The Sociology of the Home An Autoethnography that Explores House Building in Rural Sandanezwe

Oliver Hayward

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The Sociology of the Home
An Autoethnography that Explores House Building in Rural Sandanezwe

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School for International Training
Fall 2014: Community Health and Social Policy
# TABLE OF CONTENTS

Acknowledgements ........................................................................................................... 2  
Abstract ............................................................................................................................. 3  
Introduction ....................................................................................................................... 4  
Initial Research Question ............................................................................................... 7  
Final Research Question ............................................................................................... 9  
Context ............................................................................................................................ 11  
Literature Review .......................................................................................................... 15  
Methodology ................................................................................................................... 20  
  - Initial Engagement .................................................................................................... 21  
  - Immersion .............................................................................................................. 21  
  - Incubation .............................................................................................................. 23  
  - Illumination ........................................................................................................... 24  
  - Explication ............................................................................................................ 24  
  - Creative Synthesis ................................................................................................. 24  
Ethics .................................................................................................................................. 26  
Prologue .......................................................................................................................... 27  
Chapter 1: The Descent ............................................................................................... 28  
Chapter 2: Hubris .......................................................................................................... 30  
  - The Cracks Begin to Form ..................................................................................... 31  
  - The Fall ................................................................................................................. 34  
Chapter 3: That Boy is Getting Lost in the Mist ........................................................... 37  
Chapter 4: Architectural Findings ............................................................................. 40  
  - The Pattern Language .......................................................................................... 40  
  - Building Materials ............................................................................................... 42  
  - Home Organization ............................................................................................. 44  
  - Cultural Styles of Housing .................................................................................. 45  
  - Construction Methods ......................................................................................... 48  
Chapter 5: Letting Go ................................................................................................. 50  
Chapter 6: The State of Sandanezwe Houses .............................................................. 54  
Conclusion ...................................................................................................................... 59  
References ..................................................................................................................... 62  
Appendices ..................................................................................................................... 65  
  - Appendix I. Map .................................................................................................... 65  
  - Appendix II: Figures .............................................................................................. 66  
  - Appendix III: Participant Drawings ...................................................................... 80  
  - Appendix IV: Personal Drawings .......................................................................... 83  
  - Appendix V: IRB Form .......................................................................................... 88  
  - Appendix VI: Example of Consent Form ............................................................. 89
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ABSTRACT

This project took me to Sandanezwe, KwaZulu-Natal, a rural village outside of Pietermaritzburg, South Africa, where a community member, Mpume Khanyezi, had originally asked me to design and build a new home for her family. I intended to engage in a heuristic inquiry so that I could complete a daily practice of letting go of my own opinions and immersing myself in the community in order to better act as a scribe for the mother and analyze the community objectively. I attempted to gather qualitative data through interviews, active participation, direct observations with village members and building parties. Ultimately, my aim was to understand the influences of culture, socio-economic conditions and the environment on the house. In the end, my house design was not realized due to miscommunication and uncontrollable circumstances. I found that the houses here reflect the simple and imperfect aspects of the surrounding environment and largely demonstrate the culture inherent of these predominantly Zulu tribes people. This experience helped me to realize that houses here simply represent a means to an end and it is the relationships within that matter. The level of humility that I observed in the houses held a mirror up to my own life, and pushed me further toward my own personal growth. I came to South Africa, and more specifically Sandanezwe, in order to break down my paradigms and to learn.
I. INTRODUCTION

With the sun beaming directly overhead, a small egg-shaped shadow appears suddenly as the topography of gravel roads and concrete sidewalks gives rise to the grass fields and dirt paths of the Durban Botanic Gardens. The shadow loses no speed as it flutters over patches of green, dodging tree roots and blatantly disregarding the walkways. The shape gradually develops, becoming more vivid as it dons two dark wing figures on either side, a long tail extension in the back and a small beak in the front. A thick line bisects the beak shape, pinned back as the shadow crosses onto the water of the pond. Its trajectory remains fixed for the larger shade of an old tree, its bent branches radiating from a small island of reeds. Coming closer, the shadow mutates, forcing two feet to lurch forward just as it disappears amidst the dark complexion of the tree.

I witnessed this subtle arrival from a nearby wooden bench, my eyes following the owner of the shadow, a southern masked weaver bird, native to South Africa. In hindsight, I attribute much of my recent education of life and of architecture to this little avian species. The bird had been spending a great deal of time selecting the right blade of grass for his nest, a strong fibrous specimen that could bend and twist freely. Only after meticulously searching and carefully constructing, this young bachelor could begin the mating calls, luring a desirable female to witness his worth, physically represented by a green woven spherical nest with a small opening at the bottom. Surviving harsh winds without falling into the waters below, the nest could now be put to the final test as the key to sexual reproduction. With open doors to the judgment of a female, the newly built structure could either house the next generation of master builders, or be rejected, forcing the male to destroy the nest (Oschadleus, 2007). The destruction would send a
shadow back across the pond, where the rejected nest would sit quietly and decay, rocking against the shoreline.

A tumultuous history had brought me to gaze upward at this old tree. After a dismal career as a university biology student, I came to South Africa in hopes of finding my calling in life away from the daily comforts and luxuries that prevented me from seeing the world the way I do now. The cutthroat academic obstacles of my college had worn down my ego, slowly closing the door to medical school as if they knew that I had chosen a prestigious, yet incompatible school in pride to study a subject my family expected of me. In the middle of overwhelming premedical schoolwork, I decided to shed my Bachelor of Science degree in biology to save my grade point average with a Bachelor of Arts degree in health and humanity. I told myself that I never used to play doctor as a child, but had been engaging in something much more fulfilling. Doubting my accomplishments of the past few years in school, I remembered my childhood love of building with LEGO's and designing houses on the SIMS computer game. Engaging in architecture was the time where I was not concerned with the world passing by. Even though I stressed about how everyone would perceive me, I knew that this path would make me feel most free and alive. So, in addition to my degree change, I picked up a minor in architecture and began exploring the relationship between humankind and its built environment.

I ended up sitting on that wooden bench that day in retreat from the daily research and lectures on community health and social policy as part of the School for International Training. The classes kept reminding me of the part of my life that I was giving up. It was a reminder that I was losing my medical emphasis. It was the bustling life of this old tree in the garden, a vertical neighborhood of nests dropping from the ends of the branches, however, that took my mind off the failure. I was completely preoccupied with this purely natural demonstration of architecture,
where birds were learning from observation and instinct to manipulate the environment to fit their need for reproduction. Only by designing the most appropriate nest could a weaver bird ever hope of passing on its genetic code. Sitting and watching, I realized that I was foregoing research on health and medicine to receive a very special lecture on biology, immersing myself fully.

It was then that I realized that although these birds were all generally using the same materials and following the same style of architecture, females still chose one over another. Maybe these females were unknowingly attracted to a particular nest based on its shape, its smell, or its style of threading or the male’s attention to padding on the base. It was the relationship between the male bird and his nest, in a way that the nest stood as a physical representation of what makes that weaver bird stand out in the neighborhood. That nest, in turn, activated a very natural part of the female, enough to elicit a response that would allow her to trust the nest to protect her offspring. The nests were so simple, and exact in their focus resolve all the forces that were acting upon them. It was a meticulously careful, yet natural process that stunned me.
II. INITIAL RESEARCH QUESTION

I took to South Africa in order to investigate this architectural interest. Instead of analyzing large-scale architectural monuments and structures, I looked toward impoverished regions in order to tackle my own perceived issue of informal housing programs and rural homes. I was much more swayed by the makeshift “slum” houses in a ravine in Cato Manor than the colossal Moses Mabhida World Cup Stadium downtown. Thus, in the midst of clinic visits and health lectures, I decided that I wanted to devote my Independent Study Project to designing a mass producible structure that could remedy slums by offering a cheap, aesthetically pleasing, utilitarian solution. I wanted to help people, and I saw this ‘idealistic’ house as a way to bring money and attention to the poorest housing settlements to change the face of poverty in South Africa. I wanted the houses to don the history of the country, taking into consideration Zulu and African ideals of beauty and methods of construction as well as paying homage to the previous style of the “slum” house. Even though I worked in a rural and impoverished area for my Independent Study, my ambitious dream conjured by this narrow paradigm was never realized.

It was a resident of the rural village of Nzinga who convinced me to focus elsewhere. S’bu Kunene, house electrician and father, opposed my idea that people living within these informal settlements were looking for a better house. He noted that these individuals build these temporary shelters illegally on private property because they only temporarily work in the city (Kunene, 2014). They send money to rural areas benefitting their families and long term homes. They wish to save the little money that they receive, not spend it on a house that the government will inevitably evict them from (Kunene, 2014). Even on public land, and for people residing permanently, this idealistic house would be too expensive for these individuals. S’bu also noted that people often do not mind the conditions of their house. Slum houses strictly represent a
means to an end. They place higher emphasis on the relationships with people than the materialism of a house. The only buildings that should be improved are their homes in the rural villages, a symbol of family legacy built from generations of family contributions (Kunene, 2014).
III. FINAL RESEARCH QUESTION

S'bu insisted that if I wanted to analyze any architecture, I must work on houses in the countryside. In isolation the houses there have been built upon the foundation of family history and exclusively influenced by the direct environment, the community culture, local building methods, and the ideals of the family (Kunene, 2014). Building designs are spread throughout the community by physical example and word of mouth. As Professor Gqaleni noted, “Indigenous Knowledge is the information that people in a given community, based on experience and adaptation to a local culture and environment, have developed over time, and continue to develop” (2014). Local workers contribute their skills to the project and produce buildings that satisfy the needs of the family and demonstrate an example of regional architecture (Kunene, 2014). Within a close-knit village house building is a community project. Like a community barn raising, these processes infuse the material structure with a deeper sense of place, love and effort. Largely, the only outside influences exist as money sent home from the city and building material innovations and techniques (Kunene, 2014). Ultimately, houses not only document the history of the area, but evolve with the development of the village. This idea was the starting point of an extremely difficult independent study project.

The village of Sandanezwe opened up the gates for me to practice architecture in a real world setting. South west of the city of Pietermaritzburg, KwaZulu-Natal, South Africa, Sandanezwe is a predominantly Zulu territory, quite isolated from the outside world (Map 1). During my initial rural homestay in this village, my host mother, Mama Mpume described an eighty square meter plot of land that had recently been allocated as the site for a new house on her property. Understanding that she was accommodating an architecture student from the United States, Mpume enthusiastically asked me if I would like to draw the plans for the house.
Without a thought, I accepted the offer and spent the rest of the homestay confident that this dream would fulfill everything that the study of medicine had failed to do for me.

With my intention to design this house, my main research questions was, How was culture, socio-economic condition, and the environment reflected in the houses of Sandanezwe, and how did a personal self-impact the construction of their home? I aimed to analyze qualitatively how the home of one member of the Sandanezwe community embodies its surroundings and affirms the resident’s perception of self. I saw this opportunity as a way for me to capture the simple beauty of the weaver bird nest in a humble dwelling, a construction that recognized the external forces at work and attempted to reconcile each one with a limited amount of resources. My aims were to actively participate in the community and interview local members and construction workers. I hoped to submerge into the daily life of Sandanezwe, understanding the community factors that played into the design of her house, ones that satisfied her practical needs and preferences. I wanted to design a house that would explore the sociology of the community, but also work to offer ways in which the house may better reflect the mother's desires and needs. This project would be a practice in building a house comprised of physical materials as well as the intangible elements that influence the home's development. In this regard, I would also need to research the ways in which rural builders construct houses. Ultimately, I hoped to take part in producing a home that existed as a fusion of the mother's wishes and my own architectural knowledge, but stands as an important means to coming closer to the more important values of family and friendship. The true beauty of the home exists as a physical representation of the community’s efforts and the family’s perception of self. I hoped to contribute newfound findings on Sandanezwe to the present academia on African architecture.
IV. CONTEXT

Based on my own initial observations and the opportunity to design, Sandanezwe stood as a suitable site for my project and a physical example of the countryside community that S’bu mentioned. Approximately twenty eight kilometers along a crude rock road from Donnybrook, the nearest commercial center, Sandanezwe is a recognized rural settlement of the Ingwe Municipality of KwaZulu-Natal (Mthembu, N., 2014). Encroaching colonialism and neighboring war conflicts of the early 20th century had pushed several coastal Zulu tribes people into the hidden hills of Sandanezwe (Jijane, 2014). There, the chief of the region granted the new arrivals the opportunity to buy land and build their own houses. From then on, the village has continued to grow, mainly occupied by the extended descendants of only a few Zulu families, such as Mthembu and Sithole for example (Jijane, 2014).

