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The objective of this thesis is to explore and create a methodology and tools for residential interior design that supports well-being. This goal is based on the effect the spaces we occupy have on our physical, mental and spiritual health. The home can have the greatest influence on us than any other space through its intimacy, safety and individuality. Designers of residential spaces therefore have a great opportunity to influence positive energy in the world, however, very little systematic precedent can be found for residential design processes that have the goal of well-being.

The 21st century has been characterized by rapid change, an abundance of information, increasing globalization, and constant technology-supported multi-tasking. This thesis creates a design methodology that takes the current culture into consideration by designing a process that prioritizes mindfulness, connection and functionality. Precedent research in eastern building sciences coupled with western evidence based design for holistic health contribute to the development of a design process prototype for the in-take, design, and presentation steps of a residential design project. The prototyped process includes three distinctive tools: a Design Manifesto, a process for interior designers documented in Design Deeper Cards, and a unique method of delivering design through Design Together Boards.

Two studios are completed to explore the prototype. The first follows a rapid testing approach, followed by iterations to the process. The second studio is an in-depth exploration of the prototyped process, following through to a full client design presentation. Further exploration is needed to refine the efficiency and complexity of the process. The thesis results in a revolutionary way to both understand and communicate with clients, and incorporate the client in the design process, both paving a new road in residential design for holistic health.

DESIGNING DEEPER: CREATING INTERIOR SPACES THAT
SUPPORT WELL-BEING THROUGH EXPLORATIONS IN
PROCESS DRIVEN DESIGN

by

Sheila M. O'Rourke

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Approved by

Committee Chair

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This thesis is dedicated to my two favorite women: my mother,
who knew I should have a career in architectural design
years before I would listen to her, and my one
hundred and two year old grandmother,
who will kill me if I don't finish this
before she dies.

APPROVAL PAGE

This thesis written by SHEILA M. O'ROURKE has been approved by the following committee of the Faculty of The Graduate School at the University of North Carolina at Greensboro.

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CHAPTER I

INTRODUCTION

The objective of this thesis is to explore and create a Methodology and tools for residential interior design that supports well-being. This goal is based on the profound effect the spaces we occupy have on our physical, mental and spiritual health. Christopher Alexander refers to this when he states in *The Nature of Order*:

...the geometry of the physical world – its space – has the most profound impact possible on human beings: it has impact on the most important of all human qualities, our inner freedom, or the sense of life each person has. It touches on internal freedom, freedom of the spirit. (Alexander, 2001)

The home can have the greatest influence on us than any other space through its intimacy, safety and individuality, with the potential to foster our spirit more than any other. Designers of residential spaces therefore have a great opportunity to influence positive energy in the world. The underlying philosophy is that those balanced and healthy at their core are better equipped to have positive, open-hearted interactions in the world and thus promote a healthier and more peaceful universe.

This methodology requires the practitioner to consider the world in which they are designing. The 21st century has been characterized by rapid change, an abundance of information, increasing globalization, and constant technology-supported multi-tasking (Laurinavicius, 2016). Americans are increasingly mobile, and communities are more and more diverse with extended family spread across the globe and neighbors changing year to year. To support well-being in this environment is to create an experience that balances these everyday experiences. For a home, this means creating an experience that:

1. Supports slowing down and being present
2. Creates continuity and a strong sense of belonging
3. Fosters a connection with humanity in a technology driven world.

To integrate and explore these objectives, historical systems from the eastern traditions of Hinduism and Buddhism have been found useful in their philosophies on energy and the built environment. They value the metaphysical forces at work in the universe and use them to create balance and mindfulness. Information and lessons from environmental design research and the interior design and architecture fields will also be synthesized. Research and historical philosophies will substantiate the effect of the home, the psychology of space, and design methodology based on a metaphysical/physical connection to explore and finally create a tangible, workable, methodology for interior designers to use to create environments that foster holistic health in inhabitants. The end goal is a methodology that addresses function, layout, and architectural details as well as colors, textures and materials. Utilizing a method that addresses these core issues will consider how aspects can work together to create the most successful homes psychologically and spiritually.

Informed by precedent research, I have created a methodology that aims to achieve the goals stated above through the integration of three approaches:

1) Design for Connection

Hear the client.

Find the in-balances.

Lay the foundation.

2) Design for Authenticity

Prioritize functionality.

Make it personal.

Create space to become.

3) Design for Mindfulness

Engage the senses.

Anchor with the five elements.

Design for Yin and Yang.

The deeper intention is that this approach will foster a more easeful, spirited, balanced life, one that counteracts some of the challenges of our 21st century world and fosters a greater chance of positive interactions and influence outside the home.

CHAPTER II

UNDERLYING THEORIES AND RESEARCH

A connection between the physical and metaphysical worlds had been widely accepted before the 1800's in pre-industrialized society (Alexander, 2001). This included the effect of non-functional aspects of an environment on health and well-being such as light, color and cardinal direction. However, beginning in the 19th century, what could not be measured mechanically was given less priority or dismissed altogether. With this thinking, society lost a reverence for the mind-body connection in the experience of the built environment for a century and a half. In the late 20th century researchers started using scientific methods to show the mind-body connection again. Most relevant to this thesis, scientific studies in mindfulness and meditation have surfaced to counter the 21st century's "epidemic of stress" (Pickert, 2003). Studies at Harvard University, for example, have shown that meditation can change the brain waves that help "the brain deal with an often over stimulating world" (McGreevey, 2011). The prevalence of studies in mind-body connection in the early 21st century are an indication of a growing respect in, and need for, metaphysical knowledge. Using scientific methods to verify mind-body connection bridges the gap between the industrialized need for mechanical understanding and traditional beliefs in the metaphysical experience of the world.

Environmental Psychology and Evidence Based Design

My literature review began in behavioral science, specifically, environmental psychology and design. My intention was to begin with data based modern research that showed a connection between physical spaces and a metaphysical experience. The earliest modern research exploring the impact of environmental design began in the 1970's in the healthcare industry. In 1984 Robert Ulrich showed in quantitative research that the health of patients with a view of nature improved more quickly than those with a view of a brick wall (Ulrich, 1984). This

type of research has led to evidence-based design, which is design that is informed by research. Extensive studies have led to research-backed changes in building certifications where the holistic health of the inhabitant is of prime concern. Healthcare is leading the way, but changes are found in the education, workplace and hospitality industries as well. Research in the commercial and specifically health care design industries were especially useful due to the depth of research and the years of practice that have created many precedents and the shared goal of holistic health of inhabitants.

Very little systematic precedent can be found in home design. In this thesis, I explore the metaphysical effect of home design to fill the gap between evidence based research and a traditional residential design process. When designing or renovating an existing residential interior, few systems can support design for well-being. Design of residences requires a different methodology and set of principles than commercial design. A residential design fulfills the needs of a person (or persons) and therefore is fundamentally personal. Commercial environments have objectives in mind: the healthcare industry has the objective of expediting healing; the hospitality industry aims to foster relaxation or belonging; work environments use environmental research to enhance productivity through focusing the mind or enhancing collaboration. The home, at different times and places, ideally supports optimal health in all aspects of the human experience. Residential design is also unique in that it requires an intimate partnership between designer and occupant. Limited research in environmental design has been found that explores the support of the full human experience, the breadth of well-being one would want in their home.

Environmental Design Research and The Nature of Order

The work of Christopher Alexander, an architect and design theorist, has frequently been the focus and study of the Environmental Design Research Association. In *The Nature of Order*, Alexander proposes fifteen properties that make up the elements in the world that have the most “life” (Alexander, 2001). He proposes elements with “life” make us feel the strongest connection to our souls and have the greatest potential for effecting positive experience. Alexander believes

there is a direct and distinct connection between the well-being of humans and their environment and that connection can be measurable and scientific.

When we pay attention to our own wholeness, we find that the degree to which conditions in the external world do increase our wholeness is predictable. We find, too, that the effect of these conditions on the human observer is reliable and replicable. The idea is that our feeling is not merely a subjective and changing thing, but that it itself is a reliable instrument – and that the condition, or state of this feeling, is a source of objective truth...the geometry of the physical world – its space – has the most profound impact possible on human beings: it has impact on the most important of all human qualities, our inner freedom, or the sense of life each person has. It touches on internal freedom, freedom of the spirit...The impact of geometry of our environment – its living or not living structure – has a trace like effect on our emotional, social, spiritual, and physical well-being. (Alexander, 2001)

Alexander's fifteen properties and approach to ascertaining what in our built environment has the most life is highly applicable to the nature of this thesis. Alexander's properties will be one of the tools used to explore design parameters and approaches.

Biophilia

Biophilia is a modern school of thought in environmental psychology popularized in 1984 by the book *Biophilia* by Edward O. Wilson. Wilson described biophilia as "the connections that human beings subconsciously seek with the rest of life...life around us exceeds in complexity and beauty anything else humanity is ever likely to encounter" (Wilson, 1984). The premise is that people are drawn toward organisms, species, habitats, processes and objects in their natural surroundings and have a biological need for this connection. This results in physical, mental and social effects of either having these connections or lacking them. Since the 1980's the concept has gained momentum and is now supported by neuroscience, environmental psychology, and endocrinology. Research has shown that biophilic additions to an interior space have an overwhelmingly positive effect on the people inhabiting them.

Color Theory

Color theory is a logical organization and explanation for colors as they relate to each other and affect humans. Color, as found in nature, creates sensations that can be linked to health and well-being. Nature provides “infinite asymmetrical and symmetrical color relationships which give an orderly system for the study of color and design” (Agoston, 1987). These effects are visual, psychological and aesthetic and therefore are the highest priority when approaching interior space design. As color does not exist without light, these principles affect how light affects a space as well. Studies on the effects of specific colors are widely researched with such examples as red signifying the earth, energy, and warmth, and blue signifying the sky, the ocean, and influencing relaxation, serenity, and coolness (Marberry, Zagon, 1995). Color theory can be found in research on environmental psychology as well as the theories on the Chakras, Feng Shui and Vastu. Color theory is a philosophy that uniquely transcends the ancient and modern approaches to design for well-being.

Science of Home

In the *House of C. G. Jung: The History and Restoration of the Residence of Emma and Carl Gustav Jung-Rauschenbach* (Yung, 2009), Carl Yung is quoted as saying our home is our source of “comfort, belonging and other psychological riches”. In *House as a Mirror of Self*, Clare Cooper talks about our homes as a direct reflection of who we are.

Our dwellings, and the objects within them, communicate...mirrors of what is, and...suggestions of what may be...every relationship, event, mishap, or good fortune in our lives can be perceived as a teaching, guiding us toward being more fully who we are... and the places we live are a reflection of that process...indeed the places themselves have a powerful effect on our journey toward wholeness. (Marcus, 1995)

The research is clear that a powerful connection exists between our home environment and our psychological well-being and that our built environment has a profound effect on us. It has been shown homes, more than any other environment, have the power to influence us to be our best selves. It is difficult however to find a documented residential design approach that takes

full advantage of this opportunity. Many homes are not designed or built with any thought of the metaphysical effects of space, but prioritize surface style and overall cost.

The Chakras

Historical spiritual systems will be used as a balance to scientific research as a framework from which to draw inspiration. Specifically, systems from the eastern traditions of Hinduism and Buddhism have been found useful in their priority balance and holistic health, and their goal of connecting the secular experience with the spirit. One such system, the Chakras, was first introduced in the 8th century by Buddhist monks in India. The Chakras are thought to represent the seven main energy centers in the human body. Asha Praver, graduate of Stanford University and spiritual director of the Anada yoga community in Palo Alto, has studied and taught the chakras extensively.

The chakras are spiritual principles. They represent a progressive expansion into a higher form of reality, they also represent all the qualities that make up a balanced human being and also a solidly functioning good Soul. (Prayer, 2006)

No one chakra is more important than the other and they all need to be in balance for ultimate human functioning, in other words, for well-being.

Referencing the work of Praver, this thesis will use the chakras in a non-sectarian way applying them to everyday living to affect experience of space. In exploring the use of spiritual principles to inform a design Process, the Chakras were chosen for the following reasons:

1. The seven chakras represent all the qualities that make up a balanced human being
2. The chakras are taught from a non-sectarian approach that can be applied to everyday living
3. There is universal significance to the number seven. It has prominence in all major religions:
Judaism, Christianity, Islam, Hinduism, Buddhism
4. The chakra system associates each chakra with many aspects that can be applied to design:
element, color, divine principle, physical property, and emotion

The most useful aspect of each chakra for interior design is the associated feeling. Every space one occupies can be described by the feeling it invokes and each chakra is thought to support feelings. For example, Asha defines the second chakra as “The water chakra, the creative capacity to flow intuitively with life”. The second chakra refers to the need for flexibility in life. It is also associated with an element (water), a color (orange), a divine principle (sensuality/sensitivity), a physical property (creativity) and an emotional connection (intimacy).

The chakras, therefore, can be directly applicable to spatial design in the intended feeling, or feelings, for each space. In *Interior Design Theory and Practice*, Anthony Scully references the Chakras as “interesting for designers...because they are positioned in the same places on the human body as the five platonic solids.” (Sully, 2012). The renowned designer Clodagh sites the Chakras as a modality from which her designs are inspired. (Ramsdell, Aubry, 2006). The chakras are cited as a valuable philosophy more and more in the western world and will be useful in the exploration of this thesis for paths to achieve well-being. See Figure 1.

Chakras and Elements of Interior Design.








	CHAKRA	Life Application	Color	Element	Metal	Sense
	1st ROOT	GROUNDING&SECURITY Survival, Values, Loyalty	Red	Earth	Lead	Smell
	2nd SACRAL	RELATIONSHIPS Creativity, Sexuality, Inhibition, Flexibility	Orange	Water	Tin	Taste
	3rd SOLAR PLEXUS	ENERGY & VITALITY Willpower, Desire, Anger	Yellow	Fire	Iron	Sight
	4th HEART	BALANCE, LOVE, CONNECTION Compassion, Hope	Green	Air	Copper	Touch
	5th THROAT	COMMUNICATION & HEALING, SPEECH Creativity	Blue	Ether	Mercury	Hear
	6th THIRD-EYE	INTUITION & UNDERSTANDING Clairvoyance	Indigo	Light	Silver	Intuition
	7th CROWN	ENLIGHTENMENT Inter-connectedness Spirituality	Purple	Thought	Gold	Think

Figure 1. Chakras and Elements of Interior Design

Feng Shui and Vastu Shastra

In addition to the spiritual system of the Chakras, this thesis will reference the historical building and environment science of China, Feng Shui, and its predecessor from India, Vastu Shastra (Vastu meaning dwelling and Shastra meaning Science). Feng Shui and Vastu Shastra focus on the effect of “chi”, as it is called in Buddhism, or “prana”, in Hindu, which is defined as the flow of non-biological energy. The renowned scholar Robert Svoboda wrote in *Vastu: Breathing life into space*: “The force that produces feelings of ease or dis-ease within us is the life-force...prana...or chi.” (Svoboda,2013). It is the force that makes a person the same as they age through life even though all their cells have regenerated. It is the force that makes us feel

right in a space, a relationship, an activity, without a logical explanation. Both Feng Shui and Vastu are ancient spiritual bodies of knowledge that illustrate this force as it relates to the built environment and human well-being. Rodika Tchi, a Feng Shui expert from the University of British Columbia, states “In Vastu Shastra, as well as in Feng Shui, the focus is on a human's well-being, which can only be achieved when we are in harmony with nature and the universal flow of energy” (Tchi, 2016).

The science of Vastu Shastra considers the effect of the various energies in the universe including solar energy, lunar energy, thermal energy, magnetic energy, light energy and wind energy. In this way, it is quite practical and aims to align the home with nature to improve quality of life. Vastu Shastra also uses the shape of the lot and building and their relationship to the cardinal directions to create a position and function that works most optimally. Specifications for types of space within a dwelling (kitchen, living room, bedroom, etc.) are synthesized with the effects on different personality types using the five elements and the five senses to manifest the energetic flow. In Vastu Shastra the home is thought of as a living thing and spatial design is used for optimal health and harmony. Color, placement of furniture and thoughtful use of space, specifically for the individual inhabitants of each space are the tools most used.

Like Vastu Shastra, Feng Shui is a science of space design that seeks to harmonize and channel the forces of the universe with the belief this will enhance the experience of life. In Feng Shui, the three most important aspects of the universe that need to be supported for a healthy environment are:

- Balance of yin and yang
- Representation of the five elements (metal, wood, water, fire and earth).
- Flow of Chi (energy)

The Five Elements as defined by Feng Shui are Fire, Earth, Metal, Water, and Wood. The qualities of the elements relate to aspects of our physical environment including, color, weather, shape, cardinal direction and yin/yang. See Figure 2. Qualities of the Five Elements of

the Universe (Wong, 1996). These qualities make the Five Elements easily adaptable to design elements which share similar traits.

	FIRE	EARTH	METAL	WATER	WOOD
ENERGY QUALITY	Expansive	Stabilizing	Contracting	Conserving	Generative
DIRECTION	South	Center	West	North	East
COLOR	Red	Yellow	White	Dark Blue	Green
SHAPE	Triangle	Square	Round	Wavy	Rectangle
SEASON	Summer	Transition	Autumn	Winter	Spring
WEATHER	Hot	Damp	Dry	Cold	Windy
PHASE	Full Yang	Yin Yang Balance	New Yin	Full Yin	New Yang
SENSE	Speech	Taste	Smell	Hearing	Sight

Figure 2. Qualities of the Five Elements of the Universe (Wong, 1996)

One of the main tools used in Feng Shui to analyze the energy of any given space is the Bagua Map. The Bagua is the Feng Shui energy map of a space that shows which areas of a home or office are connected to specific areas of life. See Figure 3. Bagua Map Draw Over Floorplan. The nine areas of the Bagua (Wong, 1996) are:

- 1) New Beginnings and Family – This represents your parents and ancestors; signifies growth, strength, flexibility and vitality.
 - Element: Wood
 - Color: greens and blues
 - Good Enhancements - Botanical prints, green items, plant, Things made of wood or that look like wood, Family photos (except in the Bedroom), Vertical items like floor lamps and columns.

- 2) Wealth and Prosperity - Represents abundance and prosperity as well as your sense of gratitude for the abundance you already have in your life.
- Color: purples and golds
 - Good Feng Shui enhancements - Items that symbolize prosperity to you.
Representations of things for which you feel truly grateful.
- 3) Fame and Reputation - Represents your integrity and how you are known (and wish to be known) in the world.
- Element: Fire
 - Color: Reds
 - Good Feng Shui enhancements - Lighting, candles, Red items, Triangular shapes, Animal prints, leather items, photos of animals.
- 4) Love and Marriage/Intimate Relationships - Represents your most important romantic relationship, your ability to nurture yourself and your lover, mother earth, devotion.
- Color: Rosy Pink
 - Good Feng Shui enhancements - Pairs of things, Things symbolizing intimate relationships, Items that have pink in them.
- 5) Children, Legacy and the Future - Represents your sense of joy, openness and discernment, as well as your ability to complete projects.
- Element: Metal
 - Color: Whites and light pastels
 - Good Feng Shui enhancements - Items that help you visualize the future: a vision board, for example, Things that symbolize the completion of important projects, Metal things, Rounded things – circular or oval items, archways
- 6) Travel and Helpful People - Represents getting out in the world to make things happen; your ability to get and give help, and to create synchronicities.
- Color: greys and pastels

- Good Feng Shui enhancements - Travel souvenirs, a globe or maps, Photos and artwork honoring people who have made a difference in your life, Symbols/photos of people you would like to come into your life, People in whose lives you have made a difference.
- 7) Life Journey/Career - Represents the journey of life, including your career. The Water element also symbolizes cash flow.
- Element: Water, both moving and still
 - Color: black, very dark colors
 - Good Feng Shui enhancements - Artwork about water, a water feature or fountain, Glass and mirrors, Sinuous textiles, Dark colors.
- 8) Knowledge and Self-Cultivation - Represents the cultivation of knowledge, skill-building, contemplation. "A place where wisdom can develop."
- Color: dark colors: greens, blues
 - Good Feng Shui enhancements - Art symbolizing study, stillness, contemplation, Books, a place to read and study, A personal retreat.
- 9) The Center/Tai Chi - Represents your physical and emotional health. A clear, open Center helps keep all the other areas connected and in balance.
- Element: Earth
 - Color: Yellows, earth tones
 - Shape: square
 - Good Feng Shui enhancements: Keep this area open if possible, helping Chi energy flow freely in your space, Square items, Earthenware and ceramics.

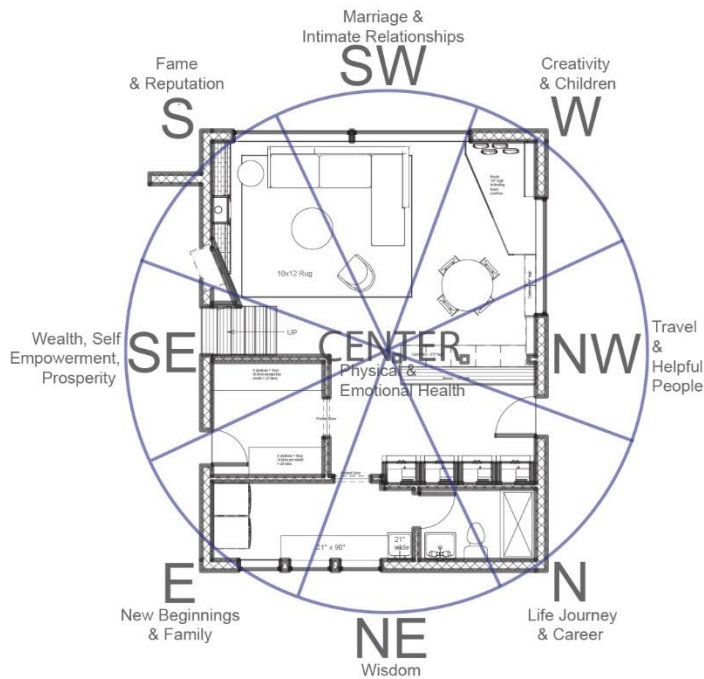


Figure 3. Bagua Map Draw Over Floorplan

All Feng Shui schools have what are called “Cures” or ways to remedy issues with flows of energy in a space, that represent ease and balance in the areas of life, through use of shape, light, color, movement and sound.

