

“Put in a sequence of graded sitting spaces throughout the building, varying according to their degree of enclosure. Enclose the most formal ones entirely, in rooms by themselves; put the least formal ones in corners of other rooms, without any kind of screen around them; and place the intermediate one with a partial enclosure round them to keep them connected to some larger space, but also partly separate.” Pg 674, A Pattern Language.

Garden Seat
“Somewhere in every garden, there must be at least one spot, a quiet garden seat, in which a person—or two people—can reach into themselves and be in touch with nothing else but nature.” Pg 816, A Pattern Language.

“Make a quiet place in the garden—a private enclosure with a comfortable seat, thick planting, sun. Pick the place for the seat carefully; pick the place that will give you the most intense kind of solitude.” Pg 817, A Pattern Language.

Private Terrace on Street
“The relationship of the house to a street is often confused: either the house opens entirely to the street and there is no privacy; or the house turns its back on the street, and communion with street life is lost.” Pg 665, A Pattern Language.

“Let the common rooms open onto a wide terrace or a porch which looks into the street. Raise the terrace slightly above the street level and protect it with a low wall, which you can see over if you sit near it, but which prevents people on the street from looking into the common rooms.” Pg 667, A Pattern Language.

Sunny Place
“The area immediately outside the building, to the south—that angle between its walls and the earth where the sun falls—must be developed and made into a place which lets people bask in it.” Pg 758, A Pattern Language.

“Inside a south-facing court, or garden, or yard, find the spot between the building and the outdoors which gets the best sun. Develop this spot as a special sunny place—make it the important outdoor room, a place to work in the sun, or a place for a swing and some special plants, a place to sunbathe.
Be very careful indeed to place the sunny place in a position where it is sheltered from the wind. A steady wind will prevent you from using the most beautiful place.” Pg 760, A Pattern Language.

**Six-Foot Balcony**

“Balconies and porches which are less than six feet deep are hardly ever used.” Pg 782, A Pattern Language.

“Whenever you build a balcony, a porch, a gallery, or a terrace always make it at least six feet deep. If possible, recess at least a part of it into the building so that it is not cantilevered out and separated from the building by a simple line, and enclose it partially.” Pg 784, A Pattern Language.
PRECEDENT CONCEPTS

BUILDING CONCEPTS

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SUMMARY

The preceding design concepts of Rehabilitation through Nature, Hearth and Fire, Intimacy Gradient and Alcove will be the governing guidelines for the design of a Retreat in Southern Ohio for combat veterans and their families. Patterns derived from A Pattern Language, will support the larger design concepts and help to define the architecture of the Retreat.

The final intent is to design a Retreat that can help support the rehabilitation of the post-deployment family by means of integrating nature and natural elements with the landscape and architecture of the Retreat. Through this investigation of design, this thesis will conceptualize the intentions of Compass Retreat Center to one day construct a Retreat on a similar site.


Bell, Paul and Thomas Greene, Jeffery Fisher, Andrew Baum. *Environmental Psychology, 5th Ed.* (Belmont: Wadsworth Group/ Thomson Learning, 2001)


Imrie, Rob and Peter Hall. *Inclusive Design: Designing and Developing Accessible Environments*. (New York: Spon Press, 2001)