Nestled amidst a mountainous landscape beside the Kwasibihu River, the village is organized around the main roads, with several dirt paths and smaller roads branching off. Houses are typically built on the side of the hills, where goats, sheep, and cows can graze freely (Figure 1). Major public facilities have been provided by government, contractors, religious groups and development institutions, mainly road works, primary and secondary schools, Sandanezwe clinic, a tribal court, a public events hall, and several western churches. The village received electricity in 2013, but still does not have an official plumbing system (Jijane, 2014). Most families receive water from the small dirt reservoirs, known as boreholes, or from collecting tanks perched on the hills. As a result of the isolated nature of the settlement and the relative absence of private cars, citizens, particularly younger citizens, must often take a two hour public minibus transport to work in the village of Ixopo, or take further transport to the nearest major city of Pietermaritzburg, or even to Durban four hours away. Most families live in poverty, often
unemployed. Their income is predominantly from farming on their own familial lands, supplemented by family members working in the cities. Most people in the area follow traditional culture, engaging in such practices as *lobola*, healing with a sangoma, and ancestor worships (Mthembu, N., 2014). Many villagers are also members of western churches, such as Roman Catholic and Baptist. On a weekly basis, members can attend *shembe*, or the traditional African church, on Saturdays, and attend a Christian church on Sunday (Mthembu, S., 2014). Despite the hardships, Sandanezwe is surrounded by nature, with many open fields, forests, waterways, and mountains.

With the actual opportunity to take part in the building process of someone's home, this village would allow me to thoroughly participate in my study aims. Located outside of the National Home Builder’s Registration Council area of influence, village members have full freedom in designing houses without any needed approval and therefore create houses that best suit their needs within their financial constraints. With the direction of motivational speaker and Sandanezwe coordinator M'duduzi Jijane, I was able to integrate into the community and meet individuals who shared their perceptions of the home and building methods in place to actualize that structure. The beautiful natural scenery would allow me a peaceful place to meditate and immerse in the daily life of a Sandanezwe community member.

Before embarking on my Independent Study Project, I was able to collect key data regarding the environment of the site and the basic desires of Mama Mpume. Carved out of a hill in the Sandanezwe catchment, the family's property consists of one L-shaped house, two rondavels (round huts), an outhouse, all painted a spiced peach color, and a crop field all surrounded by a barbed wire fence (Figure 2). A long dirt path leads up to the property gate. All of the houses face northeast, looking toward houses on the opposite hill. Tall dark green trees
and an open sky frame the skyline of hills and mountains beyond. A main tar road separates the two hillsides, with several makeshift paths leading to other properties and gardens. On Mpume's property, an eight by ten meter site stands between the two rondavels as the foundation of the previous home, a plane of dirt surrounded by a three centimeter high perimeter of the remains of forced slab mud brick (Figure 3). This marked the area in which the new home would be built, the one I had planned to build. The proposed house would also face northeast along its longer ten meter side and don a pink, or “spiced peach” complexion (Khanyezi, 2014). Two meters to the southwest, the property ends with a three meter wall of dirt, left behind from when the property was carved out of the hill. Uphill, a forest blocks out the view of the hill's summit. To the northeast, a four meter front yard of dirt runs along the length of the property, extended by the destroyed forced slab bricks of the old home, eventually spilling over into the crop field below. When facing the house, the sun would rise over the front left corner of the house in the morning and shed light over the back right corner in the afternoon. A peach tree and the adjacent rondavel two meters to the left will provide shade in the morning, with another rondavel blocking sunlight two meters to the right.

Over my initial four day stay in Sandanzezwe, I learned that the family needs a one-story cubic house with two bedrooms, one sitting room and a kitchen. This new house would act as the main area of activity for her family, consisting not only of her two sons, but also of her boyfriend and the extended family which visits frequently. In preparation, Mpume purchased 1,200 concrete bricks from a local brickmaker and a pile of rusted corrugated steel sheets from the old house. She claimed that the previous building was leaking and cracked (Khanyezi, 2014). Without a developed plumbing system, a bathroom was obsolete. Mama Mpume also expressed
interest in a hipped or gabled roof, one that will allow rain to slide off the sides (Khanyezi, 2014).

In my preliminary research, I met with an architect for the South Africa Human Settlement Project, currently residing in Durban. A university graduate, Buaa Makhathini designs houses for the government built in urban areas around KwaZulu-Natal. He noted that all buildings must be designed in accordance with the Home Building Manual of the National Home Builders Registration Council (NHBRC). Fortunately, the rural Sandanezwe Community rests outside this radius, allowing me full freedom to build a house without waiting several months for approval (Makhathini, 2014). Even though his collection of Human Settlement houses were restricted by the NHBRC, Buaa did give me several working blueprints of houses within the eight by ten perimeter that could safely shelter a family of four (Figure 4).
V. LITERATURE REVIEW

Even though there is a lack of qualitative research investigating the effects of rural architecture on a population, I was able to gain access to literature regarding Zulu architecture, notably Dumisani Mhlaba’s thesis, *The Indigenous Architecture of KwaZulu-Natal in the 20th century*. Other articles relate to the important connection between humankind and its built environment, notably the South African Bill of Rights, Maslow’s Hierarchy of Human Needs, Max-Neef’s Model on House Development, and Alain de Botton’s book *Architecture of Happiness*. Lastly, I attempted to engage in the instruction manual of National Home Builders Registration Council drafts and Johan van Lengen’s *The Barefoot Architect*.

Dumisani Mhlaba’s thesis for the Built Environment’s Department of the University of KwaZulu-Natal describes his investigation and observation of several rural homesteads across the province, collecting background information of the amaZulu tribe and the cultural influences of the architecture of a collection of homesteads. Successive overlap between my observations and Mhlaba’s observations have been left out of the Literature Review section and included in the Findings narrative.

Based on evidence of settlement structure and language similarities, the Zulu tribe finds roots in the nomadic abeNguni people who drifted south along the eastern coast in the 13th century (Mhlaba, 2009, page 24). The Zulu Kingdom successively emerged through the collectivization of five clans in the region by King Mnguni, further defined and consolidated by King Zulu in the 17th century (Mhlaba, 2009, page 24). In the 18th century, efforts by King Shaka to engulf all of Southern Africa through conquest and peaceful acquisition ended with his assassination, with his last words, “You will never rule this nation, it will be ruled by the birds of the sky” (Msimang, 1982). In reference to European settlers, Shaka predicted the present state of
KwaZulu-Natal, a province of diversity with a history of racial tension. He states that Zulu architecture has been historically neglected from the contemporary architecture by colonialism and apartheid, and has only made an appearance in urban life after the institution of democracy as a “catalyst for tourist trade and a showcase of economic and racial class” (Mhlaba, 2009, page 1). As Mhlaba strives extensively to emphasize that culture, especially that of the Zulu tribe, is “a living phenomenon that evolves over time” (2009, page 25), he notes that current Zulu building methods continue to evolve and have ironically survived due to this European influence with greater access to western styles and building materials, especially concrete blocks, glass and corrugated iron sheeting (Mhlaba, 2009, page 151).

Further, Mhlaba argues that the Zulu homestead, or individual private property, bears witness to the idea of vernacular architecture, when he references writer Paul Oliver (1997), “architectural concepts and construction techniques that germinate locally, and evolve as a response to environmental factors, social circumstances and external influences” (2009, page 15). In this way, Zulu tribal villages have slowly developed their own interpretation of how buildings are designed in KwaZulu-Natal without acknowledging an overarching style of the tribe throughout the province. In his findings, Mhlaba notes the subtle and dramatic changes between rural dwellings of different settlements throughout eastern South Africa, and compares it to the forces at work, which may have attributed to those changes. Ultimately, Mhlaba calls for modern architecture to understand that, as Laurier (1997) writes, “all the important lessons of architecture were inherently present in ‘the humble hut’” and to incorporate African style into the present building language without accentuating its features for the purposes of tourism and poverty identification (2009, page 151).
Other articles aim to denote the importance of the house to the individual and the connection that exists between shelter and humanity. According to Section 24 of the Bill of Rights of the South African Constitution, “Everyone has the right - (a) to an environment that is not harmful to their health or well-being” (SA Bill of Rights). Based on my observations of rural houses, I have come to the conclusion that several of these building are indeed sufficient in providing adequate shelter, but do not take into consideration the overall comfort of the resident. Even though the South Africa Human Settlement Project employs architects to design small houses that can be built across the country, these designs are drawn based on mass production capability and utility, and are often comprised of cheap materials that emit no character into the house (Makhathini, 2014). Without much concern for sustainability, these buildings often leak, constrain the resident, crack over time, and often do not take into consideration the influence of the community or the environment.

There are also several literature reports discussing the correlation of a resident’s wellbeing with the architecture of one’s house. Maslow’s Hierarchy of Human Needs dictates the imperatives of shelter as a fundamental need in allowing a community to operate effectively. Abraham Maslow asserts that in order for individuals to achieve a level of self-actualization, the physiological, safety, belongingness and esteem needs must be met (Huit, 2007). Shelter is a physiological and security need, but must not be designed in such a way as to block other basic needs, notably bodily comforts and safety from health hazards. Members of the community can be able to affiliate into the village, feel achievement, realize one’s own potential and help others to do the same when they are placed in an environment that works to uplift the individual (Huit, 2007).
In an opposing view of Maslow’s interpretation of human needs, theorist Manfred Max-Neef offers that shelter itself is not a need, but an element, whereby the act of living in a suitable shelter satisfies and actualizes certain human needs that are uniform across cultures, particularly protection and basic physiological needs, but also the underlying needs of motivation, rest, self, beauty, and development (Murray et al., 2005, page 5). The theory argues that “a view of human needs that is not based on some imagined hierarchy of needs respects people’s need to express themselves aesthetically or to align or differentiate themselves from certain traditions” (Murray et al., 2005, page 6). In a University of Pretoria analysis of the application of the Max-Neef theory, investigators highlight the importance of the household, noting that “there is only one social institution that - on a significant scale - continuously takes care of orphans, the jobless, the sick, the elderly, and all those in need- … not governments, development institutions or even churches, but the family” (Murray et al., 2005, page 5). The physical features of the site and dwelling actively and continuously take part in affecting the quality of life of the resident.

According to architect Christopher Alexander, in *The Timeless Way of Building*,

> The fact is that the difference between a good building and a bad building, between a good town and a bad town, is not an objective matter. It is the difference between health and sickness, wholeness and divided-ness, self-maintenance and self-destruction. In a world which is healthy, whole, alive and self-maintaining, people themselves can be alive and self-creating. In a world which is unwhole and self-destroying, people cannot be alive: they will inevitably themselves be self-destroying and miserable (1979, p. 25).