The Chakras, Vastu Shastra and Feng Shui share a base belief that a chief prerequisite for healthy living is balance and alignment in all aspects of life. They share the view, like Christopher Alexander referenced above, that the physical properties of the world are one of the chief influences on our metaphysical experience of the world. Spiritual systems of space planning, as well as Christopher Alexanders fifteen properties, offer many tools and strategies that can be used in exploring and developing a design process for well-being that can be applied to the modern world. Feng Shui’s Bagua Map covering the Full Human Experience, the Five Elements of Feng Shui, Color Theory, and Energy Flow offers a framework for exploration if many of the concepts of this thesis.

CHAPTER III

DEFINITIONS AND PHILOSOPHIES

Heuristic Design Methodology

The method of research that will be used in this thesis is called a heuristic design method. The word “heuristic” comes from the ancient Greek word meaning to find or discover. A heuristic approach to design is a method meant to explore a Process and not meant to achieve a specific result. It is an iterative process and lends itself to a thesis of this type where the subject matter is not measurable in a scientific way and the most information will come from exploring and iterating the process as it evolves.

Well-Being

The World Health Organization defines well-being as “a complete state of physical, mental, and social health, and not merely the absence of disease or infirmity” (Quality of Life Assessment: International Perspectives, 1994). In the article “Advancing the Science of Design's Impact on Health + Well-Being”, Stephanie Clemons (*Ph.D., FASID, FIDEC*) discusses the distinction between design for health and for wellness.

Wellness goes further than health in that it focuses on soundness of body and mind and preventing disease, injury, illness, or pain that could be caused by occupancy of interior environments. It strives to support people's physical, psychological, social, and spiritual well-being and contribute to their financial or economic management, success, and responsibility. (Clemons, 2014)

For the purposes of this thesis, well-being is the health of a person's body, mind and spirit, or physical, mental and spiritual health.

Spirituality and The Soul

For this thesis, soul will be used interchangeably with spirit. The National Center for Cultural Competence at Georgetown University defines spirituality as:

A broad set of principles that transcend all religions. Spirituality is about the relationship between ourselves and something larger, spirituality means being in the right relationship with all that is. It is a stance of harmlessness toward all living beings and an understanding of their mutual interdependence. (Definitions and Discussion of Spirituality and Religion, 2014).

The implication is that spiritual health is as real and as important as physical and mental health. This goes against the focus on the scientific and mechanical brought about by the industrial revolution. The industrialized world in which we live is a rapidly changing, complicated, globally connected and profoundly secular one. This thesis follows the belief that within that experience the spirit, or soul, is still viable and essential to a healthy life, and is not scientific or mechanical. Mies Van Der Rohe has said “Just as we acquaint ourselves with materials, and just as we must understand functions, we must become familiar with the psychological and spiritual factors of the day. No cultural activity is possible otherwise, for we are dependent on the spirit of our time.” (Mies, Gropius, 1970). Spirituality is thus defined as the experience of the soul lived authentically within a physical body and intellectual mind.

Mindfulness

An important factor in achieving balance of the spiritual and secular is mindfulness, a philosophical topic that implies living in the present moment. Mindfulness can be traced back to the earliest writings in the religion Hinduism dating over 4000 years ago. Through the Bhagavad Gita's discussions of yoga and Vedic meditation, the history of Hinduism can be read as a history of mindfulness. Mindfulness may be even more involved in Buddhism, a religion dating to 400 B.C.E. than it is in Hinduism, as mindfulness (Sati) is the first step towards enlightenment in Buddhism.

The influence of mindfulness in the west can be traced to Buddhist teachers. Jon Kabat-Zinn, Ph.D. is known bringing mindfulness into the mainstream of medicine and society when founded its world-renowned Mindfulness-Based Stress Reduction Clinic at the University of Massachusetts in 1979. This integration with Western science was a crucial aspect in helping mindfulness gain widespread popularity in the West. Since that time mindfulness has grown in popularity as its benefits are the antithesis of the influences of modern society. Time Magazine recently featured a full cover story titled “The Mindful Revolution” (Pickert, 2013). The movement is a reaction to the modern, fast paced, information filled, secular world. A mindful state of being is achieved by a mental discipline which holds attention on what is being experienced by your senses in the current moment. Mindfulness, defined in this way, can have a profound impact on our lives. The presence and success of yoga and meditation centers in American cities is evidence of this trend. In the Journal of Marital and Family Therapy, an article on mindfulness describes it as “the way to truth, the path to goodness, or the process by which we see our interconnectedness with the universe” (Block-Lerner, Adair, Plumb, Rhatigan, Orsillo, 2007).

Mindfulness can be described as non-attachment to transitory thoughts or thoughts influenced by the past, the future or the ego. Its purpose is in direct contrast with the fast paced, information filled, global world in which we live. Mindfulness will play a large role in the design processes created for this thesis with the intention to enhance the experience of the present moment by engagement of the senses.

CHAPTER IV

METHODOLOGY

The objective of this thesis is to develop guiding concepts, approaches and tools for a design process that can be used in designing a residential space. To create this process, I used the following method:

- 1) Conduct expert interviews
- 2) Create and develop a design manifesto
- 3) Create and develop a prototype for the in-take process that includes recording and documenting data.

Tool Developed: Design Deeper Cards (In-Take Process: Observe, Ask, Play)

- 4) Interview four clients using in-take process prototype
- 5) Choose one of the clients for a preliminary design project as a high-level test for the prototype. This is called *Studio Project One*.
- 6) Create a Develop a prototype for the post in-take process.

Tool Developed: Design Deeper Cards (Post In-Take Process: Synthesize, Create)

- 7) *Perform a high-level pass through the Synthesize and Create process for Studio Project One.*
- 8) Choose one of the clients for an in-depth design project as a detailed test for the prototype.

This is called *Studio Project Two*.

- 9) *Perform a detailed pass through the Synthesize and Create process for Studio Project Two.*
- 10) Create a prototype for presentation process

Tool Developed: Interactive Design Boards

- 11) Present to Client
- 12) Review of Tested Prototyped Process
- 13) Future Follow-Up

Throughout the work of this thesis I used a heuristic approach, iterating as I cycled through the following sub-process:

- Gather information
- Perform a task or activity based on information gathered
- Document and Analyze results

The three steps of the sub-process appear repeatedly during the thesis work.

Expert Interviews

An official industry of residential designers specializing in well-being is not strongly established, however, many practitioners achieve some to many of the objectives of well-being in their work. I began my process with a series of interviews of professionals who explicitly create spaces for well-being or support holistic or mindful living through their work. I began interviewing in May 2016 and completed my expert interviews in March 2017. Interviews with architects, interiors designers, an owner of a yoga studio, the leader of a Zen Buddhist center, a Chakra expert, and Feng Shui and Vastu trained interior designers and architects were intended to shed light on how the metaphysical properties of the human body can be affected by the built environment. The expert interviews were used to gain insight into practical applications towards the process I was developing.

Interview Commonalities

Though the experts covered a range of specialties, my interviews followed a consistent process with the following commonalities:

- 1) All interviews were recorded.
- 2) When possible, interviews were conducted on a site that was designing or used by the professional. This included interviews with Joshu Pat Phelan, Jodie Rufty, Bradshaw Orell and Dr. Susie Wise.

- 3) Questions asked had the intention of understanding the practitioners' process specifically in terms of the three focus topics for my final process: communication with clients, designing for authenticity, and supporting mindfulness.
- 4) After each interview, a post analysis response was conducted in which ideas or lessons were identified that could be explored in a design studio project and eventually be part of an interior design process. Each interview was synthesized down to the main inspiration ideas.

Interviewees

- 1) *Vibhavari Jani* - Professor of Interior Architecture at University of Kansas, interviewed May 21, 2016

I met with Professor Jani at the EDRA Conference in Raleigh, NC. She spoke about Vastu Shastra, the traditional building science of India. This was my introduction to Vastu Shastra, and finding it relevant to my work, I requested an interview with Professor Jani. Ms. Jani has a graduate degree in Interior architecture and bachelor's degree in Architecture. Her book "Diversity in Design: Perspectives from the Non-Western World," addresses the contribution of Non-Western cultures in the field of architecture and design, and incorporates real-world non-Western design traditions into Western context. In our short conversation, the most important point was her confirmation that humans are part of, and directly affected by, a much larger universe. She encouraged me to research Vastu Shastra as foundation literature for this thesis. A few particularly relevant Vastu Design Principles that would lead to an experience of "spiritual harmony and inner poise" are:

- Understanding the spirit of the client, the building should meet who the person is
- The materials and designs should meet the needs of the community and local nature
- The center of any home or space is the most important point and should be free of clutter
- Shade, shadow, light and wind should work together

2) *Jodie Rufty* – Expert in the Philosophies of the Chakras, interviewed July 16, 2016

Jodie Rufty has been teaching yoga for 22 years. She is also a Reiki Master and co-founded Amrita Yoga Center NYC and the Nava Yoga Center in Zagreb Croatia. She leads trainings annually that focus on yogic philosophy and the mind body soul connection and has a course on the chakras that covers how to use knowledge of the Chakras to align ourselves with the natural flow of life.

Our interview focused on Jodie's expertise with the Chakras and consisted of one main question. I asked Jodie to describe what an interior space would look like that supported each Chakra. This line of questioning sparked many useful explanations and insights regarding the chakras and how they relate to physical space. The interview was extremely helpful in that it enhanced my understanding of the Chakras and in doing so verified the connection between the philosophy of the Chakras and the metaphysical effect of physical space on a human being. For example, Jodie stated: "The Chakra's are a neurological mapping of the body – they represent how you receive information from the outside world." I gathered four "Big Ideas" that could be used as inspirations for studio work.

Jodie Big Idea 1

My conversation with Jodie focused on brain storming what a space would look and feel like that supported each chakra. The idea that came out of this was to design a house with rooms inspired by each Chakra. This could most obviously be done with color as each chakras has an associated color but we pushed ourselves to think about the feeling created by different approaches to room design and relate those to the chakra's.

- Kitchen – A kitchen designed to support the 1st Chakra would use or be inspired by red, green accents, grounded/heavy objects, stability, your tribe (family, ancestors, heirlooms), your values, plants, rocks, earth

- Living Room – A Living Room designed to support the 2nd Chakra would use or be inspired by orange, blue accents, flowing patterns, not stagnant, nourishing, creativity, curves, movement, flexibility, water
- Dining Room – A Dining room designed to support the 3rd Chakra would use or be inspired by yellow, violet accents, have views, triangular shapes, power, will strength change, abrupt, energy, vitality, naval, purpose, inner strength, rising, fire
- Kids Rooms - A room for kids designed to support the 4th Chakra would use or be inspired by green, red accents, open-ness, embracing, mother's love, connectedness, gracious, universal love, beauty, feminine, air
- Master Bedroom - A master bedroom designed to support the 5th Chakra would use or be inspired by blue with orange accents, a design that is authentic to how the room is really used, a design with clarity/contrast, a balance of yin and yang
- Study - A study designed to support the 6th Chakra would use or be inspired by the color indigo with dark yellow accents, subtlety, beyond what can be seen, wisdom, all one, vastness, spirit and soul, interconnected, books, desk, light
- Outside – An outside area designed to support the 7th Chakra would use or be inspired by purple with light yellow accents, décor inspired by around the world, low contrast, light and airy, upward, focus, harmony, peace.

Jodie Big Idea 2

The second big idea that came out of the interview with Jodie was to use nature to visualize and emotionalize what each Chakra represented. The task was to find a natural space that represented each Chakra. For example, the first chakra is about our experience of being grounded and rooted in an idea, community or feeling. It is a heavy, strong, solid chakra. It could be represented by a mountain or rocky terrain. Other inspirations are as follows:

- *First Chakra* - a mountain or a large rock (GROUNDED/earth, rooted, values, stable, base, RED)

- *Second Chakra* – a meandering river (FLUID/water, creative, flow, produce, move, form, cleanse)
- *Third Chakra* – a waterfall, lightening, a tiger roaring (POWERFUL/fire, change, will, stand up, break through, push, YELLOW)
- *Fourth Chakra* – a forest reflecting on a lake (LOVING/air, all encompassing, all embracing, compassion to the whole, rotund, GREEN)
- *Fifth Chakra* – a long view of mountaintops like the view over the blue ridge parkway or across the Grand Canyon (HONEST, CONNECTED, Ether, Authentic, original, honest, integrity, nothing hidden, justice, speaking out for what is real, BLUE)
- *Sixth Chakra* – Sun coming through trees (INTUITION/TRUTH, Light, Cut through illusion to access deeper truths - to see beyond the mind, beyond the words, INDIGO)
- *Seventh Chakra* – sun in the sky or view over the ocean (UNIVERSAL CONNECTION, higher power)

Jodie Big Idea 3

The third big idea to come out of the interview was to design the lower levels of a house to represent lower chakras and design the upper levels of a house to represent upper chakras. This is like “Big Idea #1” except applies the chakras more generally. The lower chakras are warm colors; red, orange and yellow. They refer to human experiences that are physical in nature. This includes being grounded to the earth or being part of a community, going with the flow of life, or creating another human, feeling passion and making change. The upper Chakra’s are cool colors: green, blue, indigo and purple. They refer to human experiences which are cerebral in nature: feeling love, connection, intuition or spirituality. The idea was to approach the design of a home where the more public rooms, those on the entry floor, represent the more physical characteristics of being human, and those on the private floors represent the more cerebral characteristics of being human.

Jodie Big Idea 4

The final insight to come out of the interview was that I generally design to the upper chakras. The colors I use, the materials I use and the feelings I try to evoke are all representative of higher chakras. The idea here was to challenge myself to do a design project where I design to support the lower chakras. For example:

- Focus - family, community, your tribe, stability, support, supporting your physical body, grounded, creative
- Design elements would support:
 - a. GROUNDED/earth
 - b. FLUID/water
 - c. POWERFUL/fire
- Colors → red, orange, yellow
- Materials → clay, stone
- Patterns/Shapes → flowing, triangular, square
- Décor Elements → images of family, family heirlooms
- Furniture -> heavy, supportive

This idea would later come up in my thesis studio projects.

3) *Reiko Gomez* – Feng Shui Interior Designer (Flying Star Tradition), Interviewed August 12, 2016

Reiko Gomez is a Feng Shui designer based out of New York City. We spoke on August 12, 2016 on a video conference. See Figure 4. Interview Plan for Reiko.

Reiko Interview: August 12, 2016

Video Conference

- 1) How many years have you been practicing interior design?
- 2) How has your process or style changed in those years?
- 3) Can you talk about how feng shui informs your process?
- 4) Do you approach all projects with Feng Shui thinking?
- 5) Can we look at some of your work together?
 - a) Cove Bedroom & Loft - Can you talk about thresholds or spatial experiences of different places in that loft?
 - b) Bathroom with layers - Can you talk about what might inspire a design - here looks like nature?
 - c) Grey with Wood - can you talk about why feels so different from other work?
 - d) Hot Pink Master headboard - Can you talk about the bold use of color?
 - e) Bathroom blue floor --Can you talk about the shapes?
 - f) Pink living room - Can you talk about texture?
 - g) Turq Chandelier (Light fixture!)
 - * Can you talk about how a chandelier affects movement or a threshold?
 - * Can you talk about how a chandelier is experienced from different places in house?
 - h) In the 3 black & white designs - Can you talk about your use of pattern?
 - * Marble/wood, busy pattern, simpler stripe, crystal-y chand, with view of rustic deck and dunes
 - i) More Modern Living Room - Can you talk about straight lines vs curves and greys vs colors and the affects
 - j) Colors in Library - can you talk about light in this room?
- 6) Do you have a favorite color, fabric, shape?
- 7) In what ways does your own home look like the designs you do for others?
- 8) Do you find yourself using your favorite color/fabric in your work or do you get to know your clients and choose colors for them? How much time do you spend getting to know your clients? How get at what will move THEM?
- 9) What has been a challenging project in terms of creativity or soulfulness of the design?
- 10) What do you prioritize what to hold on to?
- 11) What inspires you? DESIGNERS? ARTISTS?
- 12) Can you describe some of your most successful spaces - could be in a clients home or your own home but a room, a view, a corner, something that makes you feel good down deep in your soul.
- 13) Is there anything I did not ask that you would like to tell me?

Figure 4. Interview Plan for Reiko

Reiko was an excellent interviewee and almost every question led to a deep and informative conversation which led to multiple inspirations for my studio work.

Reiko Inspiration 1: Flying Star Feng Shui

Reiko believed whole-heartedly in the Flying Star system of Feng Shui. She brought it into every project whether the client asked for it or not. Her statements about it were inspiring and seemed to come from a logical approach to designing what is best for her clients.

When you are in a harmonious environment, things flow, and when things flow in your life, the right people show up, the right opportunities show up, money flows, everything has an ease to it.

I seamlessly blend it into every design because I am committed to them having a good home and a good life.

Every building has strengths and weaknesses, the key is figuring out where those things lie.

Feng Shui gives me my broad decisions, more specific decisions are based on my tastes, my client's tastes, their needs.
(Reiko, 2016)

I decided to explore using Feng Shui to inspire my work. The list I created and would use is as follows:

- a. The center of the home is the heart of the home – it should be light, bright and happy.
- b. Energy in stagnant corners and areas of a home could be awakened through curves, light, stairs, columns.
- c. Highly energetic areas of a home could be calmed through rugs, darkness and closing off spaces (room delineation)
- d. All five elements should be represented in every room:
 - i. WATER represents Wealth, Abundance, Fluidity. It is represented by s curves, dark blue or black, water features, water in art, black and white photographs, flowing fabrics.
 - ii. EARTH represents nourishment, knowledge, stability. It is represented by the shape of a square, brown, the materials concrete (tiles), ceramic, marble, crystals, and natural rugs, and by images of a warm landscape.
 - iii. WOOD represents growth and health. It is represented by the shape of a rectangle, the colors green and brown, and by plants, pictures of trees, natural fibers, wood floors, wood furniture, and wood walls.
 - iv. METAL represents independence, focus, strength, calm, clarity, peace. It is represented by the shape of a circle, the colors white, grey and metallic, and by metal light fixtures and picture frames

- v. FIRE represents passion, energy, creativity. It is represented by the shape of a triangle, the colors red, purple and yellow, and by candles, a fireplace, and the colors in art, a vase, a rug, or fabric.

Reiko Inspiration 2: Reiko's Process

I asked Reiko about her process and she went into detail taking me through how she works with clients. Given how much her philosophy supported the objective of this thesis, I would explore using parts of her process in my studio work. Following is a summary of the process she outlined:

- a) Assess the Feng Shui of the building
 - exact direction it faces
 - year it was built
- b) Create an energy blueprint and overlay on the floorplan
 - 8 areas, directions, trigrams
 - find exact center of building
- c) Assess what elements are needed for the harmony of the building.
- d) Plan materials in respect to energy blueprint. For each area, make a broad plan for:
 - colors (highest priority)
 - shape (second)
 - material (third)
- e) Present Client with an Interview/Questionnaire
 - trying to get a sense of who they are and what they are striving for
 - what they like/don't like
 - what are their goals/vision for 5 years (SPACE, LIFE, FAMILY)
- f) Design!
- g) Listen to Client Input
- h) Trust the Process and Let It Unfold!

Reiko Inspiration 3: Indian Culture

Reiko explained how her first interest in Feng Shui design began from a trip to India.

I was first introduced to Vastu in India. It was a process of making sure the architecture was in harmony with the environment. It was thought to uplift and support the people who lived or worked there, it resulted in buildings that had an inherent in-syncess with people.

When I came back to America, inspired by Vastu, I found Feng Shui and studied for many years with a master. Later, I went to Parsons to get my design degree. I always knew though that I was going to integrate Feng Shui into the design, I wasn't interested in just creating fancy spaces, I wanted them to be infused with this energy. (Reiko, 2016)

She said the colors, materials and energy of India shows up in her work again and again.



Figure 5. The Culture of India Inspires Color, Texture, Light (photos by author)

Reiko Inspiration 4: Clodagh

Reiko named the re-known designer Clodagh as a designer who inspires her work most directly. Originally from Ireland, now living in New York City, Clodagh has named her style “Life-Enhancing Minimalism™” with the following definition from her website:

Clodagh passionately believes that good design supports well-being and that it can transform people's lives. She feels that clutter can undermine serenity, but minimalism should not be self-denying. The experience of entering a Clodagh designed space is one of blissful serenity. She is a believer in the tenants of integrative medicine, addressing the entire body and psyche as a whole, she embraces both ancient and cutting-edge methods in an effort to comfort not only the body but also the mind. (Clodagh, 2014)

Clodagh was one of the earliest adopters of Feng Shui in her design practice. She now incorporates cutting edge metaphysical modalities into all her projects. She was the first mainstream interior designer I came across in my research who directly states one of her modalities as the Chakras. Clodagh lists the modalities she uses as:

- Bio geometry, defined as the science of the effect of shape on energy fields and therefore on the body.
- Chronotherapy, defined as the work of strengthening the seven chakras of the body. Each chakra relates to emotional, spiritual and physical states in the body.
- Feng Shui
- Wabi-Sabi, defined as the ancient practice of finding beauty in the imperfect
- Aromatherapy, defined as using scents to affect an experience
- Biophilia, defined as using references to nature to enhance a human experience

Clodagh states her process as: Cleanse --> Clarify -->Contemplate -->Create. Clodagh's inspirations and process inspired the exploratory process that followed my interviews.