Changes in the structure and design of a home can greatly impact the psychological status of the resident and in turn bring the entire community closer to a level of happiness. Alain de Botton, in his book, *Architecture of Happiness*, reaffirms this idea when he writes, “We need a home in the psychological sense as much as we need one in the physical...We need our rooms to align us to desirable versions of ourselves and to keep alive the important, evanescent sides of us” (2006, p.
The beauty of a house and its individual rooms exists in that it allows the individual to come to peace with his or her present condition.

Lastly, I attribute much of my initial understanding of rural homebuilding to the recommendations of Johan van Lengen’s *The Barefoot Architect: A Handbook on Green Building*. This building manual provided a wealth of ways to make a rural home more durable and efficient in temperate environments. For example, van Lengen explains that “emotions change your body temperature. In cold regions, give rooms a warm glow by painting them orange, yellow or ochre” (van Lengen, 2008, page 293). He includes the minimum 11° angle for roof pitches to operate effectively during storms, that foundations should extend 20-40 centimeters above ground level, and the formula that the width of doors and windows should take up no more than half of the walls of the house (van Lengen, 2008, page 329). In all aspects of construction, the manual provides education on proper building methods and ways to maximize the utility and appeal of a house built from limited resources. Much of my design process attempted to incorporate several of these musings, and see if builders in Sandanezwe engaged the same knowledge. I hoped to at least offer advice on how to build simply and effectively with these pieces of information.
VI. METHODOLOGY

Even though the focus of the project was on architecture within Sandanezwe, I initially decided to undergo a process of looking inward in order to better realize the desires of the population, pay attention to the architect-client relationship and gauge my own opinions against the experiences of the Sandanezwe community. Most importantly, however, I was trying to focus on finding meaning in my own life, and investigating answers of how to live happily and wholly. This form of “action research” demands an engagement in an unknown situation, forcing one to rely on participation and intuition in order to make meaning of not only an academic pursuit, but of life (Reason et al, 2001, page 290). Using the words of Seeley & Reason, I felt that the “messy, rich, direct experience where we are a part of our complex, creative planet is the grounding for all our other ways to knowing (whether we like it or not)” (2008, page 296). Even though Sandanezwe is nestled amongst nature, I realized that I would be experiencing a difficult existence, full of manual labor, restricted resources, and long travel distances. The unknown environment would heighten my awareness of the subtle elements of the experience as I would be more receptive to the inherent abnormalities of daily life.

I quickly chose heuristic inquiry as a suitable way to combine scholarly research with an engagement in my own personal concerns. In 2004, I was diagnosed with Obsessive Compulsive Disorder (OCD) and have been in a constant mental battle over controlling my environment and striving for perfection. Ironically, I hoped that through meticulously building a physical house in a rural community that I would be able to focus on these issues, and find the importance in letting go of these ideals. Amidst a community far removed from my own, I decided to constantly walk a path between exploring my self and the concept of other to effectively analyze my experiences in an unbiased way. Douglass & Moustakas identify the success of heuristic
inquiry in research when they write, “The validity of heuristic research is inherent, insofar as it pursues the truth, to the extent that it is conducted through authentic self-processes, and to the degree that after repeated examinations of the data, the same essences are revealed with the same degree of plausibility” (1985, p. 44). The process of a heuristic inquiry fits into my research study as it “is organized into six steps: Initial engagement, immersion, incubation, illumination, explication, and finally, creative synthesis” (Kenny, 2012, p.8).

6.1 INITIAL ENGAGEMENT

Initial engagement has been detailed in my Context section. In actuality, however, my initial engagement has been a continuous process. Be it walking through Cato Manor, driving through the countryside, or experiencing houses while on rural homestays, I found myself naturally observing house designs and format. Turning away from studies on HIV and AIDS, I decided that my interests were directing me toward fulfilling an Independent Study Project focusing on the interplay of architecture and the community.

6.2 IMMERSION

Immersion, the second step of the process, involves “a sense of total involvement in a research theme or question in such a way that the whole world is centered in it for a while” (Douglas & Moustakas, 1985, p. 47). Past cliff sides, carved dirt roads, and forests, Sandanezwe stands in separation from the outside world, in turn restricting me from easily accessing my daily comforts. Seeley & Reason refer to it as “sensuous encountering, or using all our ways of sensing to experience the world directly with a whole-body sense of curiosity and appreciation for the glorious mundane” (2008, page 7). Thus, I planned on immersing myself as an active member of the community, interacting with individuals who speak predominantly Zulu and taking part in the ordinary and daily customs in hopes of exploring the village fully.
In order to accurately design a house in tune with the mother and her family, I initially decided to take up residence in her rondavel next to the site of interest. By living next door, I would be able to visit the construction site with ease and engage deeper with the family. My close proximity would allow me to take part in the everyday chores and activities of the family, important in deciding which rooms the family will utilize the most.

Full immersion would continue with data collection, as I would engage in the building process and the architect-client relationship with Mpume. Even though the calculations and measurements of the home would be inherently quantitative, they would be derived from a qualitative data collection strategy. General observations and structured, but informal interviews with an interpreter would be conducted in order for me to accurately design a house that would encapsulate Mpume’s interests. At every step of the design process, I hoped to elicit her opinions and try to locate the environmental, cultural, and personal influences in her decision-making. Recording of notes, taking photographs and measuring would also play a role in my data collection strategy. On site, I would be engaging in convenience sampling, talking to and working with the individuals who have decided to assist in building the house. According to M’duduzi, the surrounding community consists of several hundred members of the same extended tribal families, allowing for an easy supply of contributors and help. Based on their aptitude in English and their level of involvement in the building process, I would determine who would be suitable candidates for an extended interview where I could gain information about how other members of the community perceive the concept of home.

As part of the process of immersing myself further in the design process and the community’s role in home building, I would also ask members of the community to simply draw a house that they would like to live in. I hoped these images would provide additional insight
into how individuals feel about their current living situation. I would also ask them to draw their idea of home, to see if these community members perceive family, friends or Sandanezwe itself as a more accurate depiction of what home really means for them. In order to capture a better snapshot of the community, I hoped to engage a full range of community members, young and old. This sample would be limited by members who are willing to talk with me, but I hoped that by delving into the community, I could extract a suitable range of participants. I hoped to use M’duduzi and other individuals to refer me to willing participants. I hoped that families would be cooperative, seeing a young university student eager to learn about their culture and architecture and talk to them about their house alongside a local interpreter. I saw my data collection strategy as a way to fully immerse myself and document the community through my own eyes.

6.3 INCUBATION

Reflecting on my findings would effectively assist in consolidating my thoughts and perceptions on my experiences. I would utilize the interviews, drawings, and observations in making meditative sketches of houses and house elements that speak to the village of Sandanezwe. From subtle wall trimmings to full-scale buildings, these drawings would give me the space to physically represent the aspects of community that I personally experienced. Using the basic tools of white paper and graphite pencil, I hoped to create simple images that would contain more detail in its meaning than in its appearance, and also would not demand a significant amount of time out of my long days on site and in the community. Chris Seeley reflects on her own architectural sketches of tiles when she writes, “The drawing doesn’t matter, as a product. What really mattered to me was that I felt ‘with’ this patch of floor for that time, offering it my full attention” (2007, p. 15) Daily drawings would effectively document my own progression through the three weeks, allowing me to make connections between myself and
others. In letting go of my own opinions in the discussion with Mpume, I needed to be able to immerse myself in these drawings in order to reignite my passion for the final house designs.

6.4 ILLUMINATION

Data analysis would stand as the process in which my interviews and experiences would take shape in the design of Mama Mpume’s house through the building process. I hoped to make several small realizations along the way that would allow the ideal house to come forth from the pile of concrete blocks, steel sheets, glass panes and cement mix. While working and living on Mpume’s property, I hoped to find personal illumination as I came closer to letting go of my OCD and allowing others to guide me on the process of home building.

6.5 EXPLICATION

Explication would physically take place in the interweaving of my findings into the final creation of the home. As each daily sketch would embody one or two learned concepts from my experience, the house would stand as the final combination of those ideas. This fifth step would force me to utilize the data I had analyzed in a way that could be represented physically. Through a partnership with Mpume and the community, a house would form that realized the African culture, the surrounding environment and the surrounding community, as well as take into consideration the financial and realistic constraints naturally in place in an architectural structure. This house would stand as a fusion of ideas, where I would be able to depart from Sandanezwe, leaving behind a symbol of my efforts and understanding of the village.

6.6 CREATIVE SYNTHESIS

In addition to the initial construction of the house, I originally hoped to compile my own experience into an architectural model of a Sandanezwe house. Because I would not be able to witness the end product of Mpume’s desires, I thought that constructing a small model of a
Sandanezwe house would be a suitable way for me to demonstrate my learning. The architectural drawings and the final design of the house, as well as the lessons I had learned in Sandanezwe would all be fused into an idealistic house, one that focused on a house for the community and not just on one single member. This design would fully embody the concept of home, and I hypothesized that it would connect the greater ideas of security, belongingness, and relationships. I believed that a true home uplifts the individual toward their full potential, one where they could integrate into the community, assist others and understand the true meaning of interpersonal relationships. I hoped that this model would document a change that occurred within me, as I, the individual who immersed himself in Sandanezwe, would be my own client.
VII. ETHICS

Throughout the three week period in Sandanezwe, I performed structured, yet informal interviews with ten members of the community. Even though I was interacting with general villagers on a subject that does not necessarily spark any discomfort, I made sure that I followed specific guidelines, just in case.

The participants of this study were based upon convenience sampling, primarily those individuals working on the construction sites. Through M’duduzi, I was placed in contact with other members of his family and employees of his garden. I talked mostly with individuals who spoke or understood English for the most part, which gave no indication of their financial status.

I prefaced those interviews by explaining that I was a university student from the United States eager to understand the perception of the home within Sandanezwe and the cultural influences that impact the way I house is built. In addition, I explained that I was interested in observing and participating in the construction of houses here in rural South Africa. I also asked for permission to take written notes on their comments. I made sure they knew that they could stop the interview at any point, and would not need to answer any questions that offended them.

At the conclusion of each conversation, I obtained verbal consent to use their names in my report (See Appendix for Example of Consent Form). I also told the participants that I would be upholding the security of their comments and would destroy the notebook at the end of my study.
VIII. PROLOGUE

Ultimately, it was sheer misfortune and circumstance that resulted in the initial goals of my Independent Study Project crumbling and slipping through my fingertips. My original methodology and plan met obstacle after obstacle until I finally stopped following a structured process altogether. In reality, the process of heuristic inquiry should never follow a clearly defined schedule and certainly cannot be accomplished within a three week time frame (Huit, 2007). Many of the six sections occur simultaneously or oscillate back and forth between sections.

I felt that, in light of the issues I could not control in Sandanezwe, my findings would be best described in a narrative. Even though I do dedicate a section to presenting my findings related to architectural patterns, I relay my personal development chronologically. It explains the initial disappointments in the experience, climaxing with a story of getting physically lost and submerging in Sandanezwe. From then on, I attempt to understand Sandanezwe architecture and my own personal development through the lens of Christopher Alexander’s *The Timeless Way of Building*. As a significant part of my experience, this book allowed me to view the village in a new way, one in which I could understand the elements of the homesteads here and how they may perceive succeed and fail in capturing Alexander’s idea of the ideal home.

The realizations of this new experience also uncovered new insight into my own life, where I found a creative synthesis inappropriate in the case of expediency. I spent more time working on letting go of my opinions in order for me to properly encase the meaning of the last three weeks into this report, and tried to understand a better way to live and perceive the world.
IX. CHAPTER 1: THE DESCENT

“There is an art of attending to the weather, to the route you take, to the landmarks along the way, to how if you turn around you can see how different the journey back looks from the journey out, to reading the sun and moon and stars to orient yourself, to the direction of running water, to the thousand things that make the wild a text to be read by the literate.”