Reiko Inspiration 5: Zaha Hadid

The final inspiration that Reiko passed on to me was the late architect Zaha Hadid. Reiko said Ms. Hadid's work inspires her to design organically and with feeling, not following set solutions or assumptions. On further research into Ms. Hadid's work, I found the following quotes that verified her connection to my work:

Architecture is really about well-being. I think that people want to feel good in a space...on the one hand its about shelter, but its also about pleasure. If you think about

housing, education, schools and hospitals, these are all very interesting projects because in the way you interpret this special experience.

What's nice about concrete is that it looks unfinished.

I have always appreciated those who dare to experiment with materials and proportions. People think that the most appropriate building is a rectangle, because that is typically the best way of using a space. But is that to say that landscape is a waste of space? The world is not a rectangle!

I don't think that architecture is only about shelter, is only about a very simple enclosure. It should be able to excite you, to calm you, to make you think.

The beauty of the landscape - where sand, water, reeds, birds, buildings and people all somehow flowed together - has never left me. (Hadid, 2010)

Throughout my studio work I used images of Ms. Hadids work to push me out of the assumed path and inspire me to explore new ways of thinking of design.

4) *Anjie Cho* – Feng Shui Architect and author of *108 Ways to Create Holistic Spaces*,

Interviewed August 13, 2016

I met with Anjie in her office/apartment in New York City. See Figure 6. Interview Space Designed by Anjie Cho. The most significant idea from Anjie was that philosophies like Feng Shui and Vastu Shastra required a deep level of expertise to use thoroughly, but that they did not have to be used as a total approach. Elements could be mixed in here and there as needed and where it worked for the client. Some of these ideas were ones I had heard in the interviews described above:

- Use materials from all five elements in every room
- Use mirrors and light fixtures to waken the energy in stagnant corners of rooms
- Use color to affect mood

One advice of Ms. Cho's was different from what I had heard thus far:

- The client needs to ask for Feng Shui to be incorporated into design, do not add it without their request or it will not work

It was interesting to hear this different approach and was something I explored in my studio work.



Figure 6. Interview Space Designed by Anjie Cho

5) *Joshu Pat Phelan* – Abbes of Chapel Hill Zen Center, Interview August 26, 2016

Joshu has been the Abbess of the Chapel Hill Zen Center since 1991. Joshu and I met at the Chapel Hill Zen Center and spoke for about an hour. As the leader of a Zen center, a non-profit with budgetary constraints, Joshu has been the design director for all interior design and construction projects at the center for the last twenty-five years. She gave me a tour and described each room and how it came about. I observed the center as aesthetically beautiful, calming and nature inspired. See Figure 7. for an example of one of the rooms we discussed. From the interview with Joshu, it did not seem like aesthetics or metaphysical effects of space drove the design. Through the entire interview, Joshu gave pragmatic answers in relation to space planning and interior design. When I asked why different choices were made they were always for a logical reason. When I asked what was her favorite part of her own home, she said “I love that the walls are thick, keeps the cold out and you can’t hear between rooms.” The Zen center was designed with the same priorities. Pieces were often made by hand and with natural

materials because that is what they had donated or could do themselves. They used the task of construction and carpentry for the Zen practice of working meditation. The visit and interview left me with an inspiration to think honestly, simply and logically about spaces and use.



Figure 7. Chapel Hill Zen Center – Interior of Main Meditation Room

6) *Bradshaw Orell* – Expert in Biophilic Hospitality Design, Interview September 13, 2016

I interviewed Mr. Orell in the Bradshaw Orell Interiors office in Greensboro, NC. Mr. Orell received his Master of Fine Art's degree with a focus in furniture design from the Savannah College of Art and Design. One of his first projects at Bradshaw Orell Interiors was the Proximity Hotel, which was the first LEED platinum hotel in the country. Bradshaw's interview was interesting and informative, but not specifically around the goals of this thesis. He did not respond directly to questions but instead spoke organically about his path to where he was in his design career. He did not speak about his process nor how design affected people on a metaphysical level. There were two useful elements of this interview:

- The interview process taught me a lot about what questions were better or worse at drawing out information or getting to the information I wanted. I saw how some of the questions

worked well with someone who did not think of space in a philosophical or spiritual way.

Many questions would reappear again when I later interviewed clients. Many I would never use again.

- He recommended that I visit the Proximity Hotel. It was there, without Mr. Orell, that at I gained insight and inspiration from his work.

I was given a tour by the hotel lobby receptionist. The tour focused on the biophilic and LEED certified elements on the hotel. My primary tools for collecting data were taking photographs and listening.

The hotel had an overall organic and integrated approach to design. This created an environment that felt extremely unique for a hospitality building. When I was there I felt grounded, and a sense of comfort and belonging, even though it was a hotel that I had never been in before. I studied the space by touch, sight and sound and documented with pictures and notes. One of the most poignant moments was when the hotel receptionist, who was giving me a tour, said *“All the natural light makes you come alive, it’s exciting, energizing.”* The elements that most inspired were:

- Use of Biophila
- Repetitive use of shapes and patterns
- Use of over- scale items
- Use of simple patterns

See Figure 8. Light and Repetition of Shapes at the Proximity Hotel and Figure 9. Verticality, Repetition and Simple Shapes at the Proximity Hotel.



Figure 8. Light and Repetition of Shapes at the Proximity Hotel



Figure 9. Verticality, Repetition and Simple Shapes at the Proximity Hotel

7) *Dr. Susie Wise* – Founding Director of the K12 Lab at Stanford D-School, Interview December 1, 2016

Dr. Wise has been deeply involved in design thinking since she received her PhD from Stanford University in Learning Sciences and Technology Design over a decade ago. She contributed to the book *Make Space* (John Wiley and Sons, 2012), a tool to use to intentionally manipulate space to spur creativity. When we met, she gave me a tour of the Stanford Design School. We then discussed the process of a heuristic approach to research and she related processes from projects she has worked on that could be used for my purposes. Following are the most useful tips that came out of our discussion:

- Think about your intentions (in an interview) and ask yourself “How might I...”
- Create cards with tasks to use as a tangible when working with clients
- Make prototypes to test with clients, don’t spend time on pretty design yet
- Have some cards have pictures instead of words
- Can you leave something behind for them to use, and you “gather data” after you have left?
- Text them at different times of the day asking questions about where they are, what they are doing and how they are feeling
- Create large pin-up boards in your design space for each client to hang fabrics, words, precedents that help inform the solution. These could be placed on stands so they can be brought out and put away as needed.

I honed the interview questions I would use with my clients through my discussion with Dr. Wise, and came up with two key components of the process I was developing:

- 1) Create playing cards to direct the design process with a client
- 2) Create a working display in my office for each client that would *ultimately be a key component of how I would work with the clients to come to solutions*. See Figure 10. Office of Dr. Wise with Design Thinking Tools *and* for my interpretation of the D School display.



Figure 10. Office of Dr. Wise with Design Thinking Tools

8) *Rebecca Bryant* – Principal, Watershed Consultants. Watershed consults on the construction of green buildings focusing on southern united states. Interviewed March 16, 2017.

I interviewed Ms. Bryant on a conference call while she was driving. The connection was not ideal and we kept losing service. Rebecca is the managing principal and senior consultant with Watershed, a firm that partners with architecture and engineering teams, building owners, developers, and contractors to create green buildings that are tailored to the specific climate and culture of the deep south. Ms. Bryant studied sustainable design and social ecology and is a registered architect and a certified Permaculture Designer. The most important information I gathered from the call, in relation to this thesis, was her encouragement to see humans' strong connection with nature as a primary asset when designing interior spaces for well-being.

Design Manifesto

After the expert interviews and resulting analysis were complete, I used the synthesis of the interviews and my previous research on theories and philosophies to create a designer's

manifesto. It was used to inform all subsequent design explorations. See Figure 11. Design Manifesto.



Figure 11. Design Manifesto

Design Process Prototype

A prototype for a design process was informed by the Manifesto and inspired by the research and expert interviews that preceded it in this thesis work. This process had two phases:

- 1) In-Take – Client data gathering and documentation phase.
- 2) Post-In Take – Steps that follow data gathering including analysis and design.

A tool was developed to support these two phases called “Design Deeper Cards”. Each card represents a task or step in the process. There are five types of cards: Observe, Ask, Play, Synthesize and Create. Observe, Ask and Play are part on the In-Take phase. Synthesize, and

Create are part of the Post In-Take phase. In line with the methodology of this thesis, iterations to card wording and use was made on an ongoing basis as they were tried with different clients.

In-Take

The steps in the In-Take phase are defined by the Observe, Ask and Play Cards. They parallel the “Questionnaire and Interview” step of a traditional residential design process. The goal of these cards is to understand the project or the client at a deeper level. The tasks on the in-take cards do not need to be done in a specific order. Many are optional. The idea is to pick and choose the tasks that would be most beneficial to a client or space.

Observe

The observe cards are activities that engage the homeowner to drive the presentation of information. They encourage the designer to sit back and listen or watch to gather information. These tasks can be undertaken in any order and none are required. See Figure 12. Prototype of the “Observe” Cards. Following is a list of Observe Tasks:

- Visually record the way they live: messiness, how much stuff, how much nostalgia, how much personality. (Photograph)
- Take note of the way they engage with you, the designer they have hired, and the way they engage with each other. (Voice Recorded)
- Visually take note of: style of décor, clothes, energy (Photograph)
- Ask the homeowner to walk you through the house and talk about each room. Let them lead the tour and conversation (Voice Recorded)
- Take pictures of every room in the house, from each corner, and of the outside of the house (Photograph)

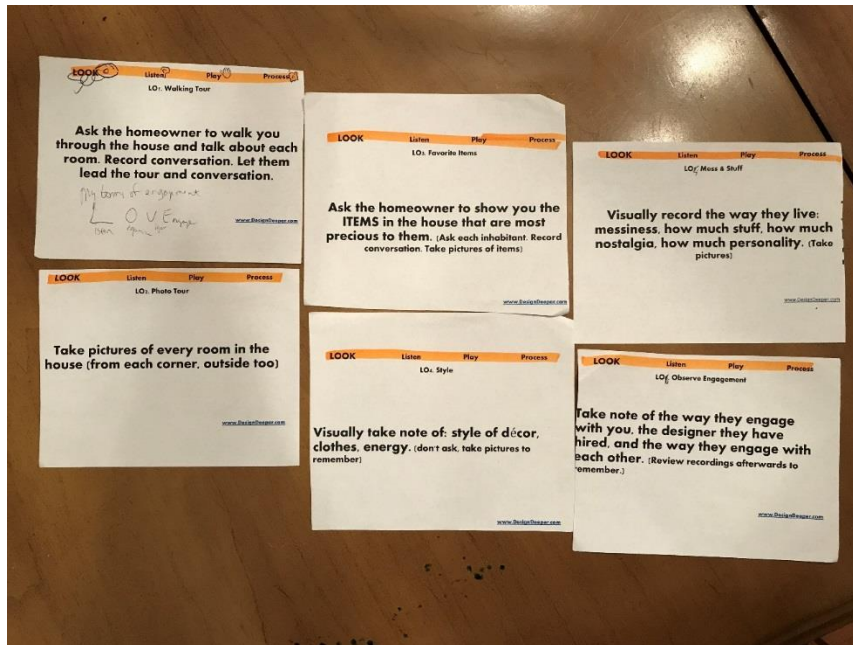


Figure 12. Prototype of the "Observe" Cards

Ask

The "Ask" cards are questions the designer asks the homeowner to help understand the project or the inhabitants. "Ask" questions are most like a traditional interior design questionnaire. They include straightforward questions about use of spaces as well as personality and background questions. These go beyond traditional interior designer questionnaires, however, by also asking indirect questions about their relationship to space and place. These questions can be asked in any order and none are required. See Figure 13. Prototype of the "Ask" Cards. See Appendix A for a full list of Ask questions.

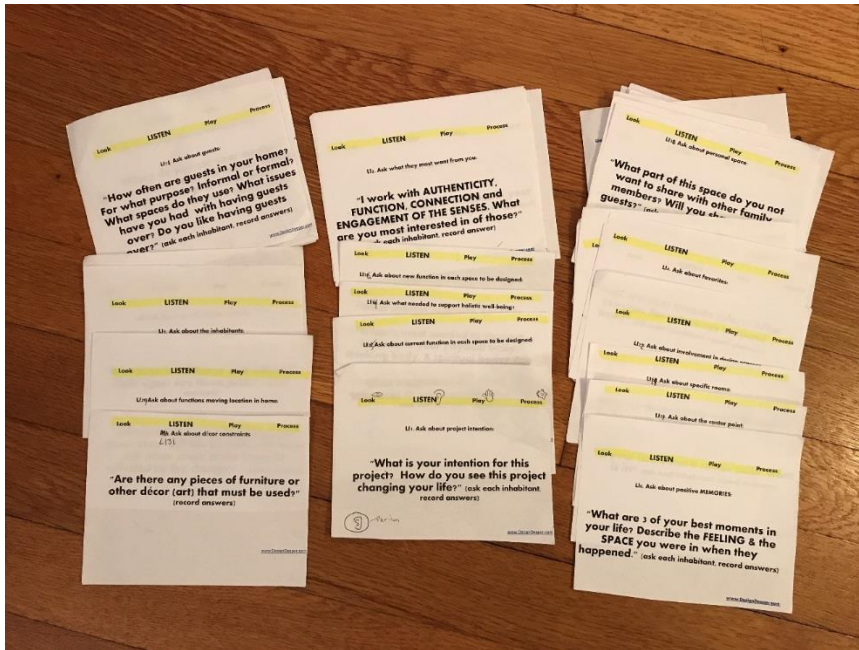


Figure 13. Prototype of the "Ask" Cards

Play

The Play cards are interactive activities that the designer and homeowner play together. Many are inspired by Feng Shui, chakra, the five elements, and the concept of yin and yang. These games can be played in any order and none are required. Games should all be voice recorded and photographs taken of client's selections or responses if visual. See Figure 14. Prototype of the "Play" Cards.

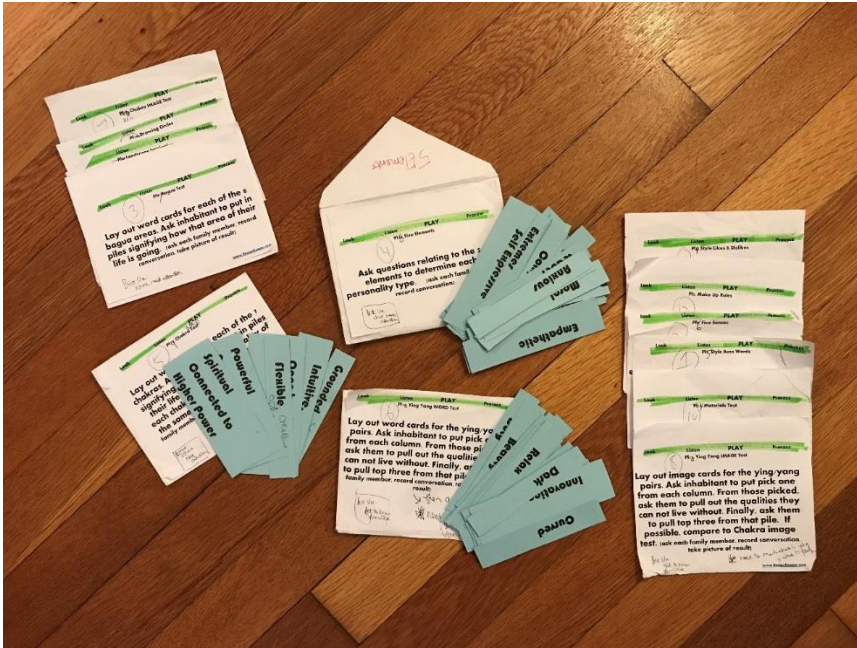


Figure 14. Prototype of the “Play” Cards

Following is the full list of “Play” activities:

- Client Directed Reflections of Self (from Christopher Alexander) – Have the client choose, show and explain three items in their home that they perceive of reflections of themselves.
- Designer Directed Reflections of Self (from Christopher Alexander) – Show the client a set of images, two at a time, and then which one most reflects themselves.
- Designer Directed Items with Life (from Christopher Alexander) – Show the client a set of images, two at a time, and then which one has more life.
- Most Precious Items – Ask the homeowner to show you the items in the house that are most precious to them.
- Five Senses – lay out photos and words that relate to different senses and ask questions to get at what most affects them

- Five Elements (of Feng Shui) Word Game – lay out the word cards with personality traits relating to the five elements and ask each homeowner to pull out the words that most describe them. See Figure 15. Prototype of the Five Elements Word Game.

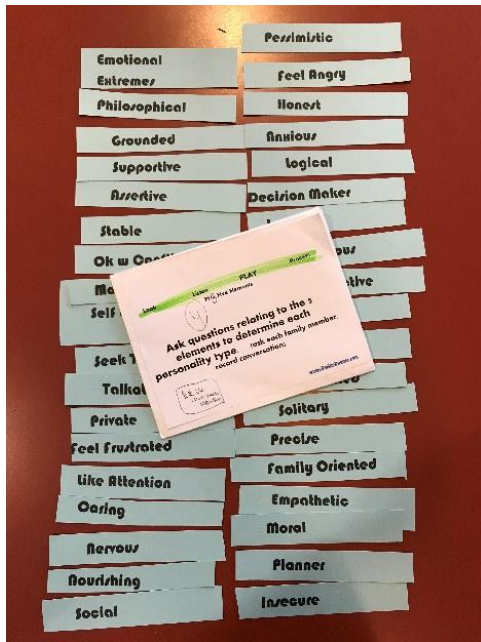


Figure 15. Prototype of the Five Elements Word Game

- Chakra Word Game — lay out the word cards with personality traits relating to the seven chakras and ask each homeowner to pull out the words that most describe them. See Figure 16. Prototype of the Chakra Word Game.

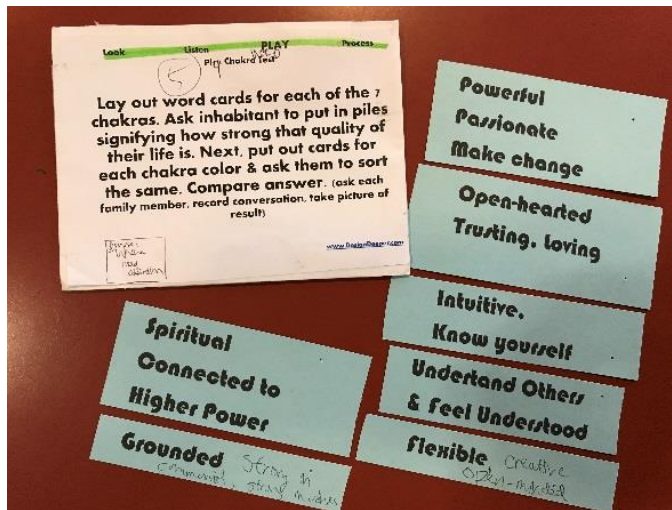


Figure 16. Prototype of the Chakra Word Game

- Yin/Yang Word Game - lay out the word cards with personality traits relating to the yin/yang pairs and ask each homeowner to pull out the words that most describe them. Figure 17.

Prototype of Ying Yang Game Pieces.

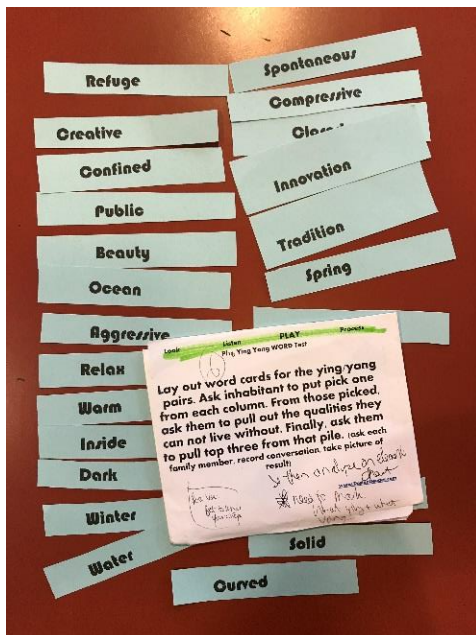


Figure 17. Prototype of Ying Yang Game Pieces

- Bagua (of Feng Shui) Word Game - lay out the word cards with personality traits relating to the five Bagua Areas and ask each homeowner to pull out the words that most describe them. See Figure 18. Prototype of Bagua Word Game Pieces.

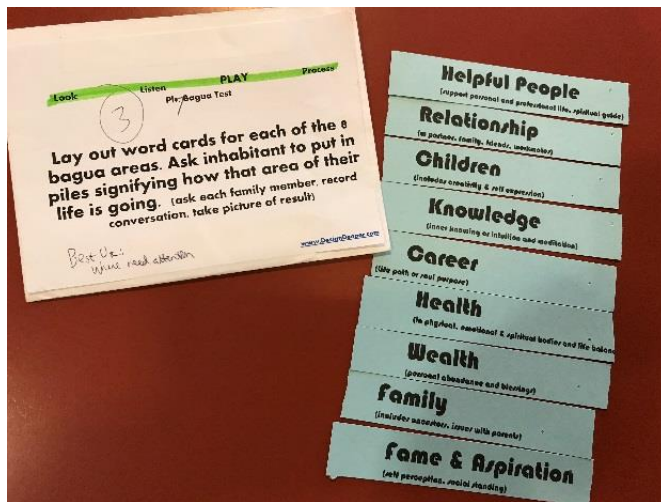


Figure 18. Prototype of Bagua Word Game Pieces

- Circle of Life – Present a pie picture with areas of life, ask inhabitant to draw points on the scale for each area. Connect the dots.
- Landscape inspiration – Place images of landscapes and nature in front of homeowner and ask which ones represent what they want areas of their home to feel like.
- Chakra Image Game — lay out the image cards relating to the seven chakras and ask each homeowner to pull out the words that most describe them
- Ying/Yang Image Game - lay out the image cards with yin/yang pairs and ask each homeowner to pull out the words that most describe them
- Materials Game – Lay out materials (fabric, tile, woods, counter surface, metals) and ask each family member what they are drawn to.
- Brainstorm for Conflicts – When family members have different answers about function/style for the same space, gather them and ask if they have any ideas for compromise

- Make Up Rules – Sit with the whole family and brainstorm rules for the new space
- Style Likes and Dislikes – Put images of different styles on a table, ask which one most and least represents what they want this new space to be (ask each family member, record conversation)
- Style Buzz Words – Place style buzz words in front of homeowner, let each family member move the words into like/don't like/mediocre piles

Post In-Take

The type of cards for the Post in-Take phase are Synthesize and Create. These outline the steps the designer goes through after meeting with the client while working on her own. The goal is to sort through all the information gathered from the client interview, analyze the data, and finally create design proposals. The steps within Synthesize and Create differ from the in-take cards in that all steps are required (if applicable) and are designed to be undertaken in an order.