Rebecca Solnit, A Field Guide to Getting Lost

A crudely made road of cracked stones and dirt buds right from the smooth gravel highway, cutting through a forest of tall eucalyptus trees. Only the pathway gives any indication of civilization beyond. A bulky white van makes it voyage into the unknown, shielding its passengers from the outside as orange dust kicks up onto its doors. Rain falls sharply against the ceiling and the road, sifting the dirt into mud as the landscape continues to grow thick forests and jagged cliff sides. The road mutates with the environment, oscillating up and down and twisting through the forest. The van skids as the tire treads fill with sticky orange mud. Farther out to the side, a cloud of moisture hangs stuck over the woodland canopy. The trees grow dark as the forest thickens, but the road continues, persisting to provide direction despite dropping into the wild. Down to the left, a waterfall can be seen throwing a quiet river off the edge, taking the landscape down with it, the trees clutching the flat rock cliffs on either side. Several kilometers of winding turns and sharp drops give first sight of human invasion, patches of brown scars in the green woods, littered with flat stumps and dying tree branches. A crumbling wall of an abandoned house stands testament to the continuance of nature over human life, as forests grow straight and steadily all around, ignoring the structure entirely.
Gradually, however, even the trees begin to assemble into grids, indicative of the lumber business’ need to domesticate nature for the lumber business. Passing by, one gets lost in gazing down the entire length of the gaps between the perfectly aligned trees flashing by like an old movie film. Behind, the hill side begins to lose density, replacing trees with cleared grassy farmland. The open spaces approach the road until the surrounded fences begin to run in line with the makeshift street. Cows graze in herds, set in the foreground of the domesticated forests. The road intersects infrequently with small streams, temporarily transforming into low concrete bridges to span the distance. A stray dog stands guard beside a corroded green street sign. Beyond, weeds and grasses stand crushed underneath piles of jagged stones to be used for road maintenance.

Suddenly, across the background of dark green and brown, a clothesline of vivid red shirts, blue dresses, white shorts, and yellow towels streams into view. A grass roof breaks the horizon of the small dirt cliff to the left, where the road had been cut into the landscape. Mud brick round huts and concrete cubic houses begin to take residence on the hillsides, fields of grass finally pushing the forest to the outskirts. People exist this far out, nonchalantly washing clothes, gathering by the roadside and continuing their current adventures. They stop to watch the van as it attempts to deliver its package to the heart of the village. Gradually, the van takes a right along a dirt driveway, coming to a complete stop. The side door opens and I enter the unknown, no longer protected by the van.
X. CHAPTER 2: HUBRIS

I was most prideful and confident in my ability to impact Sandanezwe on the drive into the village. Upon arrival, I learned that I would no longer be able to live next door to the construction site and be part of Mpume’s daily life. No definitive reason was ever presented, but it followed along the lines of financial expectations of families and a mysterious leak in the rondavel I was supposed to live in. This was the first indication that my plan was failing and the beginning of my frustration. I would alternatively need to take up residence in M’duduzi’s family house, a twenty minute walk from Mpume’s homestead. I was confident that I could still submerge in the life of a Sandanezwe citizen with this new family and understand what they would want and need in a house. Without control of my environment, I was having difficulty focusing fully on proposing a design of the house. The expectation of having my own bed in a rondavel where I could easily leave and sit on the construction site and meditate on my perfect house for Sandanezwe was met with a shared living accommodation a kilometer away.

For the first five days, I began to understand the realities of rural building and the inherent obstacles, predominantly rainfall, family commitments, and an overall slower culture. Even though it did not fit with my three week time constraint, I had to accept that wet mud meant that the builders could not work effectively. Even though I wanted to begin construction of Mpume’s house immediately, I woke up each of the first five days to torrential rain that kept people indoors and out of sight. Village members loved the rain for benefitting their crops and refilling their water sources, but the storms kept dragging me farther away from completing the house on time. On other days, members of building parties were forced to complete tasks that involved leaving Sandanezwe for the entire day. Regardless of the time it would take to directly handle those work engagements, emergencies, or mandatory activities, commute times would
encapsulate the entire day and often postpone the building of a house. Other obstacles included complications in the delivery of building materials and a lack of funds to complete certain parts of the house.

10.1 THE CRACKS BEGIN TO FORM

Additionally, my initial interview questions were met with confusion by the ten village members I interviewed. They could easily understand questions regarding the physical materials and building methods of the houses, but were unable to understand my deeper inquiries of how a house makes one feel and why my own perceived elements of a house would make the house beautiful. Many comments could be summarized as, ‘I don’t know, I just like it’ or ‘It is just my culture.’ It seemed like they had never thought about a house that way. My first few days were full of frustration as I could not accept that people may not be building houses in a way that allows them to express themselves and resolves all the conflicts in their lives. My first interviews with M’duduzi and his family concluded that people are just not educated enough to understand their environment and just ask builders to build their houses based on houses that are already present (Jijane, 2014). In a way, the citizens are the architects, asking the builders to fulfill their wishes. In visiting a relatively modern house in Sandanezwe, Getrude, M’duduzi’s grandmother, explained that people often want to demonstrate their wealth in their houses in competition with others (Mthembu, 2014). I was angry that people would build a certain way because they simply liked something without questioning why they liked those things and why they worked aesthetically.

When I asked members of the community to draw their own idea of home, I was met with illustrations that focused entirely on the physical building, with few actually detailing anything more than the house. For the most part, the activity was difficult for people to accomplish as
many claimed that they could not draw. I was hoping that other forces would be present in a village member’s idea of home, predominantly an item or location that was rich with meaning and significance. Some, however, did include other images in addition to the house, such as an image of a pet cat, or a surrounding garden. As a part of my process, these images have been included in Appendix II.

My frustration was temporarily alleviated when I remembered a rule created by renowned architect Louis Sullivan, which states that form follows function. Within a relatively impoverished area, the form of the building, though basic and uncomplicated, arises from its utility evident in the structural arrangement and the availability of resources. I felt that people here, however, do not receive the proper education to know what is best for them. Their houses are just realized from their minds based on their needs and do not necessarily demonstrate the personality of the individual. People just choose elements like color, because they like it, or because other houses are doing it. It was this frustration that clouded my observations, but would devastatingly lead me toward an ultimate life realization.

November 3rd held my confidence that Mpume would use my house design. After the morning rainfall ceased, I decided to walk to Mpume’s house with M’duduzi in order to present my finished design. I based it on my initial conversation with her in October, my current observations of Sandanezwe, a brief discussion with her the day before, but also my previous education on western architecture. My design process followed a progression of drawings, each one becoming more defined and concrete (Figure 5). The finished product consisted of two offset 8 meter by 5 meter rectangles, with the right rectangle extending out farther than the left. The front door would be positioned on that left side of the right rectangle. I felt that it would be nice for the entryway to be its own entity, making the house feel bigger as a visitor would not be able
to immediately grasp the layout of the house. From the hallway, one could see a back door, reminding the dweller of the house’s connection with the outside. To the left, two bedrooms would exist with doors opening at the corners. I thought dead space would be reduced in the bedrooms as the door would open towards the corner instead of into the middle of the room. I placed windows on two sides of the rooms to increase sunlight that would enter from the east. To reduce building costs, I used one wall to separate the two bedrooms. On the right side of the house, I placed the kitchen in the front, so that the morning sun would enter the window during breakfast. A half wall existed between the entryway and the kitchen, opening the house up and reducing the need for people to walk around a full wall to interact with the kitchen. In the kitchen, I included a door to the outside on the right perimeter wall. The sitting room extends from the kitchen to the back wall, featuring a window to the right by the door. The back wall would exist as a media center with a television and four small windows on the top, to allow some light to enter without having a view of the dirt perm in the back. I was extremely proud of my design as it included concepts that I had learned in school and demonstrated my architectural ability to the world.

On the day I arrived to visit Mpume, I was met by her boyfriend, Richard Mthembu, who was also going to be the house builder. With grey hairs, a muscled physique, and a carved smile, he seemed extremely happy to see me as he knew that I was a student from the United States, eager to learn about building methods in Sandanezwe. He knew some English so I felt confident in describing my design to him without an interpreter. I told him that I wanted to finish as much of the house as possible before I needed to leave, and he happily agreed, but recognized that working slowly and carefully is extremely important in home building. I still felt confident that
my house would be actualized and that subsequent interviews would reveal a deeper personal meaning behind why people design their built environments in certain ways.

10.2 THE FALL

I began to crash after November 7th, the first day of work on Mpume’s house. I brought Nomali, M’duduzi’s niece, with me to act as my interpreter. I arrived at Mpume’s house to see Richard setting up the perimeter of a house that in no way followed my own plan. With my design in hand, I rushed into the kitchen rondavel and asked Mpume what plan he was using. She told me that this was the design all along and that it had been drawn about a month ago. My heart sank. The drawing was a crudely sketched house that was the exact opposite of my final design. The house was just a square with a front door going directly into the sitting room on the left side. Instead of a back door in the middle of the wall, a pantry room had taken its place. A small archway design led to a small kitchen in the back, isolated by a wall. To the right, a small passageway separated the two bedrooms in the middle. I was frustrated that the house was not entirely taking into consideration some important environmental considerations, but most importantly I was furious because it was not my own. My nest had been overlooked and unappreciated by Mama Mpume. It seemed that the language barrier had misconstrued my intentions for me, not realizing that I was eager to design a house for her.

I walked onto the construction site and began asking question after question in order to understand why he was ignoring certain forces. He told me that the bedrooms were not going to receive morning sunlight from the east because the bedrooms should be placed on the outskirts of the homestead, with the sitting room and kitchen positioned in the middle next to the adjacent public rondavel. This way, the new bedrooms would be closest to the bedroom rondavel on the far right side. There is a passage between the two bedrooms to ensure privacy, despite the extra
building cost. One bedroom would be for Zakhele, the eldest son, and the other would be for Mpume and her boyfriend. It also helps to create a boundary between the bedrooms and the public areas. The sitting room is positioned in the front so that visitors would enter directly into a public area. The kitchen and pantry would sit in the back as less public areas. Smells from the kitchen would be contained by the wall. No windows would exist in the back at all. Even though it prevents the back bedroom and kitchen from having satisfying light from two sides, it would effectively keep cost down and reduce unsightly views. In my eyes, the builder designed the house based on another house that favored affordability and utility over design aesthetic and environmental concern.

Gutted, I helplessly watched the new house design become more permanent as he hammered stakes fashioned from nearby branches into the ground, setting the layout of the house. Using a fishing line to span the space between the stakes, Richard demarcated the boundaries of the rooms and used a pickaxe to trace the rooms in the dirt. As he began to use the pickaxe to dig the trenches for the foundation thirty to fifty centimeters down, I knew that my house design was officially obsolete. Amidst my frustration, I knew that I still needed to interview this man further. I found that he is an experienced builder and has built twenty houses and public buildings in Sandanezwe, Pietermaritzburg, Ofafa, Mahehle, and Saintfort (Mthembu, R, 2014). He learned the trade as an associate builder in Sandanezwe, referring to “labor, labor, labor” as the education process (Mthembu, R, 2014). He said that he builds because it is an active process where he can exercise his body and mind. He felt that most people in Sandanezwe are getting sick because they are unemployed and do not exercise. He is able to keep focused on one thing with building, letting go of the things that stress him by paying attention to the
measurements and keeping happy (Mthembu, R, 2014). Overly frustrated, I took his advice and began assisting him by digging the trenches mercilessly with a pickaxe.
XI. CHAPTER 3: THAT BOY IS GETTING LOST IN THE MIST

“One only needs be turned around once with his eyes shut in this world to be lost. ...Not till we are lost in other words not until we have lost the world, do we begin to find ourselves, and realize where we are and the infinite extent of our relations.”