Synthesize

The tasks within the synthesize cards are for collecting organizing, and analyzing the data from the in-take. See Figure 19. Prototype of the “Synthesize” and “Create” Cards. Following is the final list of “Synthesize” tasks and the order in which they are to be completed:

1. Listen to recording of in-take
2. Review photos from in-take
3. Create a Bagua map over space marking cardinal directions (see Figure 31)
4. Gather style images client has supplied (e.g. Pinterest, Houzz)
5. Create a textual summary of the recordings and photos (including results of Play activities, five elements, yin yang, and chakras)
6. Create a chart of design strategies mapped to the issue they address (see Appendix B.)
7. Find precedent images of design strategies identified

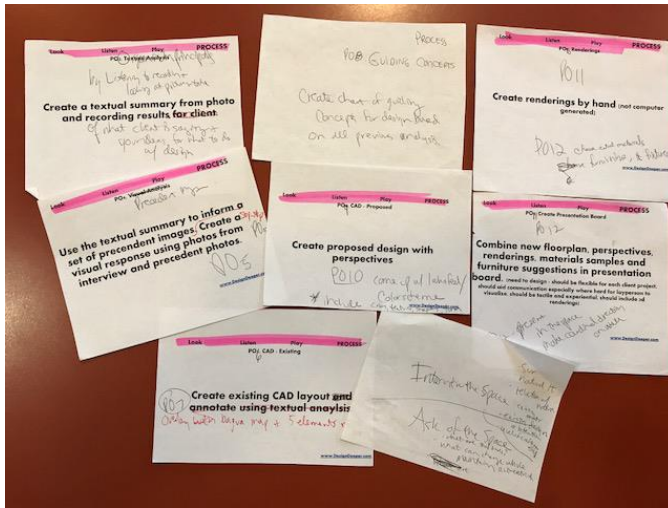


Figure 19. Prototype of the “Synthesize” and “Create” Cards

Create

The create phase is when all the results of the analysis are used to create design directions and detailed design proposals. Following is a list of “Create” tasks as they appear on the Design Deeper Cards and the order in which they are to be completed:

1. Define Design Directions for each space to be designed
2. Create floorplans for each design direction
3. Create 3D perspectives for floorplans
4. Gather sample materials for each design direction
5. Source furniture options for each design direction
6. Create renderings for each design direction
7. Present and gather feedback
8. Revise

Client Interviews

Once the prototype of the design methodology was complete, four families were interviewed with the objective of choosing one client with whom to do a trial prototype test (Studio Project One), and one client with whom to do an extensive prototype test (Studio Project Two).

Interview Commonalities

The client interviews varied in the scope and type of project, but all client interviews had the following commonalities:

- In all interviews, I explained that I was interested in participatory design. I *explained I wanted to partner with them to find the design solution because* I believed they know themselves and what they need better than I ever could. I explained my role as a facilitator, to interpret and bring order to the requirements and ideas.
- Each client interview was in the client's home with as many of the home's inhabitants present as possible.
- A requirement was that the client had a renovation project they were interested in doing within twelve months.
- The Design Deeper cards were used to direct the interviews.
- An attempt was made to use each In-Take card with at least one of the families interviewed.
- All interviews were recorded.
- All interviews started with an introduction that included my intention:
"for you to have a deeper sense of well-being due to the design of your home"

Interviewees

Four families were interviewed with the intention of finding subjects for studio work. The families were as follows:

- Dave, Josephine, Henry and Oliver Lines – A father and his three children who were interested in a basement renovation in their home in Durham, NC. Interviewed September 2016.
- Kate and Sam Sonawane – A couple with three children who recently bought a new home in Raleigh, North Carolina and need a design for their pool house. Interviewed January 2017.
- Inessa and Brian Fanin – A couple with two children living in their forever-home in Durham, North Carolina, who struggle with the house not working for them in many ways, but differently for each of them. Interviewed December 2016.
- Katie and Chuck Collini – A family of four undergoing a full renovation of their 3500 sq. ft. house, needing help with the furniture and finishes especially in the rooms the family will share the most. Interviewed December 2016.

A variety of the in-take cards (Observe, Ask and Play) were attempted tasks were attempted, with the intention of trying each “card” at least once throughout these four interviews. Before any analysis was done on the client in-take data, clients were chosen for two purposes:

- 1) Studio Project One – A practice case for the preliminary studio project to test the data gathering stage of the process. No formal deliverables would come out of their project.
- 2) Studio Project Two – The primary design work for this thesis. The design would go start with an in-take exercise, following with data gathering and analysis, have design proposals created and presented, and would finalize with a completed set of design documents.

Inspiration Boards

To choose the clients for the two studios, I created boards inspired by the design thinking boards at Stanford D School. I hung up the materials, word selections, photographs of the space, and information about the clients. See Figure 30. Inspiration Board with the Results of the Collini's In-Take Activities for an image of my office wall transformed into a creativity tool to help choose and then design for my clients.

CHAPTER V

STUDIO PROJECT ONE

The Lines Family was chosen as the first practice case for interviews, data gathering and analysis. This family was chosen because it was the project I was most familiar with, there were already CAD drawings of the space, and the family was ok if I did not follow through with a full design proposal. The family included Dave (father), Josephine (daughter), Henry and Oliver (sons). My intention was to “fail fast”. My plan was to try a few steps from my prototyped methodology, try a design, and assess the efficacy of my approach. I did not plan on presenting a design to the client as part of this thesis exploration. This first case was not meant to test the thorough, full-cycle, design methodology.

I used Big Idea #4 from my interview with Jodie Rufty as the design driver. This idea was stated as “Design to Support the First Three Chakras”. My intention in doing this was to attempt using a metaphysical approach to design and observe how that affected process. What was conducted was a significantly simplified methodology of design, as follows:

Observe

A visual recording of the existing home was completed focusing on the views that would be affected by completing a basement family room. See Figure 20. Interior View of Future Stairs.



Figure 20. Interior View of Future Stairs



Figure 21. Interior View of Future Screen Porch



Figure 22. Exterior View of Future Screen Porch

Ask

The clients were asked a variety of questions from the Ask Cards including:

- 1) What is lacking in your home that you would like to see in a new space?

Answers:

- “a screen porch”
- “better access to the back yard”
- “a hangout place for kids”
- “a way to get to the basement without going through the garage”
- “we all want our own private space”
- “I want my own private nook, without the boys where I can go with my friends”
- “where I can hang out with my friends”
- “someplace where it is not in the middle of everything and you guys don’t have to be annoyed by us”

- “I just want my own room”
- 2) Where is the center of the home?
- Answer: “Dining room”
- 3) Where does your family gather?
- Answers: “Dining Room, Living Room (tv)”
- 4) What do you see yourself doing in the new space? Some of the answers included:
- “Enjoy the outside without mosquitos”
 - Family Dinners
 - Read, Hang Out
 - Have Friends over
 - “Hang Out”
 - “Watch TV”
 - “Play computer games”
 - “Play chess”
 - “Draw”
 - “Be with friends”
 - “Creative play”
 - “Have sleepovers”
 - “Read”
 - “Play with Legos”
 - “Listen to music”
 - “Play chess”
 - “Build with blocks”
- 5) What are your requests for personal space that would come from the renovation?
- “Wall decor picked out by the kids”

- “Nook”, “kid’s nook”, “soccer nook”
- 6) Describe what the new room would “feel” like?
- Josephine: “Rusty like an apartment”, “cool”, “with the brick and a black sofa and a silver refrigerator”, “games stacked in the corner and CDs beside the TV”, “the color is the bricks and in the furniture”
 - Dave: “LL bean, comfortable, easy, not cluttered”
 - Henry: “All black with dots of white, sort of like a soccer ball”, “dark wood desk”, “floor purple”

Play

One Play card was tested. The five elements reading was conducted with the following results:

- Dave – Water, Metal and Earth
- Josephine – Water, some Fire, some earth
- Henry – Metal and Fire
- Oliver – Earth and Water

Synthesize

Four Synthesize steps were tested as follows:

- 1) Look at the pictures I took of the home (step #1 above)
- 2) Listen to the recordings (steps #2 and #3 above).
- 3) Outline the functional needs of the project. The project included ten functions:
 - a) Basement Connection to Existing Home
 - b) Connecting Inside to Outside of Home (both floors)
 - c) Outside Living area protected from Mosquitos and Rain
 - d) Mudroom
 - e) Laundry
 - f) Individual bedrooms for all kids

- g) Hang out room for kids and their friends
 - h) Strong request for “nooks” or get away spaces
 - i) Bathroom
 - j) Kitchenette
 - k) Screen Porch
 - l) Place to grill
- 4) Determine the projects intentions. I ascertained eight intentions:
- a) Connect Up with Down: going to someplace special (up and down), light from above, materials give hint of industrial basement
 - b) Connect to Yard (from main floor): transition space - screen porch, wide steps - still part of the living space, series of levels -slow transition to yard (not separate)
 - c) Connect to Yard (from basement): sitting area immediately outside, draws you out - view of place to go, connects to upstairs living space - steps to screen porch and wide steps/opening to yard, style, matches Spanish revival of house
 - d) Provide an informal (messy) way to enter home: functional, multi-person, hint of industrial basement, not just for the kids
 - e) Provide space for making: natural light, natural materials, storage, big table, room for multiple people
 - f) Provide a space for gathering: kid space, for siblings and for friends, games, Tv, parties.
 - g) Provide space for getting away: individual bedrooms for each kid, nooks for kid to be alone without going to bedroom, place for downtime, reading, listening to music, being alone.
 - h) Focus on first three chakras (to ground, support flexibility and fuel passion/individuality)

Create

Using the analysis above, especially the functional needs and intentions, a design concept was formed. It included the following spatial priorities:

- Semi-private spaces for kids and their friends to hang out - support individuality (3rd chakra)
- A kid's zone – grounded (first chakra)
- A place to be with friends (second chakra)
- A place to relax (not homework) (first chakra)
- A place that feels fun
- A place that supports hobbies (reading, drawing, building) (first and second chakra)
- A home that encourages outdoor activity - connected to outdoors (first, second and third chakra)
- A space that is independent from parent domain but not cut off (first chakra)
- Places to get away or be alone without being shut off in bedrooms.

The project was then assessed for design approaches that could achieve the desired intentions and concept. The following plan was created:

- Nooks, coves for alone space
- Place for books
- Comfortable chairs
- Tables for games/art/drawing
- On the walls art represents inhabitant:
 - Their art
 - Their hobbies
 - Pictures of them
- Everything has a place (storage) - being honest about their ability to keep up
- Make it personal – something about each person using it
- Outdoors draws you (lots of views/openings)
- Outside welcoming steps to family porch (where parents are)
- Inside, welcoming steps to family gathering (kitchen/dining)

- Materials change for each intended function
- Style changes for who will be using

Using the existing CAD drawings of the existing space, I created detailed floorplan specifications to accommodate the design requests. See Figure 23. Studio Project One: Floorplan Supporting First Three Chakra's for the result.

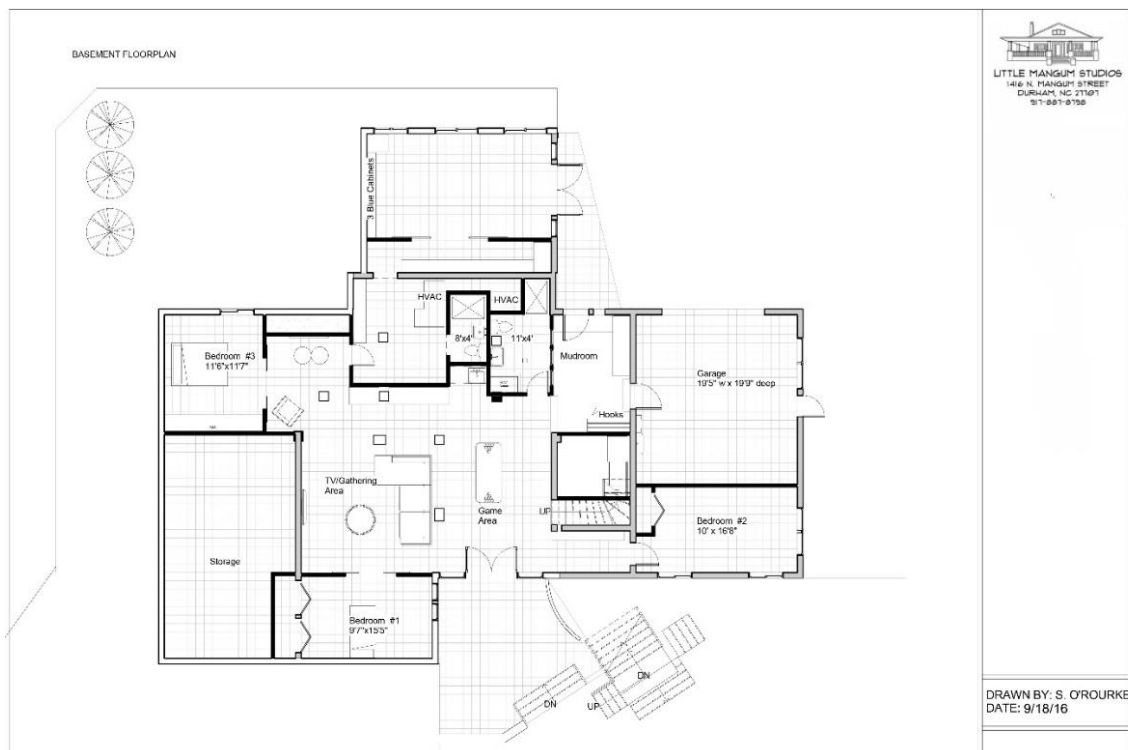


Figure 23. Studio Project One: Floorplan Supporting First Three Chakra's

After the floorplans were complete, multiple 3D renderings were created. See Figure 24 through 26 for examples of these renderings.



Figure 24. Studio Project One: Exterior Rendering



Figure 25. Studio Project One: Standing in the Mudroom Looking Toward the Den

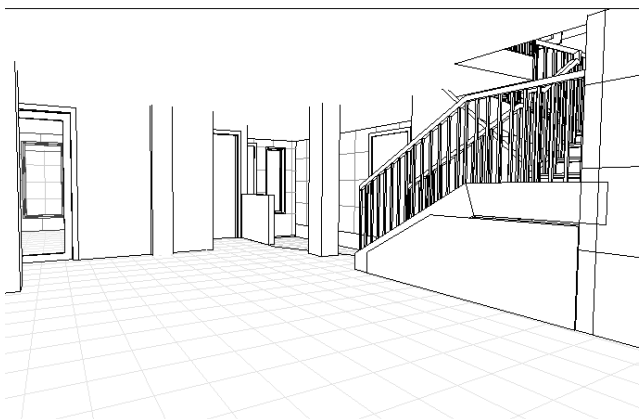


Figure 26. Studio Project One: Standing in the Den Looking Toward the Mudroom

Results

After creating 3D renderings, I ended the design phase for Studio Project One. The results of this preliminary test case are summarized below:

- 1) Using a variety of interactive approaches for initial data gathering is useful. Different people seem to respond better or worse to different approaches. For example, for some, direct verbal questions were successful. For others, images or materials were effective. For others, talking in story form about places that affected them gave the most information.
- 2) Even young people can give a lot of input into design. Children can have very clear ideas about function, color and feel.
- 3) Using the chakras to design was effective. The colors and materials associated with the chakras lend themselves well to design and using them gives a framework to the esoteric approach I am exploring.
- 4) The questions regarding the five elements were very useful in determining personality types but were harder to incorporate into design of spaces used by all. In this example, the family members represented all elements between them so I couldn't focus the design on one element or another.

CHAPTER VI

STUDIO PROJECT TWO

The second studio project undertaken was the main body of work for this thesis. The Collini's were chosen for this body of work for the following reasons:

- 1) They were planning a major renovation and so could give true feedback and direction in terms of a design methodology.
- 2) The basement of their house had received very little design attention thus far but was going to be incorporated into the full renovation.
- 3) The basement was a standalone area that I could focus on and apply my data gathering steps and design methodology that would not be affecting by decisions they may make in other areas of the house.
- 4) At 800 square feet, it was a manageable area to create a full design proposal during one semester, the time frame for my studio work.

In-Take

I met with the Collini's twice for gathering initial information. The first resulted in a high-level description of the entire house project. The second was an in-take interview where I gathered information about the family, and use of the basement. During the second meeting, I used the prototyped in-take cards (Observe, Ask, Play) to gather information. Following the process of the Design Deeper cards, the entire meeting was voice recorded and photographs were taken of the house and activities in progress.

Ask

I started the meeting with questions from the “Ask” cards. The questions and answers were recorded and later analyzed. I asked the following questions of each member of the family:

- 1) "What are your favorite colors? What are your least favorite colors?"
- 2) "What are your favorite ways to spend time?"
- 3) "What things that you have to do, do you like to do the least?"
- 4) "Can you describe a space you have been where you felt your best self (really happy, bliss, most alive)?"
- 5) "Where do you spend the most time in the home? Doing what? When are you alone and when are you with the other members of the family?"
- 6) "How would you like to use the basement space if it was redesigned?"
- 7) "What are the issues with your current home?"

I then asked the primary design decision maker in the family, the mother, Katie Collini, a set of questions:

- 1) "I work with Connection, Authenticity and Mindfulness. Of those, on which would you like me to put the highest priority?"
- 2) "What are the most acute problems with your home right now? "
- 3) "What is your intention for this project? How do you see this project changing your life?"
- 4) "Who lives in the home and what are their ages? Are there pets?"
- 5) "Where and how do you gather as a family?"
- 6) "Where do you eat your meals?"
- 7) "Where do you enter the house?"
- 8) "How often are guests in your home? For what purpose? Informal or formal? What spaces do they use? What issues have you had with having guests over? Do you like having guests over?"

- 9) "Are there any pieces of furniture or other décor (art) that must be used?"
- 10) "If your home has a center point, what is it?"
- 11) "What are 3 favorite things about past homes? What are your 3 favorite things about this home?"
- 12) "What are 3 least favorite things about past homes? What are your 3 least favorite things about this home?" (ask each inhabitant, record answers)
- 13) "If you designed a home without limits, what would it look like?"
- 14) "What are the activities that have the most positive effect on connection?"
- 15) "What are your goals, individually and as a family, for the next 1,5 and 10 years?"
- 16) "How long do you expect to live here?"

Observe

Following the Ask questions, I performed a selection of Observe tasks. These included:

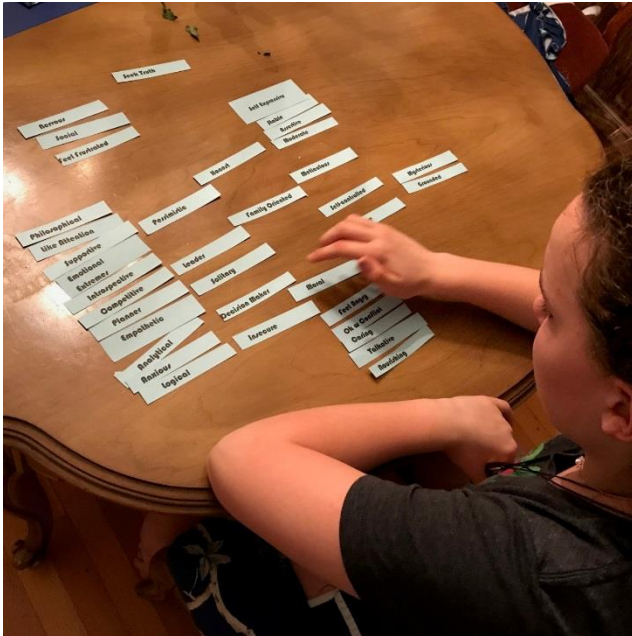
- 1) Request the family to take me on a tour of the entire house and talk about what they like and don't like.
- 2) Ask them to show me items in the house that were most precious to them
- 3) With obscurity, observe how they live if they are messy, organized, have lots of stuff, are minimalists
- 4) With obscurity, observe their décor and decorating style

Play

Last, we played a few of the Play games:

- 1) Ying Yang Game – I placed yin/yang words on the table in sets of pairs and asked Katie (the mother) to pull out those that were important to her or described her. They included of variety of opposites. Examples include: winter/summer, hot/cold, opaque/translucent, linear/curved. I then asked her to look at the resulting set and reduce by half, keeping things that were most important to her. I then asked her to do this again. I then asked her to do this again. The result were 5 sets of words:

- See Figure 27. Ying Yang Game Being Played and Figure 28. Results of the Prototyped Ying Yang Game



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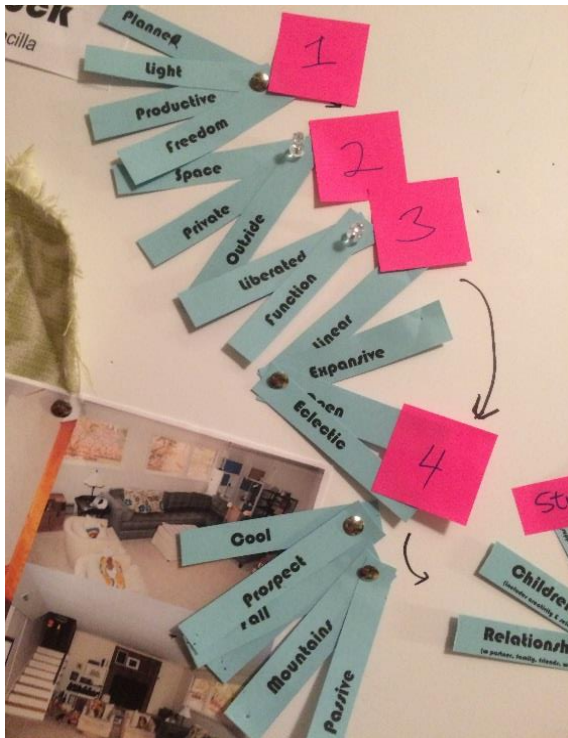


Figure 28. Results of the Prototyped Ying Yang Game

- 2) Chakra Game – For the Chakra game, I read off descriptions of the seven chakra's and asked Katie to say if they were areas of her life where she felt she her life flowed easily, where she felt stuck, and where there was some flow and some stillness. See Figure 29.
- Results of the Prototyped Chakra Game

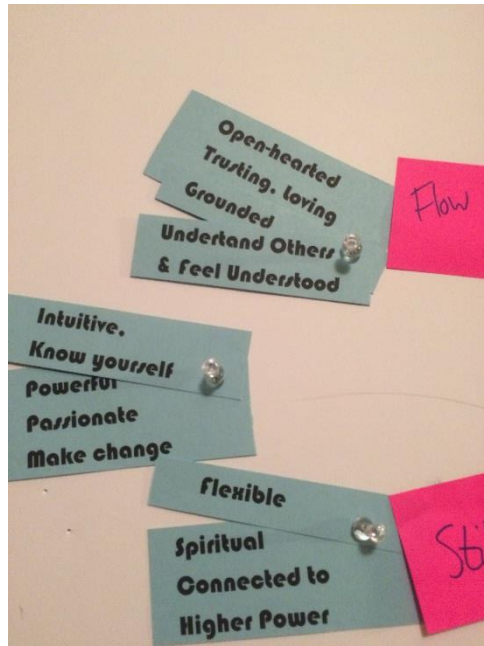


Figure 29. Results of the Prototyped Chakra Game

- 3) Feng Shui Game – I read off descriptions of the sections of the Bagua and asked Katie to say if they were areas of her life where she felt she was strong, medium or weak. She sorted papers with words much like the previous games.
- 4) Material Response Game – I laid fabrics, tiles, and wood samples on a table and let Katie look and feel each one. She then separated out those she loved, hated and was ok with.

Post In-Take

Synthesize

After the In-Take meeting was complete, the Synthesize steps could begin. This was done in a separate location and a few days after the meeting with the client. The synthesize steps, as I performed them for the Collini project, were as follows:

- 1) *Listen to Recordings* - Take note of important points and repeated phrases.
- 2) *Look at all Photos* - Take notes
- 3) *Review material selections* – Make observations

- 4) *Organize and Assess Play Games* - Take notes on the results.
- 5) *Create Collage Board* – Include all results of the in-take interview. See Figure 30. Inspiration Board with the Results of the Collini's In-Take Activities. On this board I placed:
 - a. Name of all members of family including children's ages and any pets
 - b. The results of the yin yang games marked for tier 1,2,3 and 4. I did not hang up the words that she separated out as not relating to in the initial step of the game.
 - c. The results of the Chakra game separated out for flow, still, and both.
 - d. The results of the Feng Shui game, separated out into “strong”, “middle” and “stuck”.
 - e. The fabrics and other materials chosen as favorite's
 - f. Photos of the existing basement space
 - g. Photos of their most precious items

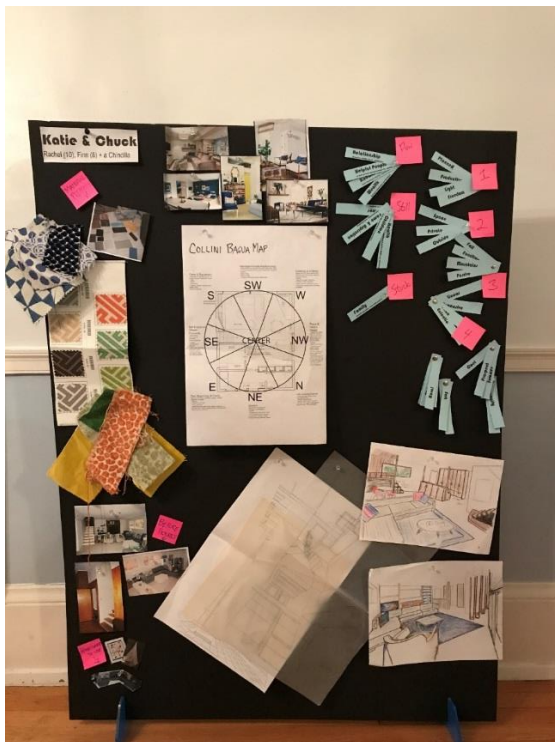


Figure 30. Inspiration Board with the Results of the Collini's In-Take Activities

- 6) *Review homeowner's precedents* - Pinterest and Houzz boards
- 7) *Create a Bagua Layout*
- 8) *Create Cardinal Direction Layout* - Include areas for the five elements and map it to the Collini's Basement. See Figure 31. for an example with the Collini project.
- 9) *Analyze Data for Design Drivers*

Using the first nine steps above, data was analyzed and the following nine design drivers were defined:

Design Driver 1: List of Functional Needs

The main functional issues that they requested I address in the basement project were stated as:

- It is not used
- It not functional
- It is too cut off
- It is not cozy
- It needs to be less DIY (it does not look nice)
- No one feels space reflects them
- It needs more intimacy

Design Driver 2: Colors/Materials Requested

- Wood tones, blues and greens.
- Yellow, red, orange not so much.
- Likes cooler red
- Concrete floor
- Pops of color, contrast

Design Driver 3: Client Selected Precedents

After a review of the precedents the clients saved on Pinterest and Houzz boards, the following priorities were noted for the basement project:

- Built ins
- Emily Henderson
- Scandinavian
- Warm rustic modern
- Use of vibrant accent colors

Design Driver 4: Furniture and Other Items to Reuse

The following items were already owned by the family and needed to be used in the basement project:

- White round Table: 43.5 inches in diameter x 30 inches tall
- Chairs: 26 inches tall x 27.5 inches wide x 33 inches deep
- 118.5 inches wide; the seat depth is 35 inches; and the chaise part is 86 inches x 33high

Design Driver 5: Individual Family Members Input

Summary of most important data pertaining to individual family members was pulled together as follows:

- Katie (mother) – the primary decision maker for the basement project:
 - Wants me to focus most on authenticity and connection
 - Wants **CHANGE** in her house/life – liberation thru upheaval– Ganesh!
 - Sees “**ISOLATED**” as a good thing
 - From the area (South, North Carolina, triangle, piedmont)
 - Has a strong response to **light** - favorite things about house are windows/light (inside and from outside)

- Rachel (daughter)
 - Loves purple, blue, green
 - Wants a place to do crafts (she says she doesn't need table surface can do on lap or on the floor)
 - Draws, reads, watercolor paints
 - Pre-teen
 - Loved "space under stairs at old house" (Mom: "That was an air-in take!")
 - Introvert
- Finn (son)
 - Loves math, Legos, creative play
 - Loves blue,
 - Wants a tree house (creative play in there)
 - Favorite thing about this house – "my room because it is mine"
 - Likes to be around the family
 - Extrovert
- Chuck (husband)
 - Loves blue
 - Most precious items in house are family photos and abstract art
 - From the area, south, Carolinas
 - Wine collector
 - Gracious, loves to host
 - Primary cook in the family

Design Driver 6: Feng Shui Bagua Map

To create a Feng Shui Bagua map, I used a two-step approach. First, I made a Bagua map over the space being designed. This meant to determine its cardinal direction(N/S/E/W), mark that on a plan of the space, then write in the areas of life as defined by Feng Shui's Bagua

system. For example, in Feng Shui, the East is the area that has the most influence over the health of our Family, Community and relationship with our Elders. See Figure 31. Collini Basement Overlaid with Bagua Map and Cardinal Directions. The next step was to look over the notes and activity results that addressed the health of different areas of Katie's life. Following is a summary of these results:

- "Family" (EAST) needs the most attention (+ almost everything important to her is from family (chairs, art)
- Sometimes needs work: knowledge/wisdom (NE), creativity/self-expression (WEST), life path/sole purpose (NORTH), self-perception/social standing (SOUTH)

Design Driver 7: Influence of the Five Elements

Data was collected from the "Ask" questions, the "Observe" notes, and the Feng Shui "Play" game as to how the five essential elements of the universe (as defined by Feng Shui) manifested in the life of the Collini family. Following is a summary of the results that I ascertained using the Bagua information in Figure 2. Qualities of the Five Elements of the Universe (Wong, 1996).

- Katie is water and earth - balance this by including fire(fireplace), metal (light fixtures), wood (stairs, mantle, built-ins)
- Wood is in Feng Shui family section and they live in so much wood. This is good because Family was the one area she wanted change to happen. However, I need to not use much wood in design AND use stabilizer elements. Earth is needed to stabilize.
- Note – too much wood can restrict your ability to make decisions, an area the entire family struggles with. They need the wood stabilized.
- The whole family is very watery – likes blue, isolation, private setting – Needs Fire to Stabilize
- They are a heavily masculine family and the masculine elements are fire, metal and wood. Bring in earth and water to balance.

- Their color scheme tends strongly toward cool colors - blues and greens. Warm colors represent Fire and Earth, try and find ways to use warm colors or represent fire and earth in other ways
- Earth has come up 3 times as a way to balance the Collini's!

Design Driver 8: Ying Yang Results

A summary of the results of the ying/yang data collection (from Katie Collini only) was as follows:

- 15 Yang, 5 Yin (more masculine than feminine)
- Highest tier picks included: productive, light, freedom, planner (all Yang)
- 2nd tier picks: outside, private, space (Yang, Yin, Yang)
- 3rd tier picks: innovative, liberated, functional (all Yang)
- 4th tier picks: open, eclectic, cool, passive, mts, fall, summer, prospect, linear, expansive
- Where she feels equally yin and yang: Opacity / Translucence, Earth/Sky, Hot/Cold, soft/hard, masc./fem, old/new, rural/city

See Figure 27. Ying Yang Game Being Played.

Design Driver 9: Chakra Results

The results of the Chakra game were used in combination with the chart "The Chakra's and Elements of Interior Design" to drive design (See Figure 1. Chakras and Elements of Interior Design). The results of the game played with Katie Collini and the two children, Rachel and Finn, resulted in the following information:

- Katie (mother):
 - Chakra's 2 and 7 are most lacking
 - Chakra's 3 and 6 are sometimes lacking
 - Chakra's 1,4,5 strong
- Rachel (daughter):
 - Chakra's 3 and 5 need most support

- Finn (son):
 - Chakra's 1 and 3 need most support

Design Strategies

After synthesizing the Collini's interview data and generating Design Drivers, the next step was to create design strategies. These were specific design approaches that satisfied the design drivers.

I created a list of strategies that addressed as much of the input as I could synthesize into design elements. What I found when going through this exercise, was that the design drivers as defined above led to design strategies logically and organically. For example, in many of the design drivers the families' strong response to light and nature came through. As is, the basement is rather dark with low ceilings. The design strategy therefore was to create light and a connection to nature by allowing more natural light to flow into the space. The solution I suggested trying was to add windows along back wall, open the wall between den and mudroom and change the stairway from a walled entry to an open banister.

Another example is in the results from the Chakra game. I had noted that three of the four family members could use support in the 3rd chakra area of their life, the human experiences around making change and feeling passionate, inspired by yellow. Katie and her children had also registered need for 2nd chakra energy, flexibility, inspired by orange, and 7th chakra energy, universal truth, inspired by purple. I also noted they don't generally like these colors – yellow, orange and purple. This is not surprising as we tend to be less attracted toward that which is more challenging for us. I strategized ways to use purple, orange and yellow that would make the homeowners respond positively. I noted these colors are the colors of fall and the homeowners did in fact have positive associations with the season of fall. The design strategy therefore concluded I should look at the colors of fall, look at mountains, look at the way light falls on rooms in the fall, and look at cooler shades of those warm colors.

WHOLE ROOM	Design Element	Purpose
Focus on basement	Go deeper on design of basement	Support change in foundation of community (family) by choosing room that is foundational for house
Light	Add windows along back wall and open wall between den and mudroom	She has a strong response to both light and nature. Adding windows and views of nature should be a transformative expenditure
Décor: Colors	Use of purple, orange and yellow in ways that homeowners respond positively to (look at fabrics, try different shades, especially cool shades)	Support homeowners desire/need (mom and kids) for help with 3 rd , chakra – passion, making change, fire, 2 nd chakra (go with the flow), and 7 th chakra (connection to universe/god) WHILE respecting they don't generally like these colors. Colors of fall, mts, way light looks from outside at night, a cooler purple.
Throughout	Adding windows, open to mud room and up the stairs	3 rd chakra responds to sight, mom and kids need help with 3 rd chakra
ENTRY	Design Element	Purpose
Entry from outside (main in and out every day)	Can see the den area	<ul style="list-style-type: none"> * path clearly defined – can see where you are going (upstairs) light important in entry – sets scene for whole home experience – open, light, space, expansive *Reminds you of the room and to use it, see work in progress (puzzle, craft) or favorite chair or spot *also opens space and gives natural light from 3 directions (her priority on light, openness and space)
Back entry	Sensory experience that says entering to space, but not an abrupt transition (what is flooring right outside door? Flagstones? Brick? Put this right inside door and gradually change to concrete)	Brings you into the moment when you enter the HOME, but not abruptly, gently
STAIRS	Design Element	Purpose
Door and ceiling over	Remove door at top and open ceiling to top of 3 rd floor	Draw you down there, less Claustrophic entry, more connected to upstairs so feel less cut off when go down there
FIREPLACE/TV AREA	Design Element	Purpose
Flow	Placement of furniture allows for obvious and easy flow, especially flow from door to door	Energy flow in space used by so many people and so many uses very important

Throughout	Pictures of them with family smiling?? Games they played or things they did that was fun? Something to remind them of good times?	*Family relationships are stuck in a pattern, she wants to be about fun, gratefulness, positive, hope
FORT and KID SPECIFIC AREAS	Design Element	Purpose
Décor Materials/texture	<ul style="list-style-type: none"> * Waxed cotton on seats * not wall to wall carpet * SOFT rug so can get on floor to play * variety of textures * biophilic elements 	<ul style="list-style-type: none"> *support priority of functional and authentic to the way they really live - Easy to keep clean and comfortable for use *textures to stimulate sensory experience * Reinforce connection to natural world

Figure 32. Example of Collini Project Design Strategies

Shortly into the process of strategizing design solutions, it became apparent that I could not apply every strategy to every design. Some of the strategies were at cross purposes, like family members having different needs, or philosophies coming to different conclusions about how to address issues. The daughter Rachel was an introvert and expressed a need for support going out into the world and communicating with others for which I strategized an outward looking design (windows, social spaces, bright energizing colors). Her brother, an extrovert, needed some help staying grounded for which I strategized heavy furniture, cave like nooks, and warm muted tones. In the philosophies issues came up with elements like color: in Feng Shui red is fire/passion and brown is grounding; in the chakras red is grounding and yellow is fire/passion.

In the end, I ascertained the high priority strategies as those that came up again and again in interviewing and analyzing the project. These were design approaches that I would attempt to include in every design solution. I then used the remaining strategies to process options for designs with different priorities. I called these the “Design Concepts” (see the next section for details on the concepts). The high priority strategies are as follows:

1. Use blue in every design direction but lean toward deep blue/indigo/purple (watery) with pops of orange, yellow, red and purple (fire, earth)

2. Support First chakra - foundation, family, community (design seating around fireplace, stirs primordial feelings of gathering/storytelling, bring in some RED, put art/photos in EAST corner that reflects positive family memories, some heavy elements - end tables, coffee table not light and airy, use local materials for connection to greater ancestral community)
3. Celebrate the existing wood of surrounding and house as it supports WOOD element and connection to elders/community. Minimal metal which destroys wood. Use earth to balance all the wood.
4. Center of the room, governed by the earth element, supports health (body mind and soul), keep open and uncluttered (concrete floor great here)
5. Bring in some Yin elements to balance your natural yang (earth browns, clay/concrete; give some feminine, curves, softness to décor, soft rugs; celebrate the low level, down under, don't try and hide it; space for RELAXATION, not PRODUCTIVITY)
6. For Katie, bring in some 2nd chakra + 7th chakra elements (ORANGE -don't like usually but in art that she likes, curves, flexible design; PURPLE and/or indigo, clouds, global elements to reinforce connection to all)
7. Fireplace in perfect place to support FIRE element (passion, power to change) - use red, orange, purple, pink, bold yellow in this area
8. Kid area in WEST corner - best place for creativity/children and self-expression (create places for introversion and extroversion; support 3rd chakra energy: yellow, fire, triangle)
9. Open to upstairs to connect spaces and draw people down
10. Open to mudroom so entry to house can be strong experience of arriving home, safety, grounded, family.

Design Concepts

Using the strategies above, the next step was to develop design directions. These were defined concepts with color schemes and material selections that responded to the design drivers. For each design direction, the following was developed:

- Name
- Stated Concept
- Focus
- Main color
- Accent colors (stabilizers)
- A colored rendering
- A stair design suggestion
- A fireplace design suggestion
- A mudroom cabinetry design suggestion
- Material suggestions
- Paint Colors

Four concepts, summarized in Figure 33. Chart of Design Directions for Collini Project, were defined as follows:

1) Design Direction 1: Deep Ocean Night

Concept: Take refuge from the world to heal, gain insight and connect with yourself and those close to you. Take strength from this to stand strong in your fundamental values and make change.

The concept of the Deep Ocean Night design direction is that the space is a place of refuge from which you gain strength and stability. It is a place where you spend time with those close to you and gain grounding from those relationships. From this place of deep grounding and connection, an individual is then inspired to go into the world and make things happen for themselves. There are five focus areas to support this situation:

Focus 1: REFUGE, YIN ENERGY (feminine)

- Basement, cave-like

Focus 2: INSIGHT, HEALING

- Water elements
- Dark blue/black
- 6th chakra

Focus 3: CONNECTION

- Bright blue
- 5th chakra

Focus 4: COMMUNITY/FAMILY

- Red (1st chakra)
- Concrete floor (foundation)

The supporting elements in the design give the individual the inspiration to step out of this safe place and go boldly into the world. To this end, the stabilizers for the Deep Ocean Night design direction support fundamental change and moving forward in life. This can be affected by the colors red and yellow, references to fire and 3rd chakra energy.

2) Design Direction 2: Beach Sunset

Concept: Inspired by insight and understanding of others, passionately and creatively work towards toward a focused objective.

The concept of the Beach Sunset design direction is that the space is inspires creativity and movement towards the direction you desire your life to go. This is done through connection and insight of others who can help push you past your stumbling blocks. There are four focus areas to support this situation:

Focus 1: YANG ENERGY

- A masculine space, angular shapes
- Warm
- Outward looking

Focus 2: PASSION

- Orange
- Fire
- Emotionally driven

Focus 3: FLEXIBILITY/CREATIVITY/SOCIAL

- Orange
- 2nd chakra

Focus 4: INSIGHT, HEALING

- Water
- Dark blue/black
- 6th chakra

The supporting elements in the design should stabilize the fire element that comes from the orange and the wood in the house (that produces fire). This is done with the metal element and cooler colors. Additionally, some curves and soft furnishings should be added to balance the yin/masculine energy.

3) Design Direction 3: Mountain Morning

Concept: Feel connection with all and the truths of the universe. Gain strength to do what is right for the good of all.

The concept of the Mountain Morning design direction is that by feeling the connection with the universe, with all beings, one can find grounding and strength in their own life. The space inspires action from a place of stability and belonging. There are three focus areas to support this concept:

Focus 1: YIN/YANG BALANCE

* feminine, curves, cool and outward looking

* masculine, straight lines, warm colors

Focus 2: UNIVERSAL CONNECTION

- Purple
- 7th chakra

Focus 3: INSIGHT, HEALING

- Water
- Dark blue/black
- 6th chakra

The supporting elements in the design balance the grounding and healing nature of the design by insight passion and energy. The stabilizers for Mountain Morning are 3rd chakra energy, yellow and references to fire.

4) Design Direction 4: Sunny Day

Concept: Stand solid in your own two feet and work with others to make clear decisions for the individuals good.

The concept of the Sunny Day design direction is that the space inspires strength in the individual and helps a person find a path in their life that supports personal growth. There are five focus areas to support this situation:

Focus 1: STRENGTH/WILL

- Color yellow

Focus 2: STABLE

- Color yellow
- Heavy furniture to ground
- Elements made of earth (tile, brick, concrete)

Focus 3: OPEN-HEARTED AND NURTURING

- Color green
- Cozy, comfortable

Focus 4: DECISIVENESS

- Elements made of wood to balance earth
- Elements made of wood to fuel fire/passion

Focus 5: YING/YANG BALANCE

- Center open
- Color yellow

The supporting elements in the design help the individual to work with others in making these decisions. To this end, the stabilizers for the Sunny Day design direction support flexibility and connection. This is done with blue, references to water, and 5th chakra energy.