Henry David Thoreau, Walden (1854).

After the work ended early for the day, another indicator of a relaxed culture, I visited the community garden that another student, Rebecca Murray, had been working in. Slingshot in hand, I walked through the garden, attempting to angrily fling rocks at birds and the occasional goat. Getrude was accompanying Rebecca and mentioned to her that, “that boy is getting lost in the mist” (Mthembu, 2014). I was overwhelmed by my independent study project. I felt that I was not finding the meaning within architecture in Sandanezwe from my interviews and that I would not be able to tell my friends and family that I had successfully foregone an opportunity to work in a rural hospital to build my very own house for a family in South Africa. I also left Mpume’s understanding that the house would not be completed until January of 2015.

I felt extremely stressed and desperately wanted to climb the nearby mountain, despite the ensuing rain and fog. I left Nomali on the road back to the house at 2:30pm and walked up the side of the mountain behind Mpume’s house with Rebecca. We climbed further up the rocks until we saw a path cutting through a slowly rising grass valley (Figure 6). The continuation of the path blurred with the mist. I confided in Rebecca my stress about the project, that I was not finding what I was looking for and that I would ultimately just be doing manual labor. I proceeded to discuss my personal failures with university premedical classes, and that I was
angry that I was perpetually placed in situations that led me to feel prideful and happy, only to be crushed by some unforeseen cause, destined to lose again and again.

As we walked along the path, we noticed that the path continued into a misty forest. I told Rebecca to hold a stick to keep safe from the pythons that occupy these forests. I told her to never stray from the path. I fearfully walked through the forest, eventually coming to an opening indicating the work of the lumber business. Burned and cut stumps dotted the area with yellow wild flowers sprouting from the rejected roots. Further on, we heard a loud banging up ahead and wood cracking. Scared, I ran into a pile of logs as a protective boundary as I watched Rebecca standing motionless on the path. I foolishly watched as three cows appear from the mist and run away.

We followed the path toward a small dirt road, and veered left. We walked along until we found a darker path leading out of the forest and back towards Sandanezwe through a grassy field. By now, the rain was falling heavily, soaking my rain jacket and filling my shoes with water. Down the hill we walked until the path ended. Disobeying my rule, Rebecca wanted to stray off the path in the direction of home. Confident that we were close to home, I agreed. I felt my stomach start to ache as we descended. We finally reached a large cliff where we could hear a waterfall. I stopped for a moment because my stomach was giving me extreme pain. We could not climb down so we continued to follow the cliffside to the left. Ultimately, we came upon a thick forest too thick to walk through. There, diarrhea stopped me in my tracks, and Rebecca started to panic that we would not make it home before nightfall. I decided to call Lucia and reassure everyone back at the house that we were fine. We decided to continue around the forest until we reached another grassy decline and could walk further down. We walked until we saw a large metal pipe cutting laterally across a hill rising up before us from the mist, which bothered
me because I thought it was just a straight shot down to Sandanezwe. By then, I was beginning to realize how far from home we were. As we approached, we noticed the source of Sandanezwe’s water and decided to call M’duduzi and ask for directions. Rebecca was now scared and completely out of her comfort zone. Every confident direction I took resulted in more confusion and a doubting of my own abilities. Eventually, a stressed M’duduzi agreed that we should follow the pipe and his nephews would try to meet us. We followed the pipe through the drenched forest, keeping to a steep and slippery mud path carved by cows. The forest finally cleared, but the pipe disappeared underground. I decided that we should just walk downhill. As we walked and mildly argued about the decisions we had made, we heard the cries of the nephews up ahead. Overjoyed, Rebecca ran toward them, all of us soaked and exhausted. We walked for another thirty minutes down the mountain, past gravel roads until the roofs of the rondavels appeared out of the fog. We arrived to find several members of the family waiting for us. I was proud that I was able to forget about my project for a moment, and utilized that anger in my determination to escape the mountain and persevere through the obstacles that continued to arise.
XII. CHAPTER 4: ARCHITECTURAL FINDINGS

12.1 THE PATTERN LANGUAGE

For the majority of the ensuing days, I was confined to my bed or to the pit latrine due to the onset of Giardia. It started with a tension headache, and escalated to a runny nose, aching muscles, extremely sensitive skin, vomiting, and painful diarrhea. I could feel fluids constantly rocking in my stomach, gas bubbling through the liquid, and occasional burps that smelled like rotten eggs, indicating that the discomfort would keep me up all night. I began to grow weaker as I could not muster up the appetite to eat the daily meals of rice, chicken curry, porridge, puthu, and steamed bread. On November 18th, I visited the clinic and received rehydration packets and Adco-Loramide for diarrhea. There, I learned that I had lost 7 kilograms. I had been taking indigestion medicine, hundreds of milligrams of aspirin, and flu medication beforehand and actually thought that they were working. That is the nature of Giardia; the symptoms come and go. Some mornings I would wake up and could cope with the upset stomach and diarrhea enough to perform interviews and work on site. Other days I could not pick myself out of bed, with no choice but to sleep, watch movies or read books.

My sickness allowed me the space to change my perspective on architecture in Sandanezwe. Too sick to consistently perform work, I used silent observation of houses and personal drawings to investigate houses. I have included several sketches of houses and homestead elements, which allowed me to remain focused on architecture, in Appendix III. I also decided to read a book that my professor Clive Bruzas had recommended to me in its entirety. Under discipline and humility, I opened Christopher Alexander’s 1979 novel entitled, The Timeless Way of Building. As a part of my process, this book provided me the lens that I would
use to perceive Sandanezwe architecture in a new light, and also provided significant musings that helped me analyze my own life and navigate the complexities of this report.

The book centers on the idea of a patterned language of architecture. In subsequent volumes, Alexander lists features of a house that elicit positive responses and are comprised of smaller elements assembled into a pattern that recognizes “all the forces which actually exist, and then finds a world in which these forces can slide past each other” (Alexander, 1979, page 304). He continues to explain that “the forces which are ignored do not go away. Sooner or later they erupt in violence: and the system which seems to win is then exposed to far more catastrophic dangers” (Alexander, 1979, page 304). The repetition and combination of patterns in houses of a particularly culture produce a language that can be articulated concretely. Alexander notes that each part of the world combines these patterns in different ways, based on local ways of doing things, and developed by a shared vision of the people. Like divergent evolution, the language develops locally and individually as each person has access to the same knowledge and can interpret it personally.

In text, Alexander describes the analogy of the oak tree. Much like a tree, a building style cannot be assembled, but must be grown gradually from a seed. The seed will most definitely produce an oak tree, but the tree will be differentiated from other oak trees by the particular external forces that act on it and the expression of its genetic code. In the same way, an individual’s building style will develop from a common architectural code, but will retain its own identity from the differences in environmental demands, socio economic concerns, and individual preferences. This is a demonstration of the interconnectedness of architecture and humanity across the planet, as all buildings exist as part of this pattern language.
Within Sandanezwe, I was able to apply these patterns into my observations and data collection. I recognized the vernacular architecture and indigenous knowledge that spanned the village, which demonstrated the collective sharing of a local language of building, while still allowing homesteads to develop with independence. Even though all the houses lie amidst a mountainous territory with clusters of evergreen medium thick indigenous forests, humid and rainy weather, river valleys, domestic scale livestock and crop farming, and a general underdeveloped economic scene, each property needed to adapt slightly to the different socio-economic conditions and particularly environmental factors. Even though I will attempt to demonstrate the existent architectural language within Sandanezwe, it must be understood that evolution is continuously occurring within each and every homestead. Not all of the patterns I included are relevant to each homestead, but play a role in explaining the present culture. Architect Hall (1984) demonstrates this idea when he writes, “any characterization of a standard form involves the suppression of variation. When such a model is presented without reference to its time of existence or area of distribution, the situation is particularly misleading” (as cited in Mhlaba, 2009, page 18). Even though the village population is predominantly Zulu, nothing from these findings can be said of any other civilization within KwaZulu-Natal and South Africa.

12.2 BUILDING MATERIALS

Firstly, only specific types of building materials are present in Sandanezwe and range based on affordability. On one end of the spectrum, houses can be built entirely from their direct environments. As most houses are often built into the hill side to avoid excessive rainwater accumulation on flat land, people must often excavate a terrace on the slope. The mud that is removed can be packed together into bricks for the house. Branches from nearby trees are used for the structural framework of timber laths (izintungo) (Jijane, 2014). For added strength and
insulation, smaller stones can be incorporated into the walls. Additionally, grass from the hillsides can be collected and used to cover the timber roof frames. Even though some houses are left unpainted or without plaster, villagers have the opportunity to cover their homes in homemade internal and external plaster and lime wash (*umcako*) paint. The downside to these materials is that they are greatly affected by weather. Rain gradually wears down the paint, plaster and mud bricks, forming cracks in the walls. They are also quite inefficient in retaining warmth. The colors of these houses would be derived from pigments available in the surrounding area, often browns and oranges. Even though stone houses can be built cheaply and last longer than mud brick, chiseling stones is not time efficient. The oldest surviving structure in Sandanezwe is a thick carved stone round hut built by the Roman Catholic Church approximately 80 years ago. Even though the roof has been outfitted with a new corrugated iron roof, the cylindrical structure has held up the longest due to its thick walls and durable stone (Figure 7).

Recently, Sandanezwe has met an influx of new building opportunities and materials. Cornelius Nyembe, owner of the local Thsí Tuck shop & Hardware, represents a way for villagers to access textured concrete blocks, corrugated iron paneling, cement bags, glass, prepared wood and metal framing and wooden doors (2014). According to Richard Mthembu, “these materials come with a guarantee,” and are more resilient than materials gathered from the local environment (2014). Materials are manufactured locally at one of these hardware stores, or available from the local commercial villages of Ixopo, Donnybrook or Richmond (Nyembe, 2014). Cornelius orders most of his inventory in bulk from Richmond. Cornelius has recently begun manufacturing his concrete blocks locally with a R2,500 machine press, which makes five
at a time (Nyembe, 2014) (Figure 8). The blocks are quick and cheap, but not as cheap as mud brick.

In light of time efficiency, many houses have transitioned from grass roofs to corrugated iron panels (Nyembe, 2014). Even though the bends in the metal allow for rain to slide off the surface, the panels are extremely noisy during rainstorms and often begin leaking at the joints and nail holes of the panels. The more expensive sheets are covered in zinc to prevent rusting, but these damages can be hidden by paint (Nyembe, 2014). The more wealthy families have moved further to affording ceramic tiles, which can also be bought locally. Though expensive, these elements are quieter during storms, and more resilient.

12.3 HOMESTEAD ORGANIZATION

Layout patterns of these homesteads pay tribute to the culture of Sandanezwe. According to Mhlaba, “typical spreading of free standing individual buildings in this homestead reflects the culture of territorial dedication of spaces to members of the household and certain activities within a homestead” (2009, page 36). Due to finances and lack of necessary materials, houses do not consist of more than one story. Houses often depict the same coloration with a darker band that stretches around the bottom of the house, to reduce the physical evidence of mud on the walls (Jijane, 2014). Many houses display an artistic touch, as the bands can envelop the windows and doors with different patterns (Figure 9). In combination, cement aprons, or thick lower segments of the external walls, prevent rain penetration and additionally provide outdoor seating.