	FOCUS	MAIN COLOR	ACCENTS/STABILIZERS	STAIRS	FIRE PLACE	CASE - WORK	MATERIALS/NOTES
1 DEEP OCEAN NIGHT	<p>*REFUGE</p> <p>*INSIGHT, INTROSPECTION water (dark blue)</p> <p>*COMMUNICATION, CONNECTION 5th chakra (bright blues)</p> <p>* FEMININE ENERGY very YIN – internal, cave like</p> <p>* Accent - PASSION, CHANGE - A little fire (pink, red)</p>	Blue and Black, concrete floor	Red	Black vertical posts	Black painted wood	Vertical wood planks	<p>*Very little metal (produces water)</p> <p>*Straight lines to balance yin energy</p> <p>*Fiery elements to balance water and yin</p> <p>*Concrete floor for earth element</p> <p>*A little wood in furniture to fuel fire</p> <p>*Lighter elements to allow fluidity</p> <p>*Fireplace - fire</p>

2 BEACH SUNSET	<p>*PASSION, CHANGE Very fiery (orange)</p> <p>*INSIGHT, INTROSPECTION, FLEXIBILITY Very Watery (dark blue and orange)</p> <p>* MASCULINE ENERGY very YANG warm, outward</p> <p>* Accent – FOCUS - metal accents</p>	<p>Orange and Navy, concrete floor</p>	<p>Grey - metal</p>	<p>Metal rectangular</p>	<p>White curved tile</p>	<p>Painted grey wood</p>	<p>*Minimal wood (produces fire) so much in setting</p> <p>*metal to suppress fire (accent so doesn't produce water)</p> <p>*Fire balances water</p> <p>*Soft, curved elements to balance yang</p> <p>*Concrete floor for earth element</p> <p>*Fireplace – fire</p> <p>*Grounding element</p>
3 MOUNTAIN MORNING	<p>*INSIGHT, INTROSPECTION water (dark blue)</p> <p>* UNIVERSAL CONNECTION - 7th chakra (purple)</p> <p>* YIN/YANG balance – dark/cave like but outward looking</p>	<p>Purple and Indigo, concrete floor</p>	<p>Yellow</p>	<p>Wood open rectangles</p>	<p>Painted Brick</p>	<p>Horizontal wood planks</p>	<p>*Heavy elements to ground</p> <p>*Straight lines to balance yin energy</p> <p>*Fiery elements to warm yin energy</p> <p>*Yellow for change minimal metal (suppresses fire, produces water)</p>

	<p>* Accent - STRENGTH and WILL – 3rd chakra, yellow</p> <p>And GROUNDING – 1st chakra red</p>						<p>*Concrete floor for earth element</p> <p>*A little wood in furniture to fuel fire</p> <p>*Fireplace - fire</p>
4 SUNNY DAY	<p>* HEALTH/ WELL BEING/ STABILITY- Earth (yellow)</p> <p>* DECISIVENESS Wood - Balances earth</p> <p>* OPEN HEARTED - 4th chakra, green</p> <p>* STRENGTH and WILL – 3rd chakra, yellow</p> <p>* YIN/YANG balance yellow=earth /passion</p> <p>* Accent - FLEXIBILITY water (dark blue, calms earth)</p>	Green and Yellow , Wood floor	Indigo	Open with reclaimed wood	Decorative Concrete Tile	Flat Wood Panels	<p>*Heavy elements to ground</p> <p>*Good amount of wood furniture to balance earthiness and fuel fire</p> <p>*Add one metal element for balance (produces water but suppresses fire)</p> <p>*Focus on Fireplace with eye catching tile- fire</p>

Figure 33. Chart of Design Directions for Collini Project

Floorplans and Reflected Ceiling Plan

Using the map of the cardinal directions and Bagua map applied over the space, a floor plan was generated that could be applied to any of the four design directions. The required functional areas fit well with the map. For example, the family gathering area was around the fireplace which is in south (fire element) and southwest (family/relationship/partnership area). The individual spaces (craft, reading) fit most logically into the west corner. In Feng Shui, the west supports most strongly projects, offspring and creativity. Putting the exterior door in the center of the driveway side of the room made sense both from a functional perspective and energetic. This area was the northwest of the room and the northwest in Feng Shui is most in tune with helpful friends, travel and clients. It is an energy that is outward looking and connects to the exterior world of one's life. A door in this area supported that energy. The rest of the space (northern and eastern sections) were left for the bathrooms, laundry and storage. Given the highly functional aspect of these spaces, the energetic symbiosis was not as easily supported, but I planned to address it in materials, colors and art. This observation of how well the main areas fit within the energetic framework of Feng Shui and the elements led me to create the one floorplan for all design directions. See Figure 34. Floorplan: Collini Basement.

A Reflected Ceiling Plan was created to support the floorplan. Due to the priority of light and flow, recessed lighting was placed throughout. It functioned to light up the entrances and pathways, as well as serve as task lighting over the work table, couch area and laundry. See Figure 35. Reflected Ceiling Plan: Collini Basement.

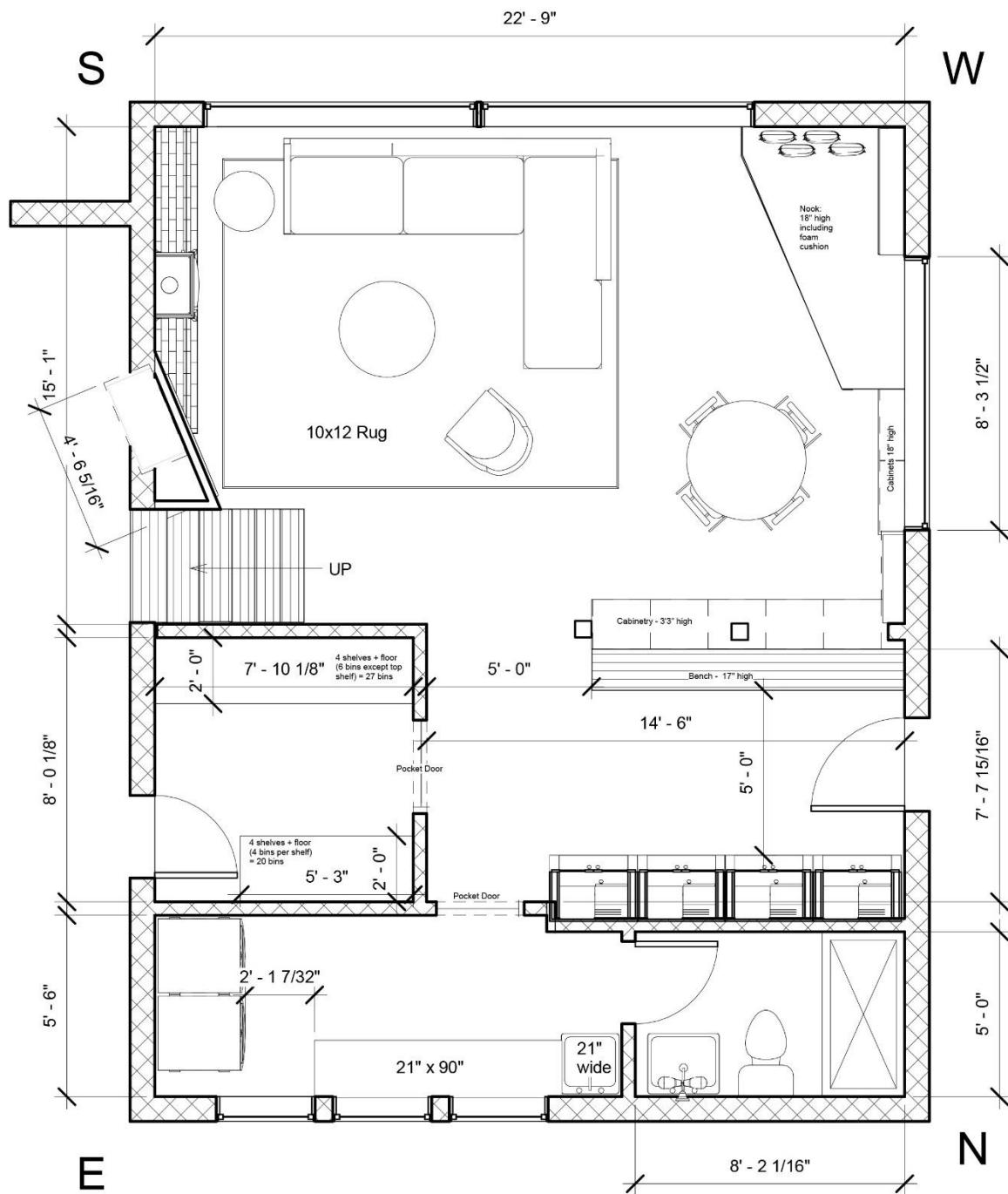


Figure 34. Floorplan: Collini Basement

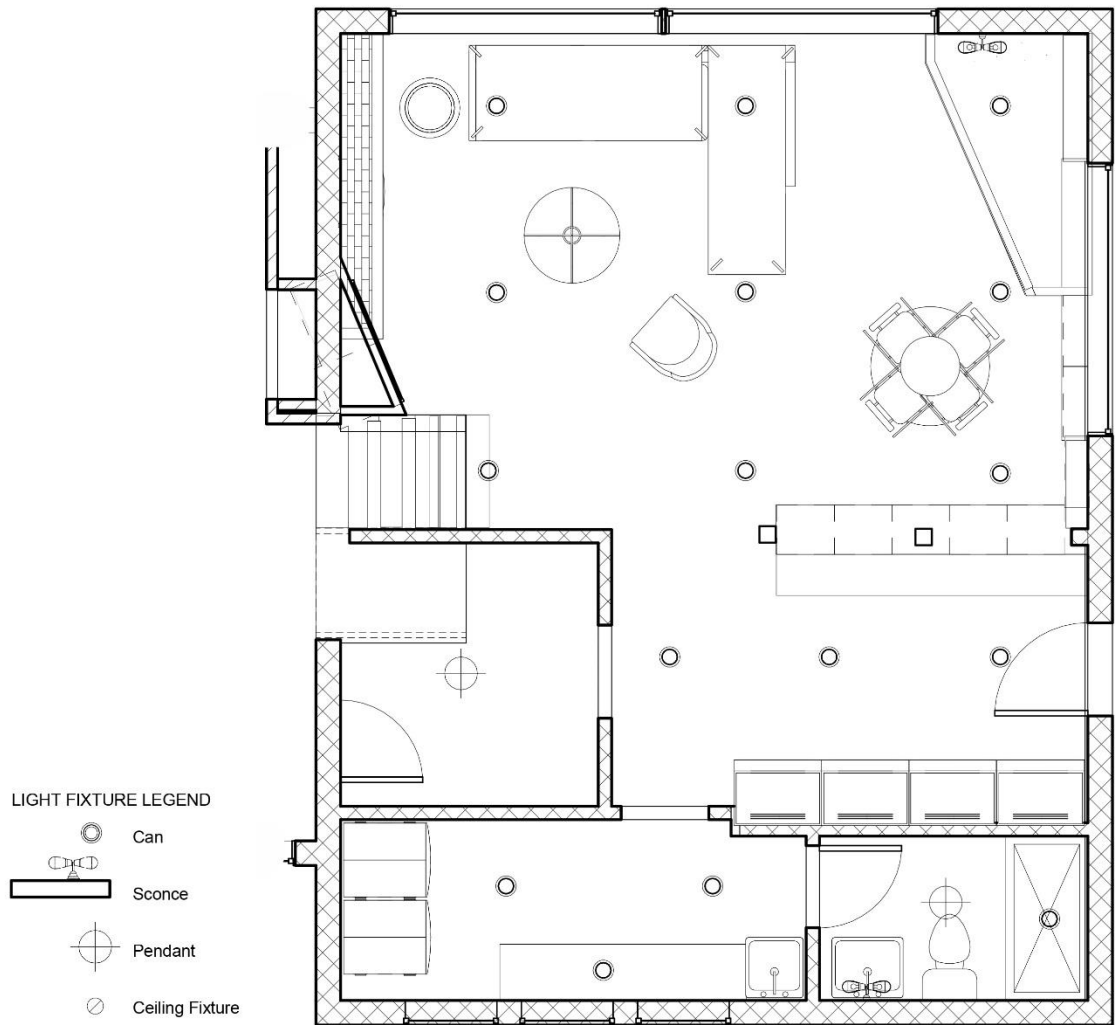


Figure 35. Reflected Ceiling Plan: Collini Basement

3D Perspectives

3D perspectives were made using the 3D function in Revit. This included the following views:

- Gathering space (couch, TV and fireplace, Figure 38)
- Individual spaces (work table and window seat, Figure 39)
- Entries (Stairs from main floor and door to driveway, Figures 36 and 37)

① ENTRY - FROM LIVING ROOM



Figure 36. Entry Space -From Main Floor

② ENTRY - FROM DRIVEWAY



Figure 37. Entry Space - From Driveway

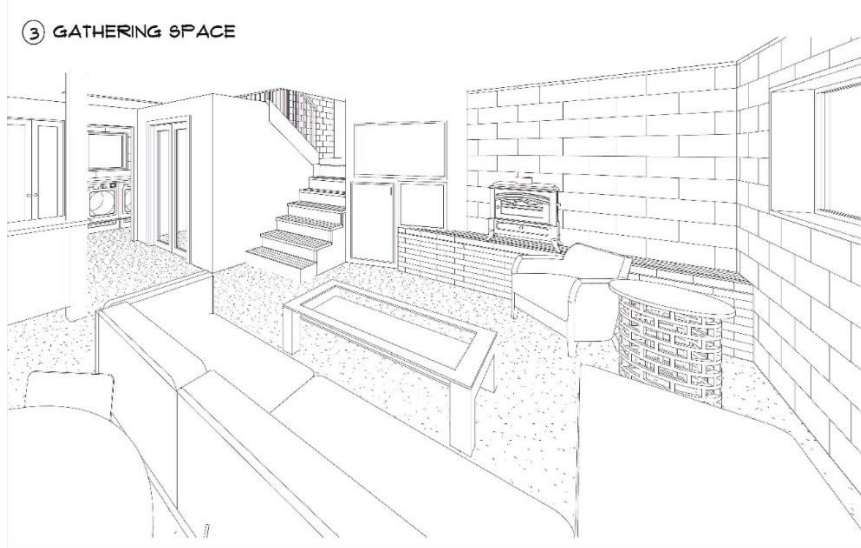


Figure 38. Gathering Space



Figure 39. Individual Spaces

Color Scheme, Materials, Furnishings

Following the strategies and design drivers, individual color schemes, material selections and furnishings were created for each design direction.

Design Direction 1: Deep Ocean Night

- Color Scheme: Blue, Red and Black
- Materials: Cool marble, rich navy and blue cut velvet, cool red patterned fabric
- Finishes: Sleek simple built-ins, low complexity, calming, grounding, Dark fireplace surround to calm the fire
- Furnishings:
 - Blue over-dyed rug
 - White coffee table, round for yin energy
 - Dark brown leather chair, again with curved lines
 - Red accent pillows and side chair for touch of fire/3rd chakra

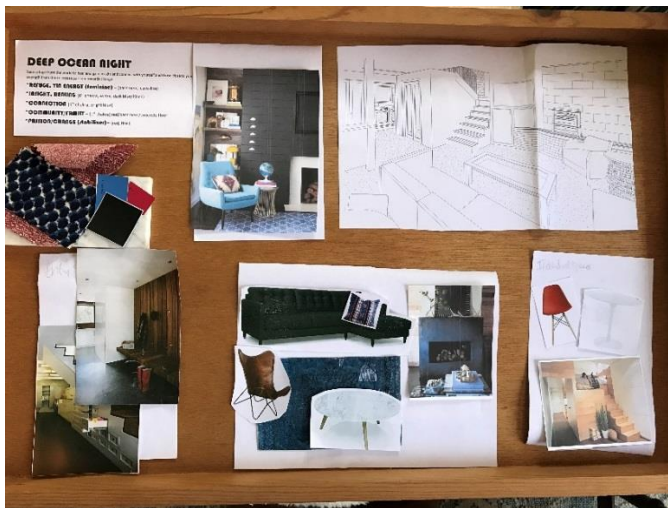


Figure 40. Deep Ocean Night: In Progress Compilation of Presentation

Design Direction 2: Beach Sunset

- Color Scheme: Navy, Orange with Light Grey accents
- Materials: Polished concrete, White Quartz, Orange cut velvet, Tribal cotton fabric in Navy and orange
- Finishes:
 - rustic built-ins
 - Modern tiled fireplace surround with curved shapes
 - Angular, metal Stairway railing
- Furnishings:
 - Orange and navy tribal pattern rug, angular
 - Orange easy chair
 - Warm metal coffee table (stabilizer)
 - Cool metal side chair (stabilizer)
 - Orange and grey(stabilizer) pillows



Figure 41. Beach Sunset: In Progress Compilation of Presentation

Design Direction 3: Mountain Morning

- Color Scheme: Navy, pink with yellow accents
- Materials: Stone, Magenta cut velvet, Navy wool
- Finishes:
 - Rustic, earthy built-ins
 - Straight lines
 - Dark finishes
 - Angular
- Furnishings:
 - Magenta and navy over dyed rug
 - Wood and metal coffee table
 - Blue cotton patterned chair
 - Yellow side chair (stabilizer)
 - Pink and yellow (stabilizer) pillows



Figure 42. Mountain Morning: Compilation of Presentation

Design Direction 4: Sunny Day

- Color Scheme: Navy Blue, Yellow with green-blue as accents (stabilizer)
- Materials: Wood, Yellow Velvet, Blue-Green Cotton print
- Finishes:
 - Bright painted wood built-ins
 - Natural wood accents
 - Colorful patterned tile
- Furnishings:
 - Bright blue patterned rug (stabilizer)
 - Wood and white square coffee table
 - Yellow arm chair
 - Light blue and green pillows (stabilizer)



Figure 43. Sunny Day: Compilation of Presentation

Color Renderings

After 3D perspectives were made, color renderings were created by tracing the 3D perspectives and then hand coloring. Using colored pencils, I experimented with different color and textural treatments that supported each design direction to define the final material selections for each direction. The process I used is as follows:

- 1) Print 3D renderings from Revit
- 2) Trace over those renderings with pencil on trace paper
- 3) Photocopy the trace paper with the outlines of the renderings
- 4) On the photocopied paper, outline the important pieces in black
- 5) Use color and shading techniques to color in elements of the rendering. I used a variety of techniques in this step to explore the best approach. See Figures 44 through 47 for these explorations.

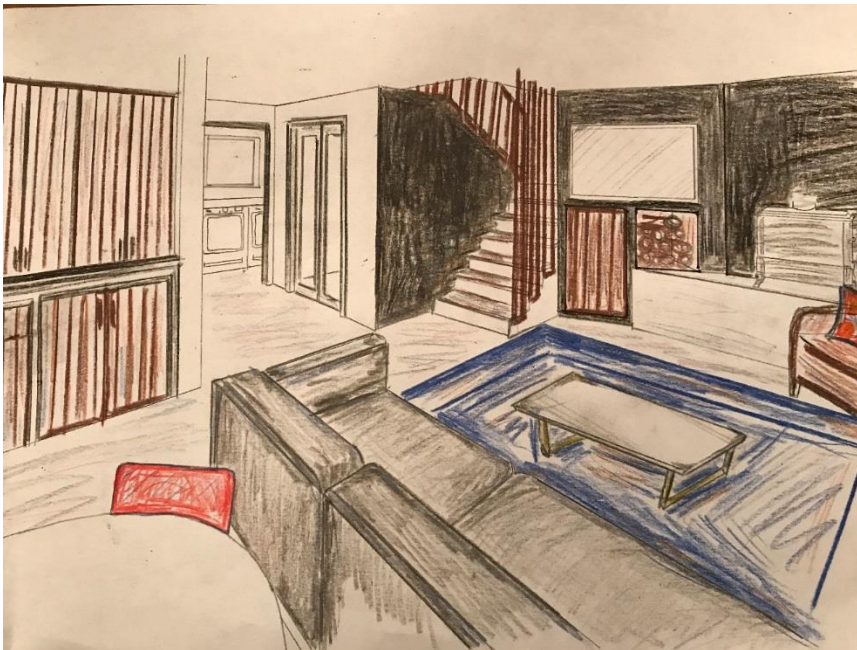


Figure 44. Deep Ocean Night: Color Rendering

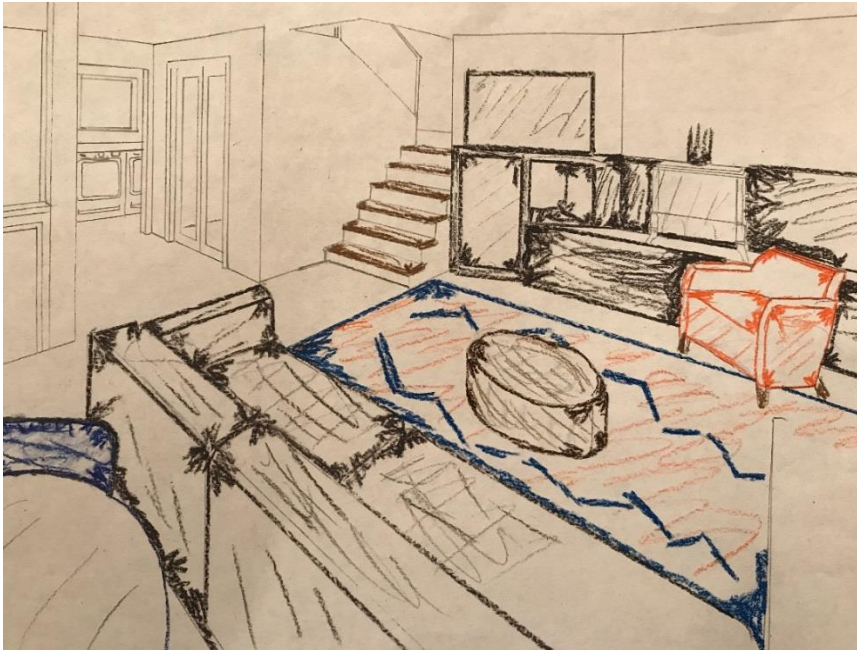


Figure 45. Beach Sunset: Color Rendering



Figure 46. Mountain Morning: Color Rendering



Figure 47. Sunny Day: Color Rendering

Client Presentation Prototype

A presentation format was prototyped to present the design proposals to the client. The presentation included findings from the in-take as well as the design proposals. It was tangible and included a leave-behind so clients could review suggestions and findings on their own. It was in the space being designed and included actual material samples and 3D renderings. The presentation was recorded and feedback was solicited from the client.