Homesteads are each surrounded by a fence to prevent wild animals and straying livestock from eating private crops, with access following through a main gate (isango) and leading into the igceke, or open, social place at the front of the houses or in between houses. As
an outdoor room, the *igceke* often features a hearth. Homes are usually arranged organically or rectilinearly within the *igceke*, based on the amount of available land. Steep hilly sites often lead to a more rectilinear arrangement of houses as they are arranged according to the topographic conditions along the contours of the slope (Mhlaba, 2009, page) (Figure 10). The houses here tend to face downhill in response to the landscape rather than the sun. Homesteads on flatter land have a more relaxed, organic arrangement. The central kitchen or parent spaces often remain at the center, with other houses radiating from it. The individual spaces recognize the independence and privacy of individual family members while demonstrating the values of family unity, and seemed to be a strong determinant of where the buildings are located.

From the center *igceke*, homesteads feature an *izala*, an area for vegetable gardens and fruit trees (Jijane, 2014). They are close to the houses for easier access to food sources and increased security. Farther out, the *insimu* stands as the larger open field for livestock to graze, or for a larger area of crops to grow (Jijane, 2014). An example of this type of layout can be seen in Figure 11. Families with more finances and space often build *kraals* or *isibaya*, a fenced area where cows, goats or sheep are placed at night. Traditional ceremonies, such as slaughtering of a cow, call for men to gather in these areas in celebration (Jijane, 2014).

### 12.4 CULTURAL STYLES OF HOUSING

The architecture of Sandanezwe can also be described in terms of rondavels and cubic houses. Based on my observations and interviews, the oldest way of building in Sandanezwe started with the design of the traditional rondavel (Jijane, 2014). Predominantly following a cone-on-cylinder shape, these houses physically pay tribute to the ideal of *ubuntu*, or the “African way of life built around a circle, signifying connectedness, balance, and a holistic life” (Gqaleni, 2014). Across cultures, the idea of the circle has been heavily attributed as symbols of
God (Mhlaba, 2009, page 20). As cited by Mhlaba, Wittkower (1962) discusses the ideas of architect Leon Battista Alberti on the sacred circle when he writes, “nature herself, he declares, enjoys the round form above all others as is proved by her own creations such as the globe, the stars, the trees, animals and their nests, and many other things” (2009, page 20). Vitruvius also explains that the ideal human proportion can be laid out in the circumference of a circle (Mhlaba, 2009, page 20). Symmetry plays a significant role in traditional rondavel designs as only two windows exist on either side facing one another, and a hearth exists in the middle. A wooden pole (insika), extends from the ceiling to the floor near the hearth (Jijane, 2014). Traditionally built rondavels demand a grass roof atop a spider web timber structure, yet can be constructed of concrete block or mud brick walls. Grass roofs allow for smoke to filter through the ceiling and maintain a comfortable living environment, which is why some families utilize these rondavels as a kitchen, or idlala (Jijane, 2014) (Figure 12). To preserve the integrity of the grass roof, a metal apex cap is often fashioned to the top, or the outskirts of the grass roof are replaced with a metal lining, to fight against wind damage.

Traditional rondavels can also have a direct relationship with the traditional religion of the region. Special herbs and animal parts used for traditional medicine (muthi) are placed above the hearth or on the perimeter of the rondavel. Many households feature the horns of a bull or a springbok above the doorway to signify that this is where the deceased ancestors of the family live. According to Ngubane (2004), “for centuries Africans have had this vision of a spiritual continuum within which the dead and the living, natural objects, spirits, divinities, the individual, clan and tribe, animals, plants, minerals and humans form an unbroken hierarchical unit of spiritual forces” (Mhlaba, 2009, page 27). Traditional healers, or sangomas, often have a traditional rondavel for their own healing purposes. When observing the rondavel of a nearby
sangoma, I noticed that I must take off my shoes to respect the ancestors and a smaller grass
roofed rondavel had been built indoors. Another sangoma, Thembha Mbhele, explained that this
‘secret house’ is to allow the sangoma and the ancestors to discuss without anyone listening in or
interruptions (2014). Even though Mbhele’s healing house was actually cubic, it was only
because he could not afford to mend his current one (2014).

In the face of evolution and encroaching modernity, the rondavel is still an imperative for
any homestead, regardless of financial concerns. Often times, neighbors will contribute building
materials and labor so that less fortunate residents will be able to have their own rondavel
(Jijane, 2014). In addition to a traditional grass roofed rondavels, wealthier families often build
another rondavel with a corrugated iron roof over the same spider web timber structure. These
rondavels are for facilitating visitors and can be built out of the faster and easier materials of
corrugated sheeting. To prevent leaks, the sheets are often arranged as a polygonal rather than a
dome to avoid the issues of “curvature and tapering shape of the corrugations of the material,
particularly at junctions” (Mhlaba, 2009, page 38). Additionally, I observed in this ron danvel that
the *insika* was removed and replaced with additional bracing at the top to open the room up.

Cubic houses can be seen as a European influence of the province, and contribute further
to a continuously developing style. According to Whelan (2001), “for years, academic
establishments have perpetuated the cliché that Zulu architecture is the grass dome: the beehive
hut, or *iqhugwana*… From recent perambulations around the province of KZN, I would argue
that this is not necessarily so…” (Mhlaba, 2009, page 14). Homesteads across Sandanezwe
feature cubic houses of many different shapes and sizes. From flat angled to gabled roofs, from
square houses to intricate L-plan arrangements, these houses additionally play a role in the
vernacular architecture of the area.
It must also be noted that lightning strikes are a recognizable fear for the villagers of Sandanezwe. In preparation, rubber tires can be seen placed at the apex of rondavels or on the metal roofs of cubic houses (Figure 13). These tires are believed to absorb any shocks, preventing grass roofs from catching fire, and electricity traveling through the metal of the house. Families are forced to turn off their electricity to avoid damage to their appliances. The nearby Christian churches also give out large palms to be burnt during lightning storms in belief that that action will prevent the house from getting hit.

**12.5 CONSTRUCTION METHODS**

Additionally, I was able to participate in all elements of the building process, by working on different houses at different stages of construction. By working with Richard Mthembu, I was able to experience the ways in which the foundation comes into formation (Figure 14). As mentioned earlier, wires and stakes were laid out to allow the builder to trace the boundaries of the rooms in the dirt with a pickaxe, producing two parallel lines to account for the thickness of the concrete blocks. Next, we used the pickaxe to dig thick trenches surrounding each room, using a shovel to clear out the displaced soil (Figure 15). After, Richard told me that he would be placing wooden stakes in the middle of the trenches to ensure that the foundation of the house would be straight and level. Arbitrarily hammering one into the front right trench corner, he used a piece of metal and a leveler to bring all the other wooden stakes to the same height, regardless of the change in ground level (Figure 16). With the wood stakes set, we prepared the cement. Placing sand, water and the contents of a cement bag onto the ground beside the site, we mixed the concrete with shovels and used a wheelbarrow to deliver the contents to the trench. Richard used a long wooden block to level the cement in reference to the wooden stake, which would be encased in cement. Even though this is the extent of my work on the house, he told me that the
foundation of the rooms would be formed later by laying out a perimeter of concrete blocks on
the cement and pouring concrete within the space.

For wall construction, M’duduzi organized for me to work with another builder-architect,
a man named Siyabonga, on a house nearby (Figure 17). Even though some of the wall had
already been formed, I could still take part in laying concrete blocks using a *trufila*, a tool used to
place cement onto the wall. Siyabonga used a team of builders to prepare cement, and collect
cement blocks. He used a structure of tree branches, nails, and concrete blocks to hold the door
frames up and to hold the corner poles, which were used to string fishing wire along (Figure 18).
Using a ruler, Siyabonga would move the string higher so that the blocks would all line up as he
placed them on the cement molding. Every three levels of concrete blocks, Siyabonga would
apply a brick force, a metal wire grid spanning along the wall to prevent cracking and a *demcoss*,
thin piece of black plastic which would extend along the wall and reduce water penetration. I
learned that Siyabonga had built eight houses in Sandanezwe and learned the trade working for a
building company in Pietermaritzburg for five years (Siyabonga, 2014). He likes to work in the
rural village because he can enjoy the fresh air, work for close friends and family, and live
without a boss or manager (Siyabonga, 2014).

Additionally, I managed to work on the corrugated iron roof of M’duduzi’s family’s
rondavel, replacing the corrugated iron sheets, and fashioning them down with nails and bottle
caps to prevent water from entering the nail holes. It was interesting to see how resourceful
builder-architects were in Sandanezwe, using available objects to solve building issues. I noticed
the spider web timber frame of the rondavel, how the corrugated sheets were overlaid, fashioned
together and to the frame. The frame design succeeds in diverting forces through the roof to the
ground, so that point loads would not cause cracks, especially in mud brick walls.
From the idea of a patterned language, I continued to engage with Christopher Alexander’s musings while in Sandanezwe as he further demonstrates that creating something beautiful demands that designers let go of their fears and anxieties. He explains that western architecture is inherently flawed because people are often fearful of their own inner talents and “have beset themselves with rules, and concepts, and ideas of what must be done to make a building or town alive, that they have become afraid of what will happen naturally, and convinced that we must work within a ‘system’ and with ‘methods’ since without them our surroundings will come tumbling down in chaos” (1979, page 14). Alexander sees natural architecture as one that exists in “perfect ease” (Alexander, 1979, page 8), and beautiful houses exist when an individual learns to let go of “the fear of being just exactly what one is, of letting the forces flow freely; of letting the configuration of one’s person adjust truly to these forces” (Alexander, 1979, page 48).

By letting go and feeling free, the individual no longer lives to force out beauty to impress or feel successful in the eyes of others, but allows the process to happen naturally. They naturally pay attention to their feelings and emotions instead of over thinking the design with overwhelming opinions and ideas. They “liberate essential subconscious processes,” allowing them to dictate one’s designs by accepting forces as what they actually are, without imposing thoughts that skew the actual reality of the situation. People place emphasis on how things ought to be without understanding that making a built environment live demands spontaneous discovery of new combinations of patterns that will work in that specific feature.

Losing the opportunity to design a real house and feeling like I was not accomplishing the goals of my project, I began to realize my arrogance and lack of humility at the beginning of
the trip. Despite acknowledging that I wanted to let go of my own opinions to act as a better scribe for Mpume in the house design, I still felt authorized to criticize the houses around me and that I wanted, above all, to be responsible for the design. As writer Paulo Freire notes, “men and women who lack humility (or have lost it) cannot come to the people, cannot be their partners in naming the world. Someone who cannot acknowledge himself to be a mortal as everyone else is still has a long way to go before he can reach the point of encounter” (Freire, 1970, page 46). I was constantly trying to apply my own way of seeing architecture into the community without realizing that I was never really designing a house for another - I was designing a house for myself, one that made me happy and that I could hold as an accomplishment. For Alexander, the architect is present in all of us, but when an individual begins to build houses for the many, “no matter how well meaning they are, their ideas gradually get out of touch with reality, because they are not faced daily with the living examples of what the patterns say” (Alexander, 1979, page 235).

Getting lost in the mountain symbolized my descent and growth through the Sandanezwe experience, and ultimately my life. At the beginning of the walk, I was overwhelmed with the need to control my surroundings, to stick to the path amidst the unknown nature of the forest and the foggy landscape and to force the process of my Independent Study Project in a direction that I wanted. I began to realize that in my life, if things were not proceeding smoothly, I tended to become fearful and quit. Recently, I had been working on a way of coping with the negative parts of my life by learning to let go of my stressors and find happiness elsewhere. I was under the impression that I was suffering through difficult premedical classes because I did not enjoy them, not that I was just retreating and unable to forgive my failures. I needed to let go of my failures, the ideas that were clouding my vision. I allowed myself to leave the path behind and
enter the unknown soaking wet and vulnerable. I wanted to get lost and be able to find my own way out. I was furious with myself for quitting all my life and just wanted to succeed at something. Even though I did not get out of the forest entirely on my own, I was in the correct mindset and was actually heading in the right direction. By the end, I was no longer fearful and aware of the situation. In trying to live, I forgot that one must recognize that coming to terms with death is the secret. According to Alexander,

A man who is not afraid to die, is free to live because he is open to what happens next, and is not always killing it by trying to control it. In the same way, the language and the building it creates begins to come to life when I begin to be relaxed about what happens next. I can work within the order of the language, without worrying about the patterns which are coming later, because I am sure that, no matter what happens, I will always be able to find a way of bring them into the design, when I come to them. I don’t need to take precautions in advance. Why am I so sure that I can always find a way of bringing in the smaller patterns? Because I don’t care what shape the finished building or details have - provided only they are natural. I have no preformed mould that I am trying to pour the patterns into; I don’t mind how strange, how curious, the building turns out to be, if I can only satisfy the patterns. (1979, page 540).