For the design presentation, I had two main priorities:

- 1) Support my design goals of mindfulness, connection and functionality not only with the design itself but with the experience of the design presentation.
- 2) Create a presentation that was interactive where a client with little to no design expertise could participate and direct the design solution

To achieve these goals, I designed a Design Together Board that allowed the client to actively design with me in the presentation. Additionally, I created a process that allowed the client experience to use as many senses as possible to experience the presentation.

Design Together Board

The Interactive board used to present the designs was a unique design solution that fulfilled the primary objectives of the process of being functional, help communicate and maintain engagement. There were several iterations of the box design before the presentation. All design presentation materials were in 24"x30" wooden boxes that were 2" thick when closed. I started with unpainted wood. See Figures 40 through 43 for the original Presentation Box. I liked the function of a firm portable display case but found functional and aesthetic issues. Functionally, I needed a way to attach elements of the design. Aesthetically, the plain boxes had a rustic feel to them and they leant that feeling to the design directions. I wanted the boxes to be a neutral backdrop. I decided to paint the boxes black and line the inside with thin magnetic board. This proved to be a very functional way to set up an analog presentation at an office and transport it to a client's home ready to be presented. See Figure 48. Presentation Box, Ready for Transport.



Figure 48. Presentation Box, Ready for Transport

There were three boxes total for this design presentation. The floorplans and computer 3D renderings were in one box. The floorplans were not tied to the design directions so they did not need to be duplicated for each direction. Each design direction was presented in one half of a box. For each design direction, there were six areas presented:

1. Concept name and textual explanation
2. Precedent Photo
3. Color Rendering
4. Gathering Space - furniture and materials
5. Individual Spaces - furniture and materials
6. Entry Spaces - casework style and materials

The first box I put together is shown in Figure 49. Design Together Board One: Beach Sunset and Deep Ocean Night. For the second box, I iterated slightly. See Figure 50. Design Together Board Two: Sunny Day and Mountain Morning. Here, I reduced the amount of textual explanation. I was interested to see if less explanation was noticed. This gave more open space to the layout and I rearranged the pieces to take advantage of the space.

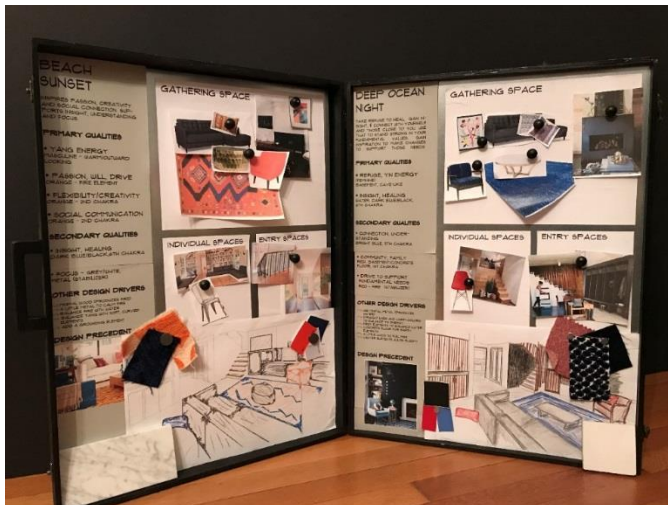


Figure 49. Design Together Board One: Beach Sunset and Deep Ocean Night



Figure 50. Design Together Board Two: Sunny Day and Mountain Morning

Engagement of Senses

The presentation process developed allowed the client to experience the design proposals with as many senses possible. The objective was to bring the client into the present moment. I used the senses of taste, touch, sight, sound.

The sense of taste was included to awaken one more sense and thus enhance the experience of the present moment. To do this I brought snacks and drinks and set them out a tray in front of the presentation boards. I brought clementine's because citrus has an effect of awakening the senses. I also brought nuts and dried fruit and cookies. These small chewable would allow the client to eat while participating in the experience. See Figure 51. Props to Awaken the Sense of Taste.



Figure 51. Props to Awaken the Sense of Taste

For touch, I made sure to have examples of the materials I was proposing for the 4 directions. I included one solid surface material (stone, tile, wood) and as many textile samples as I could gather. I also included paint chips of the colors proposed. Additionally, the snacks were tangibles that kept the skin of the hand and mouth awake and present. Most importantly, the sense of touch was awakened by the participation in the design manipulation. The pieces of each design were printed on paper cut into individual pieces so that they could be moved around the board. This included each furniture item, rug options, fireplace style precedent photos, casework style precedent photos, and stairway railing style precedent photos. The act of physically moving these pieces around the board to try different design combinations had the effect of creating a physical experience. The client had to move toward the board, pick up pieces, touch them with their hands, and place them back down. All this added to the experience of touch and the awakening of the senses.

The sense of sight was one of the primary communication channels for the presentation. Presentation Boards displayed visually all the elements designed for each Design Direction as described above and seen in Figure 49. Design Together Board One: Beach Sunset and Deep Ocean Night and Figure 50. Design Together Board Two: Sunny Day and Mountain Morning.

As a subtle additional use of sight, I chose my outfit to match the look and feel of the designs I was presenting. I was designing an energetic, earthy, family space. I dressed casual, colorful and approachable. I also made sure to wear blue, a color that I had recorded as making all family members feel good, and red for a subtle inspiration for change. See Figure 52. My Outfit for the Collini Presentation.



Figure 52. My Outfit for the Collini Presentation

I engaged my clients sense of hearing as I verbally reported my findings from the in-take research and then explained the design directions that resulted.

Client Presentation

The final design presentation was on April 19, 2017. I arrived at the house of the Collini's with three presentation boxes, my recorder and a bag of food and drinks. I started by setting up the food and drinks on the coffee table in the room that was being designed. I placed the presentation boxes on the fireplace hearth but I did not open them. I then proceeded with the following:

Over-Arching Intention

I started my presentation by stating my intention. I reiterated that I was there to help translate their vision to design a space that truly supports them the best way possible. I stated I had attempted to create an interactive presentation so they could engage in the design process.

Key Directives from Client

I then summarized the key points I heard from them as to what was important for this project. This included:

- a. This space is for your whole family to use, both for individual activities and to gather as a family.
- b. The basement is the foundation of the house – i.e. 1st chakra, family/community!
- c. Right now, it is cut off, not decorated, not cozy, not functional, stairs feel rickety, mess from outside comes in doors, no one feels like the space reflects them.
- d. Katie - An area of your life you'd like to see some change is in your broader family relationships
- e. All members of the family like blue – worth noting blue is the color of the element water and it represents the private or introspective part of ourselves
- f. In the yin/yang exercise Katie chose 15 yang's (masculine, straight lines, logical, warm, outward looking) and 5 yins (female, curved lines, soft, cool, inward focused)
- g. Katie has a strong (positive) response to: light, nature, isolation/privacy
- h. Rachel needs place to do crafts, draw, reads, watercolor, have friends over
- i. Rachel likes getting away by herself
- j. Finn wants a tree house and likes Legos and creative play
- k. Finn is an extrovert and likes to be around the family
- l. Katie, Rachel and Finn all could use some inspiration in the make-things-happen, change, area of their life
- m. We want to re-use the big grey couch and the white table

Summary of Design Suggestions

I followed with a summary of my design suggestions ascertained from all input gathered, directly and indirectly. I explained these suggestions could be fulfilled with a variety of design solutions, but for all design solutions I tried to achieve the following:

- a) Balance what you are normally drawn to/makes you most comfortable (like color blue) with what you might not normally pick (warm colors – reds, oranges) but might inspire or support the areas of your life that need attention.
 - Each design has a shade of blue and a warm/fiery color with it
- b) Entries are Important
 - Open site lines – from living room and from mudroom. Draw people in, not feel closed off, able to see out.
 - Put window on back wall – so when you come downstairs you see the outside – don't feel like going into basement, more attractive place to go
 - Incidentally – the 3rd chakra is the chakra of change/self-assertiveness and this energy is said to respond to the sense of sight. Opening another window in here (and entryways) should support that element of ourselves.
 - In Feng Shui, East is the area that supports family/elders/community (stairwell) opening it up much better for energy flow
 - Good to put a chandelier over stairwell keep energy flowing
 - Specifically, with mudroom entry
 - the experience of entering the home sets the scene for the feeling of the whole home.
 - Built-ins – so stuff enclosed - serenity is first and last experience of house
- c) Fireplace – gathering space
 - Design seating around fireplace, stirs primordial feelings of gathering/storytelling/connection/community

- Feng Shui – south – best area for the fire element (supports the power to change/assertiveness) and your fireplace is in the southern corner of this floor!
 - Use red, orange, purple, pink, bold yellow in this area
 - Simplicity in décor so people and activities are the energy
- d) Individual Spaces
- For each family member to feel they have a place to go that reflects them
 - Allow for growth and change as kids grow – flexible uses
 - Bookshelves, game/work table, lots of storage and nook/loft
 - West corner – in Feng Shui, best place for creativity/children and self-expression
 - kid-focused area so they feel they have place of their own
 - Option for loft -bottom for moments of introversion (yin energy), top for moments of extroversion (yang energy)
- e) Support your Roots – family, community
- put art/photos in East corner that reflects positive family memories
 - Use local materials:
 - connection to greater ancestral community (esp. powerful as both from here)
 - support priority on nature and authenticity
- f) Concrete Floor - Center of the room, governed by earth element, supports health (body mind and soul), keep open and uncluttered (concrete floor great here)
- g) Yin Elements - Bring in some Yin elements to balance your natural yang
- earth (browns, clay/concrete)
 - give some feminine, curves, softness to decor (soft rugs)
 - celebrate the low level, down under, don't try and hide it
- h) I have come up with four design directions that all support the suggestions above to varying degrees.

Presentation of Floorplans

I next opened the box with the floorplans and black and white 3D computer renderings. I explained the differences between the options and made a point of standing in the basement that I was talking about as I described the plan. See Figure 53. Floorplans and Perspectives.

Invitation to Client to Design

After presenting the floorplans, I invited them to engage in the design process. A lively discussion followed with the clients pointing out different aspects of the floorplan and discussing what would work better or worse for them. I observed the husband following my lead and going to the area of the basement under discussion when we talked about it.



Figure 53. Floorplans and Perspectives

Presentation of Design Directions

It was at this point that I opened the boxes and revealed the four Design Directions. I explained each design concept, the areas of holistic health it supported, and the furniture and finishes I proposed. In this part of the presentation the clients became engaged even before I was finished presenting. I believe having the colored renderings and furniture options out for them to see made it harder to listen, but easier to become engaged. The wife kept saying things like "I like

that color yellow” or “That chair is nice”. The husband at one point interrupted and said “Katie, I’m trying to think about the concepts!”

Once I had fully presented the design directions I asked them to play with the boards. I asked what their favorite color schemes were. The husband responded, “Deep Ocean Night” and the wife responded, “Sunny Day”. This was very useful information as these were what I consider to be the most different design directions in terms of energy and metaphysical affects. That led to a good discussion about the energy they wanted for this room. Together we decided this room was more suited for Sunny Day and possibly Deep Ocean Night could be used somewhere else in their house.

Next, I asked them to respond to items on the boards. I asked their favorite elements on each board and their least favorite elements. This proved to be very useful in engaging them as designers, and they began to move elements around on the “Sunny Day” Design Direction to include elements from other directions that they really liked.

One very poignant moment, in terms of understanding the efficacy of my process, was when the wife moved a fireplace style from one board on to the “Sunny Day” board. She said she loved that fireplace surround. But as soon as she put it on the “Sunny Day” board she exclaimed “Oh no, that’s not good!”. She said she didn’t realize how formal it looked until she put it with the other elements she liked.

We had a lengthy discussion about stair railing style. They had strong feelings about stair rail style. None of the precedents in the four design directions were exactly right. However, I had brought some extra precedent elements and some of those were attractive to the client. In the end, we left three stair precedents on the board and noted the stair rail style as an area that needed further design thinking.

See Figure 54. Comparison of “Sunny Day” Before and After Client Input for the final design board compared with the “Sunny Day” proposal that I presented. Note the following:

- The coffee table has been replaced with Beach Sunset’s

- The fireplace has been replaced with Deep Ocean Night's
- The nook was replaced with two options - Beach Sunset and Mountain Morning (they verbally told me the attraction of each)
- They added the yellow work table chair from Mountain Morning
- They replaced the cabinetry with Mountain Morning
- They replaced the stairs with Mountain Morning's plus two other options I had with me.

At the end of the discussion we had made selections on floorplan, color scheme, furniture and materials. The open issues were stair railing and using more of the laundry area for storage.

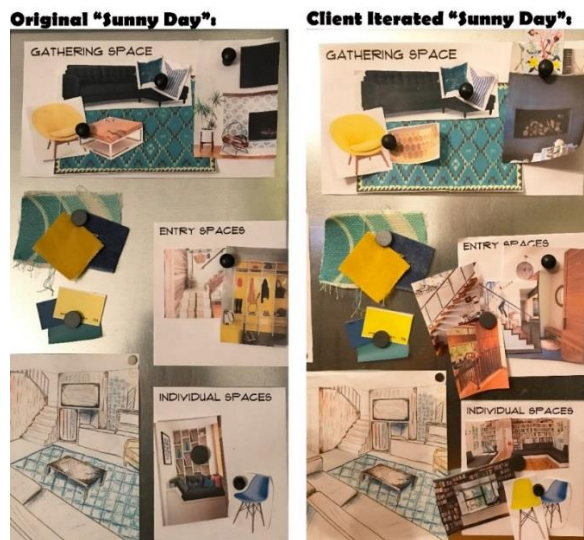


Figure 54. Comparison of "Sunny Day" Before and After Client Input

CHAPTER VII

REVIEW AND FUTURE WORK

Design Process Prototype Review

After the Collini design presentation was complete, I ended the design phase of my studio work and began to analyze the prototyped process. Following is a summary of this analysis for each phase of the design process.

In-Take Phase

The interview questions and in-take tasks led to a revelation of issues and objectives that went beyond the functional issues. Following are my most important take-aways:

- Don't ask too many questions – pay attention to the interviewee and see when they start to lose interest. When they do, mix in some hands-on activities or some observe tasks where they are leading the conversation.
- The Five Elements Game was one of the most useful tools – I could get a real read of their personality types by the questions and could translate easily into design elements. The challenge here was when multiple family members were using a room and they have different personality types. At that point, the reading of their personalities was irrelevant as I just needed to design a balanced room.
- Ying yang and Chakra games were not as useful for design decisions; however, they served to open the connection between my clients and myself. They often initiated storytelling on the part of the client and this helped us to get to know each other much faster and more naturally than if I was asking direct questions. Additionally, the games started discussions that were not about their present house or even current family and so gathered information that may not have come up in a traditional interior designer questionnaire.

- The Feng shui game was useful at a high level – to add energy flow or calm energy in certain areas. May not be my focus for now until I learn more about the science.
- It was useful to hear their plans for the whole house even if I was there to work on a small part. Though I was focusing on the basement in my design, an overall discussion about the house and their lifestyle put the basement project in context and allowed me to think about the basement design in a holistic way. It helped me understand the need for together space and alone space, functional needs not covered in other areas of the house, and insight into the design aesthetic.
- Having all family members participate in the in-take was very useful. The first time I went to the Collini's the husband was not available and I felt like I missed some important information by him not being present. In the end, he had as much say in going forward as she did. In the future, especially for the first meeting, I am going to try and talk with as many family members as possible

Following is feedback from Katie Collini on the In-Take Process:

While it totally was not what I was expecting, I was open to the idea that we each have some innate attraction to/comfort in certain environments...I felt that those exercised gave you a sense of me, on levels that I might not otherwise offer or actually be in touch with. I think they need an explanation, which you provided, and maybe an assurance that you'll get to the Pinterest photos and product selections later for those folk's eager to jump right in.

Synthesis Phase

From the Synthesize phase of my studio's, I generated the following ideas for future exploration:

- It was very useful to have the interviews recorded and I referred to them often during analyzing the data, however, it was extremely time consuming to listen back over them. This is an area I would like to explore more in the future.

- I need to take more pictures during the “Play” games that involve the client putting items in piles (words/materials). I tried to organize the manipulatives with stickies and pins and thought that would be enough to keep their answers clear until I could analyze, but I found when I went to look through them I was not always clear. For example, some had slipped out of place and, I forgot from which family member the results came. A more efficient approach would have been to simply take pictures of the final piles so I could use the groups of actual words/materials with the photos and together more easily figured out the game results.
- I would like to try a ven diagram on what brings each family member joy
- I would like to try a binder with fabrics velcro'd on to pages and allow the client to create pages of likes and dislikes.
- I found the information I gathered from the Five Elements test to be useful. It gave me a thorough context of the personalities of the family members.
- I think two personality games is probably the maximum. If the Five Elements is always done, I would then choose from the Chakras, Bagua or Ying Yang.
- When the clients are looking at pictures and giving a verbal response, it is very hard to figure out what they were talking about later through voice recording or photographs. I need to always number any images I put before them and take a picture of the images numbered and say out loud the number when they start talking about it so it is captured on the recording. For example, I could say “What do you think of picture#1?” or “Katie is talking about picture #4”

Create Phase

From the Create phase of my studio's, I generated the following ideas for future exploration:

- It is tricky to incorporate multiple modalities into one design. For example, Feng Shui, the Five Elements and the Chakras sometimes have cross meanings. They did prove useful as a framework to generate the context and stories of the client. Further exploration is needed in this area to ascertain the best use of these modalities.

- Some further exploration is needed in using the design concept developed in this thesis for multiple members of a family using the same space. The theory of space affecting personality gets complicated when you go beyond universal needs. For example, one might approach the design of a space differently if it is determined that a person needs help grounding themselves. Alternately, a different design would satisfy the need for someone to have help taking charge in their lives. If you are designing a room to be shared by members of a family, those members will most likely have different psychological needs. The theories I have developed attempt to design at this level of individual personality yet do not fully address how to approach multiple personalities and needs satisfied by one design, a situation that is common in residential design.

Presentation Phase

From the presentation phase of my studio's, I generated the following ideas for future exploration:

- Creating the manipulatives for the design presentation was very time consuming. This does not mean the manipulatives were insignificant, as the ones that were touched had a large impact on design. Future explorations could be to design a system where images/products/materials could easily be placed in a program and dragged into place by clients, keeping the functionality prototyped in this thesis but removing the actual creating (printing/cutting up) of manipulatives.
- The client seemed reluctant to interact with the design as I had designed. I believe this came from an insecurity many clients feel when working with a professional. They seem to think they do not have anything useful to add, or are afraid of suggesting something bad. I want to think further about how to empower clients to be confident about their knowledge of what is best for them in their home.
- Although the final design board contained many elements from the other three directions, it still had the look and feel of "Sunny Day" and held together well. This supports the

effectiveness of the presentation boards. A typical design presentation would not allow moving elements from one design direction to another, especially as freely as this one did. The ease at which the client could become involved in the exploration process was one of the most successful elements of the presentation. It reduced significantly the need for the designer to ask the client to trust their judgement, instead the client could see for themselves the effect of different design decisions.

Following is feedback from Katie and Chuck Collini on the Presentation Process:

As for your presentation, Chuck and I both loved it! We loved how professional it was and how functional the boards were. The magnets were a fantastic way to show the flexibility (or not) of certain boards. The written text was great too. I loved how many options you presented. It was so cool to see all the options, and they were all nice. We were in awe at the hand sketches. They made it be very easy to envision the space. Chuck said he could have done without the process explanation/stage setting that you did upstairs. I really appreciated that part. I like theory and process. I think that is a personal style thing. We both appreciated how you pointed out your rationale behind your choices, tying them to what you had learned about me/Chuck/kids. Chuck and I also disagreed on the snacks. He thought wine was nice (surprise, surprise) to relax things but was confused by the snacks. I thought they added to the experience. We don't get to have that sort of presentation often and to me, the snacks made it more of an event.

Future Follow-Up

The Collini's had not started their renovation as of the publishing of this paper. Therefore, I was not able to gather post-occupancy data around their satisfaction or the efficacy of my process in terms of a finished space. Future work would incorporate the following inquiries:

1. Add visual/pictorial elements to the PLAY games. For example, have a second chakra game where I show a picture of nature that represents a chakra (lake with reflection of forest as 4th chakra, string water fall for 3rd chakra).
2. Create a process to ascertain whether the built space achieved the goals of connection, authenticity and mindfulness.
3. Inquire whether the design process and presentation supported the renovation process. Find out if the presentation materials provide the direction needed by the general contractor.

4. Create a process to gather feedback on their satisfaction with the space post-occupancy.
5. Assess the space for Feng Shui, the Five Elements and the Chakras and see how many of those modalities were supported in the design of the final space.

CHAPTER VIII

CONCLUSION AND NEXT STEPS

The growing trend to respect the forces of nature and parts of ourselves we cannot see or measure comes out of a need to control the whirlwind of information, change and movement that defines the post-millennium. Evidence-based design with goals towards supporting well-being is now driving the interior design industry in healthcare, hospitality and commercial design. Residential design, the design of the most influential area we inhabit, has very little precedent in a systematic and researched based approach to design for well-being. This thesis begins to fill that gap. Historical building and energy flow sciences provide a framework to understand the context and narrative of clients. This understanding is used to design spaces that support a person's needs in body, mind, and soul. It is a holistic system used to create spaces that enhance well-being in the residential arena, an approach missing in the interior design industry.

The Design Manifesto, Design Deeper cards and Design Together Boards make up a design process developed to address several pressing needs for well-being today. With a focus on connection, mindfulness and functionality, they include slowing down, continuity and a strong sense of belonging, and a connection with humanity in a technology driven world.