I was starting to realize that my fears of difficult pre-medical school classes were culminating in this Independent Study Project. I was overly concerned about the grade I would receive on this paper, that I was ruining the experience purely out of fear. I instead needed to release my grip on the process and let everything happen naturally. Getting sick forced me to slow the process down, and gave me a chance to find meaning despite losing the house plan. I would be able to deconstruct my own weaver bird nest, and rebuild a new one with a different mindset.

After accepting that I would never have been able to design a suitable house for a Sandanezwe citizen after a couple days of immersion, I realized that I had been incorrect in my original house plan. I had focused more on environmental factors than socio-economic and cultural implications, trying to capture the most sunlight without understanding that the people here predominantly organize their houses based on social spaces and economic restraints. Maybe it is the organization and utility of houses that are more pleasing to them than how bright the rooms are. Even though Mpume had not necessarily rejected my plan, I luckily was able to come
to the understanding that I needed to grasp humiliation and work on being egoless before I could leave a mark on the world. According to Alexander,

And, in the end, the buildings will become alive only when the person who uses the language is himself egoless and free. Only then will he be able to recognize the forces as they really are, instead of being overawed by images. But at that moment, he no longer needs the language. Once a person has freed himself to such an extent, that he can see the forces as they really are, and make a building which is shaped by them alone, and not affected or distorted by his images - he is then free enough to make the building without patterns at all - because the knowledge which the patterns contain, the knowledge of the way the forces really act, is his (1979, page 543).

During my sickness, I could no longer feel powerful and above the community. I had to allow certain experiences to reveal themselves to me, unable to go out and force the answers. In the end, I was just watching, releasing my control over how this experience would turn out, as long as I knew that I was gradually continuing along a process of growth.
XIV. CHAPTER 6: THE STATE OF SANDANEZWE HOUSES

This final chapter aims to present the ways in which the design and construction of Sandanezwe houses may or may not be engaging in the architectural teachings of *The Timeless Way of Building*. Based on my newfound outlook, I engaged with my findings in a way that would not be influenced by my own opinions, but focused plainly on seeing Sandanezwe architecture for what it is. I intend to offer examples of how Sandanezwe may be engaging in a way of building that the western world has forgotten, but also allow the report to demonstrate ways in which the village may not be succeeding. This section does not aim to provide any answers to the success of Sandanezwe architecture.

Throughout the experience, I recognized that I was engaging in a relaxed building culture. Having a plan or not for the house did not necessarily matter for the builder-architects (Jijane, 2014). The workers were simply erecting houses that the homeowners wanted. With this level of freedom, and without the restrictions of building authorities or specialized architects, members of the community were actively engaging in the shared language of the community, “reflecting the variety of human situations in the town” (Alexander, 1979, page 231). I found that the elements that survived the slow transmission from person to person were always simple and ordinary. Maybe it was a lack of education and finances that prevented people from building in radically different and elaborate ways. Yet, maybe this was evidence of this natural style of building, one that did not try to make a statement and recognized that life is a humble cycle of growth and decay. In any regard, these homeowners were not building houses to sell.

Beauty in the ordinary basic houses of Sandanezwe may simply document the bitter quality of our life passing by. The cracking mud brick house alongside a freshly built concrete
block rondavel bears witness to the cycle of erosion and repair in nature, the only constancy in life. The village comes to life when the houses reflect their owner’s acceptance that they will eventually be destroyed or left to waste away in the background of newer houses. The imperfect measurements may reflect the fact that people here use the wild nature that surrounds them as a reference, where no dimension is exact and constant. “This is the character of nature. But its fluidity, its roughness, its irregularity, will not be true, unless it is made in the knowledge that it is going to die” (Alexander, 1979, page 152). The concept of death in Africa is seen as an inevitable part of nature and integral part of spirituality. Deceased ancestors remain close by, taking up residence in the family's traditional rondavel. Village members gather during the frequent funerals all over the area. Houses are left abandoned and waste away. These scenarios complete the circular cycle of life, and are an inevitable part of reality, which cannot be ignored. Death is a force that must be facilitated in the construction of the house, and architecture loses its strength when it tries in futility to oppose his own demise. Even though building materials of concrete and steel feel far from nature, they do satisfy a homeowner’s desire for a house that will protect their family while it is accommodating them, which is more important to the villagers.

I frequently visited abandoned sites as a way for me to not only identify the issues of mud brick, but more importantly to understand the architectural elements that have persisted through history, and feel the embodiment of nature in a human construction. Visiting the crumbling rondavels to the west made me feel that the buildings were free to die, uninhibited and unafraid (Figure 19). The elements of the hearth, the grass roof, the designs of the dark bands of paint along the bottom were all still present, but I found beauty in understanding the events that went on inside, and how to the families had moved on. Ultimately, “the life of a house, or of a town is not given to it, directly, by the shape of its buildings, or by the ornament and plan - it is given to
them by the wealth of the events and situations we encounter there. Always, it is our situations which allow us to be what we are” (Alexander, 1979, page 41). The building had done its job, and could quietly rest. The imperfect measurements and constructions reflected how Richard and Siyabonga would get lost in the process, enjoying their freedom to work without a boss...to exercise at the same time... to laugh with friends...to build a house for family. I remember the images of Siyabonga crudely smashing concrete blocks so that they would keep to the staggered arrangement of the blocks, and Mr. Mthembu drinking Zulu beer and getting lost in drilling the pickaxe into the ground, throwing himself into it. Exactness did not matter as the house would be a built upon the joy of employment and benefitting the community.

In my discussion with Jacob Sithole, an employee of the Disability Special Organization garden, he emphasized that his homestead was not beautiful, but that he loved his home and was proud to own it. When I asked him how he would feel if he had to destroy the house to build a new one, he showed no concern. He told me that it would be time (Sithole, 2014). I learned that houses built in this timeless way do not need to be full of nostalgia for the human being. It just succeeds to satisfy the occupier at that present moment.

In other homesteads, I noticed that houses reflected the human being with evidence of completely new styles in the village. Lindy Mthembu's collection of houses made me feel most exhilarated (Figure 20). I learned that my favorite house, the ordinary square house to the left with the wooden veranda was actually built completely by her father, “a creative man who used to design trays and coffins” (Mthembu, L, 2014). He included elements of the house that satisfied his needs, like circular windows and wooden verandas, created during the process of construction, regardless of how nuanced they were at the time in 1972. I noticed a freedom in the buildings- how one metal roofed rondavel had its own veranda jutting out from it, sitting next to
Hayward 57

a relatively low traditional rondavel. Another house resembled the cubic version of a stone rondavel, with small square windows and a symmetrical disposition.

I felt a struggle in Sandanezwe between this timeless way and the lure of economics and money. I recognized that throughout the world, a culture of money would always be present. Where some people may be trying to flaunt their wealth with fancy houses and tile roofs, their houses were actually better resolving conflicts of water leakage and durability with building materials that were based on exactness, not exactly natural qualities. Imported wooden doors, standard window frames, corrugated iron, and glass were all revolutionizing and improving house utility, but were doing so in a way that demonstrated a citizen’s focus on monetary values, while trying to protect their families. Industry was making a dead language readily available, but was satisfying human needs that take priority over houses that are aesthetically pleasing. I often questioned whether the direction of education in Sandanezwe was causing the problem. In order to secure suitable work, schools may be dispensing business education into students, foregoing the artistic classes that may allow students to think deeper about what makes them happy instead of mindlessly accepting the beauty in freshly built and exact houses.

I recognize here that I am “culture-bound to acting a certain way in certain places, and this means of course that in two cultures people may see even sidewalks differently” (Alexander, 1979, page 51). Where I place emphasis on the lack of aesthetics in new mass-produced houses, I recognize that people are focused on their socio-economic conditions. Based on my feelings, people may be creating functionally empty spaces, but in their eyes, they are creating homes that symbolize success and their own culture. There is a consistency to the layout of one's homestead and design that may be attracting homeowners who want to remember the times of their childhood and culture. M'duduzi told me that he planned on constructing a rondavel in his home
in Pietermaritzburg, because “the rondavel is me,” the home where he spent most nights sleeping on the ground and going hungry. He prefers the hearth and black pot over the electric space heater, because he is so used to that way of life. He finds his own identity in the rondavel but at the same time loses himself amidst the smoke of the fire and the curvature of the circular room. In other ways, homeowners may be trying to forget their pasts. One house that I observed in Sandanezwe consisted of freshly placed roof tiles, indoor wall and floor trimmings, and swirling columns, indicative of a western style without anything to do with African culture. Regardless of their design, however, the houses were built according to specific needs and represented the proud ownership of their residents.
XV. CONCLUSION

*I want to learn more and more to see as beautiful what is necessary in things; then I shall be one who makes things beautiful. Amor fati: let that be my love henceforth! I do not want to wage war against what is ugly. I do not want to accuse; I do not even want to accuse those who accuse. Looking away shall be my only negation. And all in all and on the whole: some day I wish to be only a Yes-sayer.*

Friedrich Nietzsche, *The Gay Science* (1882, sec. 276)

I conclude this report with my most beautiful architectural finding of Sandanezwe - the orange dirt paths that snake and cut through the hillsides. These trails are completely entirely ordinary- often naturally and unconsciously designed by the active elements of the village, notably the people of Sandanezwe and the free running livestock. The paths, though defined, elaborate the freedom of life in the easy opportunity to move off into the wild and create one’s own path. They resolve the issue of navigation and provide a streamlined way for people to reach destinations off the main roads. Throughout my experience, I was constantly following these trails, and realized that I was only subtly contributing to the history of that path. They embodied the interweaving lives of these villagers with pathways extending deeper into the center of the village, but splaying out to outskirts of the forests and mountainsides.

My experience in Sandanezwe in turn stands as a small segment of my own lifelong process of growing and navigating the pathways of my life. The findings that I accumulated about Sandanezwe have left me with more important questions that do not necessarily need answers at this very moment. I find comfort in pondering the questions of human aesthetic and the drive to produce and build something from the mindset of sheer enjoyment, relaxation, and
happiness. But will I always be ready to stray from the comforts of the path and embark into the unknown? Can I trust myself to let go of my need to control my environments and understand the success of allowing the process to just happen? Can I continue to appreciate the world for how equal and interconnected people’s lives are, without trying to rise above and impose my views on others?

I tried to invoke my inner humility by the end of the project. I recognized that every person has a connection to their home, regardless of its condition and aesthetic appeal. The obstacles I faced in Sandanezwe corrected my vision, where I could actively engage in the community for the first time and allow the process to take its own shape. I tried to watch and observe construction methods and houses without judgment, and did recognize my frustration when I began to elevate myself above the village again. I understand that I am still very much immersed in the process of a heuristic inquiry and will be for the remainder of my life. Maybe one day, my creative synthesis will actually take root. I will certainly try to be entrenched by the process and immersed in a nurtured level of innocence and humility. Ultimately, as Alain de Botton writes, “the architects who benefit us most maybe those generous enough to lay aside their claims to genius in order to devote themselves to assembling graceful but predominantly unoriginal boxes” (2006, p. 1). I hope that my next weaver bird nest will be spawned from the lessons I learned from rural South Africa.

Despite the hardships, I do believe that my experience was a success in collecting qualitative data. Even though my hypothesis failed, I was still able to capture key information on how a house in Sandanezwe is built and the influences that play into creating a building. Most importantly, I hold the question of the future of Sandanezwe architecture and my own life up for a moment. Can the intangible and subtle beauty that exists in these ordinary houses be applied
earnestly to contemporary architecture? As someone who wanted to live and engage amongst the Sandanezwe community, I was still perpetuating the issues of western architecture as the predominant language over the African style. I believe that one day, the architecture of Sandanezwe may eventually lose its more natural qualities momentarily, and move further toward mass produced materials as the community continues to connect to the outside world, engage freely in post-apartheid South Africa, and secure houses with a higher utility and durability. The pattern language will inevitably change in a way that incorporates cheaper and dead materials, but I believe the evolution will still continue, where people begin to cherish and recognize the old style of building. The timeless way of building the traditional grass roofed rondavels and unique houses will blossom once again, and witness for the first time a transformed Sandanezwe. It will be one that benefits from European and external influences, but appreciates the roots of its existence. I recommend future research in Sandanezwe to bear witness to the perpetual evolution of this village.

In my own life, will I be able to return too and face my pre-medical courses again, knowing that I was giving up on my real heartfelt dream and retreating under the pressure? Even though architecture has allowed me to grow as an individual, I will always be bound to my inherent desire to be a doctor. As T. S. Eliot writes, “we shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time” (1944). Far from the end, I can easily walk along my path, content that when obstacles arise I will be in a suitable state of mind to tackle them and can patiently wait for better things to come into life. I have engaged in the timeless circle, and am ready to return to America with these new lessons.
XVI. REFERENCES

16.1 PRIMARY SOURCES


16.2 SECONDARY SOURCES


APPENDIX I. MAP

Map 1. Google maps view of the area of Sandanezwe (outlined in red) in reference to the city of Pietermaritzburg as part of KwaZulu-Natal, South Africa.
APPENDIX II: FIGURES

Figure 1. A view of Sandanezwe detailing the dirt path veering from the gravel road, a freely grazing cow, and combinations of round huts and cubic houses nestled all over the hill.

Figure 2. An image of Mpume’s three spiced peach colored houses as part of her homestead.
Figure 3. The site of Mpume’s new house before construction. The concrete blocks have been purchased and the corrugated iron sheets.
Figure 4. A South Africa Human Settlement Project design of a small National House Builders Registration Council approved house provided by Buua Makhathini.
Figure 5. The development process of my house plan, demonstrating the two offset rectangles and the organization of the rooms. One drawing depicts the back wall of the sitting room, complete with four windows on the top and a media center with a television. Some of the most advanced technology within a household is the television.
Figure 6. The beginning of getting lost in the mountains of Sandanezwe, showing how the visibility level drops as one tries to ahead. The path cuts through the grass, but ends up bringing us into the forest.
Figure 7. The oldest surviving round hut in Sandanezwe, built by the Roman Catholic Church in the 20th century (Jijane, 2014). It is used for storage today as part of the Special primary school. Even though its roof has been replaced, the chiseled stone structure stands firm.

Figure 8. Cornelius Nyembe’s concrete press which uses concrete mix to prepare five blocks at a time. The grainy texture of the blocks allow plaster and cement molding to grip the surface and produce a more stable overall structure for a house.
Figure 9. This image demonstrates the popular painting style of lighter colors lined by a dark band to prevent mud splashing. This round hut pays tribute to the range of different styles that can exist in Sandanezwe in terms of building structure. This was the only round hut I witnessed with an inner veranda.

Figure 10. A faraway image of the rectilinear planning concept of houses situated on a hill. Following the contour lines, terraces are formed as stable flat land for construction. The amount of available space forces houses to organize rectilinearly to form a close knit group.
Figure 11. An example of the igceke, izala, and insimu layout of a homestead. The houses stand upon the igceke facing the homeowner’s croplands. Fruit trees and vegetable gardens remain close by, and the insimu extends off into the open land in front.

Figure 12. Image depicting the kitchen (idlala) setup of grass roofed rondavels with a central hearth. Even though Mpume’s ancestors take residence in this house, the building is still used for daily activities. It is the public social space, where friends and family (and the occasional chicken) come and go frequently. M’duduzi poses for the picture.
Figure 13. This house demonstrates the evolution of rondavel roof building showing both grass roofed and corrugated iron roofs. The tire on top is used to keep the apex of the roof down and to protect against lightning strikes. The corrugated iron lining also helps to prevent wind from blowing the grass at the overhang.
Figure 14. An image of Richard Mthembu, builder-architect for Mpume’s house, using a machete to carve wooden stakes for use in leveling the cement.
Figure 15. Mpume’s site after we finished trenching the holes for the foundation which will support the concrete block walls.

Figure 16. Being resourceful, the builders use a small level and a longer metal beam to determine the level of two wooden stakes stuck apart in the ground.
Figure 17. An image of Siyabonga, another builder-architect, who is demonstrated the use of a *trufia* in laying cement for the concrete blocks.
Figure 18. This image depicts the use of local branches, nails and concrete blocks to temporarily support and hold up the imported wooden frame for the back door of the house during construction.
Figure 19. An example of abandoned rondavels on the western side of Sandanezwe. The circular foundation of an old rondavel represents the African ideal of *ubuntu* and the sacred circle. Inside the other rondavels, one still notices the central hearth and the designs of the windows from the dark bands that line the inside and outside of the walls. It is also a demonstration of the issues surrounding the use of mud brick, as houses tend to collapse.
Figure 20. Lindy’s collection of houses. To the left is the house designed and built by Lindy’s father. The next one demonstrates the use of stone with small rondavel-like windows. The nest rondavel features a relatively new construction with an unorthodox veranda that extends beyond circumference of the hut. All the way to the right is an example of a traditional grass roof and mud brick rondavel with an exceptionally low doorway. All of the houses face downhill toward the izala.
APPENDIX III: PARTICIPANT DRAWINGS

Participant Drawing 1. Getrude Mthembu’s idea of home (bottom) depicting the classic rondavel. She did include her cat, which just recently passed away. It was interesting to see the cat, as still a present force in her life and her image of what home means to her. Getrude’s great granddaughter, Nomali, drew the basic image of a house on top, with detailed features such as a Jojo tank for collecting water and a garden. She was trying to demonstrate how a home supported her (Mthembu, 2014).
Participant Drawing 2. A detailed drawing by Aphiwe, a distant relative of the Mthembu family who moved to Sandanezwe after his parent’s died. The house shows the rondavel with the dark band, and the garden and kraal, in which he spends most of his time working. He appreciates the ability to work for his family (Ndamase, 2014).
Participant Drawing 3. A detailed and colorful drawing completed by Mpume’s son Zakhele and authorized by Mpume herself (Khanyezi, 2014). This is the only picture, which includes the family members as part of the home.
APPENDIX IV: PERSONAL DRAWINGS

Personal Drawing 1. This was my first drawing, depicting a grass roof rondavel with a corrugated iron skirt atop a plastered and painted concrete block structure. I used dirt to color in the bottom, showing
the collection of brown on the walls right at the bottom.

Personal Drawing 2. My next drawing features an umlahlankosi tree, an extremely sacred tree in Sandanezwe. Its branches are brought to the place where an ancestor had died, allowing the carrier to bring the ancestor back home. If anyone cuts down this tree, they could be arrested. I thought the tree reminded me of a rondavel roof, which is why I felt compelled to draw it. The other figures were included in order to facilitate the logo design that M’duduzi Jijane wanted to use my drawing for as part of his Disability Special Program company.
Personal Drawing 3. This drawing details the peace and naturalness of an abandoned rondavel interior. The grass roof has fallen onto the ground, and plants have already begun to take over the land once again.
Personal Drawing 4. Sitting and meditating, I drew these two images because I wanted to show how the television had become an integral part of family life, as well as show how the natural plant was a suitable home for a huge population of insects within an abandoned rondavel. It shows juxtaposition between a lively architecture in the plant, and a dead language of a family watching in stillness and silence. I did not include this juxtaposition in text as it is not exactly architecture and I only realized the opposition of these two in hindsight. I was just trying to let go of the process and allow my ideas to flow at the end of the trip, when I drew this.
Personal Drawing 5. The last drawing I did, I did for a member of the community who wanted me to draw their house. I feel like I improved significantly from my first drawing of the rondavel. I included more detail freely. The house itself is a concrete block and corrugated iron roofed cubic house which the homeowner was immensely proud of. Even though the materials were not lively, the house was living from the experiences inside and the proud attitude of the homeowner.
APPENDIX V: IRB FORM

IRB Action Form

Cover Sheet for Review of Research with Human Subjects
World Learning, Brattleboro, VT 05301

ACTION TAKEN: Form below for AD/LRB/IRB use only

Name of Student: Oliver Hayward
Title of ISP Proposed Research: Sociology of a Home
Study Abroad Program: SFH

Name of Academic Director: John McGladdery
Names of LRB Members: Clive Bruzas (PhD), Frances O'Brien (PhD), John McGladdery

Identifying Project Number: SFH FA 14.159

Research exempt from federal regulations. Action taken:
_ approved as submitted _ approved pending revisions
_ requires expedited review _ requires full IRB review _ not approved

Research Expedited Review. Action taken:
_ approved as submitted _ approved pending revisions
_ requires full IRB review _ not approved

Research requiring Full IRB review. Action taken:
_ approved as submitted _ approved pending submission or revisions _ not approved

LRB/IRB Chairperson's Signature: ___________________________ 3/16/2014
Date: 3/16/2014

LRB/IRB Member's Signature: ___________________________ 3/10/2014
Date: 3/10/2014

Student Name: Oliver Hayward
APPENDIX VI: EXAMPLE OF CONSENT FORM

1. Brief description of the purpose of this study

The purpose of this study is to investigate building methods and style choices of housing through time in order to understand the present perception of housing and the home in Sandanezwe. I am interested in understanding architecture and space as an embodiment of the culture of the region.

2. Rights Notice

In an endeavor to uphold the ethical standards of all SIT ISP proposals, this study has been reviewed and approved by a Local Review Board or SIT Institutional Review Board. If at any time, you feel that you are at risk or exposed to unreasonable harm, you may terminate and stop the interview. Please take some time to carefully read the statements provided below.

1. Privacy - all information you present in this interview may be recorded and safeguarded. If you do not want the information recorded, you need to let the interviewer know.
2. Anonymity - all names in this study will be kept anonymous unless you choose otherwise.
3. Confidentiality - all names will remain completely confidential and fully protected by the interviewer. By signing below, you give the interviewer full responsibility to uphold this contract and its contents. The interviewer will also sign a copy of this contract and give it to you.

I understand that I will receive (learner to indicate what will be given)… or no gift or direct benefit for participating in the study.

I confirm that the learner has given me the address of the nearest School for International Training Study Abroad Office should I wish to go there for information. (404 Cowey Park, Cowey Road, Durban).

I know that if I have any questions or complaints about this study that I can contact anonymously, if I wish, the Director/s of the SIT South Africa Community Health Program (Zed McGladdery 0846834982).

I can read English.

Participant’s name printed ___________________________       Your signature and date ______________________________

Interviewer’s name printed ___________________________       Interviewer’s signature and date ______________________________

I can read English. (If not, but can read Zulu or Afrikaans, please supply). If participants cannot read, the onus is on the researcher to ensure that the quality of consent is nonetheless without reproach.