The Design Deeper Cards are a marketable tool that aids a designer to think in this new direction about design. They provide multiple avenues to access understanding about a client's needs in their body, mind and soul. As this requires a level of intimacy not always comfortable with someone you have just met, the cards allow a designer to find ways to access a level of understanding without direct, possibly uncomfortable, questions. It relies on the use of multiple senses to gather this information and allows a client the avenue to communicate in a variety of ways.

The Design Together Boards take the residential design industry in a new direction by involving the client directly in the design process. They create empowerment by their assumption that the client knows their needs best and the designer's job is to translate and facilitate the realization of those needs. They reduce the need for the client to simply trust the designer until the install is complete.

A primary quality of this process is that it is not style based, or personality based, but provides a variety of ways to get at the understanding needed. Additionally, everyone needs a home so everyone has a need for a holistically designed home. I hope to market this universal and flexible process, specifically the Design Deeper Cards and Design Together Boards, to university interior design programs as well as to professional interior design society's and at conferences.

Though the process proved to be very affective in fulfilling the goal of a more comprehensive approach to design, there is still need for continuing research and development. The issues that still need to be explored are around economics and efficiency. Recording and reviewing interviews, analyzing multiple types of information, and creating manipulatives that allow the non-designer to participate in the process, are all steps that take much more time than the traditional interior designer may have. For this process to be a viable one for the professional designer, tools will need to be developed, and processes automated, to aid in the data collection, data processing, and creation of manipulatives for the design presentation.

This thesis is based on the belief that a home that supports the health of our full human experience is a foundation on which a healthy life can be created. Additionally, the person who most knows what that home looks like is the inhabitant of the home. The process I have developed supports the designer and the client in designing from this foundation. The Design Deeper Cards and Design Together Boards have shown success and will continue to be refined in the future. They are tools that can be used by myself, and potentially many others, to influence greater well-being, and therefore greater harmony, throughout the world.

BIBLIOGRAPHY

- Hoover, T. (1977). *Zen culture*. New York: Random House.
- Israel, T. (2003). *Some place like home: Using design psychology to create ideal places*. Chichester, West Sussex, England: Wiley-Academy.
- Johari, H. (2000). *Chakras: Energy centers of transformation*. Rochester, VT: Destiny Books.
- Judith, A. (2004). *Eastern body, Western mind: Psychology and the chakra system as a path to the self*. Berkeley, CA: Celestial Arts.
- Jung, A. (2009). *House of C.G. Jung: The history and restoration of the residence of Emma and Carl Gustav Jung-Rauschenbach*. Küsnacht, Switzerland: Stiftung C.G. Jung Küsnacht.
- Kellert, S. R., Heerwagen, J., & Mador, M. (2008). *Biophilic design: The theory, science, and practice of bringing buildings to life*. Hoboken, N.J: Wiley.
- Kopec, D. A. (2006). *Environmental psychology for design*. New York: Fairchild.
- Koren, L. (1994). *Wabi-sabi for artists, designers, poets & philosophers*. Berkeley, Calif: Stone Bridge Press.
- Kwon, J. (2011). A MISSING PIECE IN CONTEMPORARY DESIGN PRINCIPLES: A HOLISTIC DESIGN APPROACH PRESENTED IN THE EASTERN AESTHETIC TRADITION. In Y. Kwon (Ed.), *EDRA 42: Make No Little Plans* (p. 309).
- Laurinavicius, T. (2016, November 25). 10 World Renowned Meditation Tech Experts Share What's Next In 2017 Retrieved November 25, 2016, from <http://www.forbes.com/sites/tomaslaurinavicius/2016/11/25/2017/#3c81bf1d2322>
- Living Building Challenge. (n.d.). Retrieved October 18, 2016, from <http://living-future.org/lbc>
- Marberry, S. O., & Zagon, L. (1995). *The power of color: Creating healthy interior spaces*. New York: Wiley.

- Marcus, C. C. (1995). *House as a mirror of self: Exploring the deeper meaning of home*. Berkeley, CA: Conari Press.
- Mastro, M., & Mastro, R. (2006). *The way of vastu: Creating prosperity through the power of the Vedas: Achieve success through Indian feng shui*. Seattle, WA.: Balanced Books.
- Pickert, K. (2013, February 3). The Mindful Revolution Finding peace in a stressed-out, digitally dependent culture may just be a matter of thinking differently. *Time*.
- Robinson, S., & Pallasmaa, J. (n.d.). *Mind in architecture: Neuroscience, embodiment, and the future of design*.
- Reese, R., Lewis, T., Myers, J, Wahesh, E.,& Iversen, R. (2014). Relationship Between Nature Relatedness and Holistic Wellness: An Exploratory Study. *The Journal of Humanistic Counseling*, 53, 1, 63-79.
- Robyn, K. L., & Ritchie, D. (2005). *The emotional house: How redesigning your home can change your life*. Oakland: New Harbinger Publications.
- Rossbach, S. (2000). *Interior design with feng shui*. New York: Penguin/Arkana.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727.
- Ryff, C. D., & Keyes, C. L. M. (October 01, 1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 4, 719.
- Saunders, C., Brook, A., & Eugene, M. (2006). Using Psychology to Save Biodiversity and Human Well-Being. *Conservation Biology*, 20, 3, 702-705.
- Silverman, S. (2007). *Vastu: Transcendental home design in harmony with nature*. Layton, UT: Gibbs Smith Publisher.
- Sussman, A., & Hollander, J. B. (2015). Cognitive architecture: Designing for how we respond to the built environment.
- Svoboda, R. E. (2013). *Vastu: Breathing life into space*. New York: Namarupa.

Tchi, R. (n.d.). Rodika Tchi | Feng Shui Consultant and Writer. Retrieved October 23, 2016, from <http://www.rodikatchi.com/>

The Development of the World Health Organization Quality of Life Assessment Instrument (the WHOQOL). (1994). *Quality of Life Assessment: International Perspectives*, 41-57.
doi:10.1007/978-3-642-79123-9_4

Trevelyan, J. E. (1998). *Holistic home: Creating an environment for spiritual and physical well-being*. London: Apple.

Ulrich, R. S. (January 01, 1984). View through a window may influence recovery from surgery. *Science (New York, N.Y.)*, 224, 4647, 420-1.

Wauters, A. (1997). *Chakras and their archetypes: Uniting energy awareness and spiritual growth*. Freedom, CA: Crossing Press.

Williams, M., & Penman, D. (2011). *Mindfulness: An eight-week plan for finding peace in a frantic world*. Emmaus, PA: Rodale Books.

Wilson, E. O. (1984). *Biophilia*. Cambridge, Mass: Harvard University Press.

Wong, E. (1996). *Feng-shui: The ancient wisdom of harmonious living for modern times*. Boston: Shambhala.

Wood, D., & Beck, R. J. (1994). *Home rules*. Baltimore: Johns Hopkins University Press.

APPENDIX A

QUESTIONS FOR “ASK” CARDS

1. (ALWAYS FIRST QUESTION) What is your intention for this project? How do you see this project changing your life? (ask each inhabitant, record answers)
2. (ALWAYS SECOND QUESTION) I work with AUTHENTICITY, FUNCTION, CONNECTION and ENGAGEMENT OF THE SENSES. What are you most interested in of those? (ask each inhabitant, record answer)
3. What are the most acute problems with your home right now? (ask each inhabitant, record answers)
4. What are your favorite colors? What are your least favorite colors? (ask each inhabitant, record answers)
5. What are your favorite ways to spend time? (ask each inhabitant, record answers)
6. Who lives in the home and what are their ages? Are there pets? (record answers)
7. What are 3 of your best moments in your life? Describe the FEELING and the SPACE you were in when they happened. (ask each inhabitant, record answers)
8. What are 3 places you can think of, past or present, where you have felt your best when in them? Describe those places. (light, texture, color, aroma, proportion, space) (ask each inhabitant, record answers)
9. Where and how do you gather as a family? What are the activities that have the most positive effect on connection? (examples: reading together, TV w family, TV w partner, games, meals, conversation) (record answers)
10. Where do you eat your meals? Where do you enter the house? Where do you park your cars? What bathrooms do you use? (record answers)

11. What are your goals, individually and as a family, for the next 1,5 and 10 years? (how you spend your time, how close you are, how long you live here, how long you stay in a job) (ask each inhabitant, record answers)
12. How often are guests in your home? For what purpose? Informal or formal? What spaces do they use? What issues have you had with having guests over? Do you like having guests over? (ask each inhabitant, record answers)
13. What or where inspires you? What from your past has given you the most support or inspiration" (ask each inhabitant, record answers)
14. What or where touches your humanity and feelings of vulnerability, connection and reflection (ask each inhabitant, record answers)
15. What is most needed to support balance in your physical body, thinking body, and spiritual body? Are you already doing this or do you need help? (ask each inhabitant, record answers)
16. What is most out of balance in your life? What is most in balance? (ask each inhabitant, record answers)
17. From what or where do you find your energy drained? (ask each inhabitant, record answers)
18. How are the inhabitants of your home different or opposite from each other? What situations brings out conflict in this area? What positive effects does it have? (ask each inhabitant, record answers)
19. What things that you have to do, do you like to do the least? (ask each inhabitant, record answers)
20. Where do you spend the most time in the home? Doing what? When are your alone and when are you with the other members of the family? (ask each inhabitant, record answers)
21. What do these rooms mean to you: living room, dining room, TV room, Playroom, Kitchen, Laundry, bedroom, bathroom, garage, office? (ask each inhabitant, record answers)
22. What are 3 favorite things about past homes? What are your 3 favorite things about this home? (ask each inhabitant, record answers)

23. What are 3 of the least favorite things about past homes? What are your 3 least favorite things about this home? (ask each inhabitant, record answers)
24. If your home has a center point, what is it? (ask each inhabitant, record answers)
25. Where do you spend the least time in the home? (ask each inhabitant, record answers)
26. When are you alone and when are you with the other members of the family? (ask each inhabitant, record answers)
27. How involved do you want to be with this project? (ask adult, record answers)
28. What would your home look like without limits? Describe your dream home. How is it different than this home? (ask each inhabitant, record answers)
29. What happens in this space now? Who uses it? (ask for each space, each inhabitant who uses it, record answers)
30. What specific functions need to happen in this space when redesigned? Who will use it? (ask for each space, each inhabitant who uses it, record answers)
31. Where do those functions happen now? How will this be different? How will other areas of the home be affected by the change? (record answer)
32. What are the 3 most important things about the new space? (ask each inhabitant, record answers)
33. What are the 3 least important things about the new space? (ask each inhabitant, record answers)

APPENDIX B

EXAUSTIVE LIST OF STRATEGIES FOR COLLINI PROJECT

WHOLE ROOM	Design Element	Purpose
Focus on basement	Go deeper on design of basement	Support change in foundation of community (family) by choosing room that is foundational for house
Décor: accent	Put Ganesh or elephants somewhere	To represent change leading to liberation through upheaval
Décor: feel	White walls, not much furniture, build ins for storage, simple colors in main materials	Design quiet, because so much will be happening in here. Also support homeowner's connection to mountains over ocean – stillness over energy.
Layout	Fireplace	Sight lines focal points important to balance so much activity
Light	Add windows along back wall and open wall between den and mudroom	She has a strong response to both light and nature. Adding windows and views of nature should be a transformative expenditure
Décor: Materials	Use natural materials – wood, ceramic tile, concrete, linen, cotton, wool	Support homeowner's priority on authenticity and connection to nature
Décor: Colors	Use of purple, orange and yellow in ways that homeowners respond positively to (look at fabrics, try different shades, especially cool shades)	Support homeowners desire/need (mom and kids) for help with 3 rd , chakra – passion, making change, fire, 2 nd chakra (go with the flow), and 7 th chakra (connection to universe/god) WHILE respecting they don't generally like these colors. Colors of fall, mts, way light looks from outside at night, a cooler purple.
Décor: Accent Colors	Use orange, yellow, pink, red	Using colors, they don't usually use in small doses to gently introduce and represent change
Décor: Colors	Bright, contrast-heavy colors for accent	Support homeowners design style (Pinterest) and need for simplicity and calm while wanting energy and prioritizing innovative, liberated, eclectic, experiences.
Décor: pattern	*Diagonal stripe or horizontal stripe up high or just pattern OR vertical paneling	*raise ceiling * create energy – inspire passion

Décor: wall art	* Vertical display * multiple pictures in vertical rectangle, tall shelf w uniform display	
Decor: Layout	*Low horizontal furniture	
Ceiling	*Glossy ceiling, Light bouncing light	*raise ceiling
Throughout	Adding windows, open to mud room and up the stairs	3 rd chakra responds to sight, mom and kids need help with 3 rd chakra
ENTRY	Design Element	Purpose
View from entries	What will this be from each entry?	Have a visual focus (from all entry points)
Entry from stairs (main in and out every day)	Can see from main floor	Draws you down
Entry from stairs	Can see back door	* path clearly defined – can see where you are going (outside)
Entry from outside (main in and out every day)	Can see the den area	* path clearly defined – can see where you are going (upstairs) light important in entry – sets scene for whole home experience – open, light, space, expansive *Reminds you of the room and to use it, see work in progress (puzzle, craft) or favorite chair or spot *also opens space and gives natural light from 3 directions (her priority on light, openness and space)
Back Entry - Built-ins	Key drop, organized storage	*Serenity as first and last experience of house * creates a clear path – drawn straight but also right
Back entry	Sensory experience that says entering to space, but not an abrupt transition (what is flooring right outside door? Flagstones? Brick? Put this right inside door and gradually change to concrete)	Brings you into the moment when you enter the HOME, but not abruptly, gently
Back Entry	Can see pictures, personal art, family images, favorite things – SOMETHING FOR EACH FAMILY MEMBER	*Says THIS IS MY HOME, I am the most important person to enter here
Back Entry	Everyone has place for their things – closets, cubbies, hooks low enough for kids	Feels like YOUR home, encourages sense of responsibility and ownership
Back entry	Place for messages	Function, connection with each other

STAIRS	Design Element	Purpose
Door and ceiling over	Remove door at top and open ceiling to top of 3 rd floor	Draw you down there, less Claus trophic entry, more connected to upstairs so feel less cut off when go down there
Style	New style – modern/rustic	Doesn't feel "rickety", doesn't feel like an afterthought to the house but an essential and connected piece
Stairs, Mantle (E,SE,S)	Salvaged local wood	In SE most important for WOOD element in Feng Shui. (all elements should be represented esp. in family areas). Represents connects to homeland/family, natural growth and vibrant health
Banister	One option w vertical slats all the way to top floor	Give option to homeowners to have it feel more separate visually – adds privacy for when teenagers hang out down there
Banister	One option with stairwell fairly open	Support home owner's response to light and openness. Create a strong connection between all floors to make basement feel part of the whole and draw people down there
FIREPLACE/TV AREA	Design Element	Purpose
Décor: elements	need to do element test first	*for Katie – wood and fire * for Rachel – * for Finn- * for husband
Seating - type	Bean bag for Rachel, couch for Finn to sit with parents, parents ok sitting on couch or need single chairs for some personal space? Use grey sofa because big enough for inhabitants to sit together	Spot for each family member so they feel their space; space to cuddle, read together
Seating - where	Gather around fire	Stirs primeval feelings of gathering and joy of storytelling
Seating - type	Flexible seating	For functionality and to suggest fluidity as life changes and flows
Rug	Separate than craft/fort area	Designate new space
Flow	Placement of furniture allows for obvious and easy flow, especially flow from door to door	Energy flow in space used by so many people and so many uses very important
Décor - color	White walls, accents in color, quite furnishings, nothing extra	The people and activities will be the energy, space should be calm backdrop for that

Décor Materials/texture	not wall to wall carpet, sofa fabric easy to clean, not fabric coffee table	*support priority of functional and authentic to the way they really live - Easy to keep clean and comfortable for use *textures to stimulate sensory experience * Reinforce connection to natural world
Stair wall, stairs, fireplace wall (E, SE, S)	Reclaimed wood hearth and wood end table, + houseplants + rectangular shapes + browns and green – TILE with these colors?	*In E, SE, S most important for WOOD element in Feng Shui. (all elements should be represented esp. in family areas). For natural growth and vibrant health. * reclaimed wood gives feeling of permanence * they have always lived here, use materials that have too as connection to past/ancestors and universe/nature
Window by fireplace, seating area (S/SW)	Orange, red, bold yellow, purple and pink accent colors in couch area. Fireplace perfectly placed. Angular shapes, stars.	In S/SW most important for FIRE element in Feng Shui. (all elements should be represented esp. in family areas). This especially important for this family. Represents energy, passion, change, creativity.
Mudroom, whole kid area + pathway between stairs and back door (MAIN PATH IN and OUT of HOUSE) (NE, NW, SW, W, Center)	Stone, crystal, terracotta, concrete floor (center!) floor!!! Square shapes, light yellow, light brown	In NE/NW/SW/W most important for EARTH element in Feng Shui. (all elements should be represented esp. in family areas). Benefits nourishment, knowledge and stability.
Mudroom entry, kid wall, fort, craft storage area (N, W, NW)	Round shapes, white, grey, things made of metal (picture frames, vases, ottoman/small table)	In N, W, NW most important for METAL element in Feng Shui. (all elements should be represented esp. in family areas). Benefits strength, focus and independence.
Stair wall and built-in separator (N, E, and NE)	Water, mirrors, fluid shapes, blue black – chalkboard paint OR blue on these walls in den	In N, E and most important for WATER element in Feng Shui. (all elements should be represented esp. in family areas) Benefits wealth abundance fluidity.
Throughout	Pictures of them with family smiling?? Games they played or things they did that was fun? Something to remind them of good times?	*Family relationships are stuck in a pattern, she wants to be about fun, gratefulness, positive, hope
Middle of windows (family area of Bagua in this room)	Paper chandelier – move chi instead of it rushing out window! WHAT ELSE? Bells – dispels stake chi	*Most imp Feng Shui area to unstick chi *Family relationships are stuck in a pattern, she wants change

		* Need to MOVE chi here but not too fast
TV	Paint wall black so Tv disappears when off and place where don't see it from any entry	To take attention away from TV
FORT and KID SPECIFIC AREAs	Design Element	Purpose
Décor: elements	need to do element test first	* for Finn- * for husband
Décor - color	Background quiet (white), colors vibrant and kid created. Chalkboard wall, their art.	* Supports personalities, energy. * bright colors animate and inspire creativity * area should not dampen their spirit, should be where free to discover own taste
Décor Materials/texture	* Waxed cotton on seats * not wall to wall carpet * SOFT rug so can get on floor to play * variety of textures * biophilic elements	*support priority of functional and authentic to the way they really live - Easy to keep clean and comfortable for use *textures to stimulate sensory experience * Reinforce connection to natural world
Décor - wall	Very little décor, Chalkboard wall	Make it theirs – so they can make the art. Plus, homeowner responded to this look in Pinterest. *Let them be creative and colorful in their creations and play * also keep quiet since they will bring the energy
Shelves for books	Accent color indigo	Good for introspection
Craft and Toy Storage	Out of sight. Lots of places to put things away, make clean up easy. Flexible: Storage not be specific activity.	*Teach good habits and sense of ownership *Mom says if open to above needs to look neat * Rachel says likes things organized but doesn't like to do the organizing – make it easy – place for everything. * allows for growth and change in activities they like to do
Function: Fort	Fort has elements that reflex both kids on both levels, Use BLUE (everyone loves), masc. and fem	* Supports authenticity and function * kids are emerging beings * allow for growth and change in who and how it is used.
Function: all kid areas	FLEXIBLE: Kid play, craft, read be with friends. Stock with creative tools. No desk specifically – instead do crafts where ever works	* Supports authenticity and function * kids are emerging beings * allow for growth and change in who and how it is used.

	depending on craft (table, fort, floor).	
Flow	Placement of furniture allows for obvious and easy flow, especially flow from door to door	Energy flow in space used by so many people and so many uses very important
Table	Quite design	Good backdrop for whatever takes place there, flexible use, good for family connection (games, making things, facing each other)
Table	Round	chi and activities can flow around it
Rug	Separate than seating area rug	Designate new space
Lower fort (refuge)	Heavy elements, iron, solid wood, spray with lemon/lavender, other spray? RED	Creating space to support 1st chakra, and for introvert to get away. Make this a grounding place – for son when needs it or introvert daughter when needs to recharge (color red, responds to smell)
Upper fort (prospect)	Décor supports 5 th chakra, Chimes, blue as accent. And for extrovert/connection with others – prospect	Support 5 th chakra through, and for extravert to get away. (color blue, responds to sound)
LAUNDRY and BATHROOM	Design Element	Purpose
Laundry	Wood wall? Counter?? Wood elements (especially raw wood), + houseplants + rectangular shapes + browns and green	In E, SE, S most important for WOOD element in Feng Shui. (all elements should be represented esp. in family areas). For natural growth and vibrant health.
Laundry and Bathroom (N, E, and NE)	Water, mirrors, fluid shapes, blue black – chalkboard paint OR blue on these walls in den	In N, E and most important for WATER element in Feng Shui. (all elements should be represented esp. in family areas) Benefits wealth abundance fluidity.
Bathroom (NE, NW, SW, W, Center)	TILE and Stone floor??? Stone, crystal, terracotta, concrete Square shapes, light yellow, light brown	In NE/NW/SW/W most important for EARTH element in Feng Shui. (all elements should be represented esp. in family areas). Benefits nourishment, knowledge and stability.
Laundry	Purple, orange + appropriate sensory experiences ALSO water and sky	* Mostly used by Mom right now, use as space to support her needs (2 nd – orange, water, flow + what sense? and 7 th chakra – purple sky, universe + what sense?) *
Laundry	Pictures of them with family smiling?? Games they played or things they did that was fun? Something to	* Mostly used by Mom right now, use as space to support her needs *Family relationships are stuck in a pattern,

	remind them of good times?	she wants to be about fun, gratefulness, positive, hope
Laundry	Use wood, fiery colors??	*Support elements FIRE and WOOD for Katie