PLACES OF THE EARTH

a cultural center for Zimbabwe

Thesis submitted to the faculty of Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

by

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This thesis began with research in the rural areas of Zimbabwe, in southern Africa. I began with a little background knowledge and a great desire to learn. I took my research to the rural areas to try to understand the roots of traditional architecture and the why’s of building methods in Zimbabwe. My thesis project grew out of a desire to give something back to the people that had so generously opened up an opportunity for me to learn about their culture and traditions.

My cultural center was an attempt to take the essential elements of traditional building, use the structural language of the homesteads and create a place that would become part of the site and culture of today’s Zimbabwe.
in loving memory of my father.

Michael Lyon Sterne
to make something well we do not force it into being
we merely allow what is already there to appear in our hands
PLACES OF THE EARTH

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The Great Zimbabwe, established between the 12th and 14th centuries, is a renowned archeological and architectural site. Zimbabwe means "palaces of stone."
THE GREAT ZIMBABWE was a settlement of Shona speaking peoples, ruled by a sacred leader and active between 1290 and 1450.

ENCLOSURE: The stone walls that weave around the site are a physical barrier; inside one feels secure, like a baby in a womb.

HIERARCHY: The palace is reached via long winding passages or stairways. The area is divided into five hierarchical platforms elevated according to importance of dwellers; the court, chief's area, guard's area, living quarters for important wives, lower platforms for young wives and followers.

WALLS: small narrow space inviting protective without closing you in

PASSAGES: cut into rocks snake up hill boulders tower above

APPROACH: many paths difficult to climb narrow threatening

ENTRANCE: rough stone regular courses opening draws you into the wall

GREAT ENCLOSURE: fetal calm, cool alone but not deserted hierarchically ordered

PITS: made from mix of clay and stone high walls surround you sunken, you feel protected

HUTS: stratified layers of clay indicate passage of time temporary structures, built and rebuilt
As I walked the kilometer through the bush to the place where “ancient pit structures” were supposed to be located, I was fascinated with the various colors and textures of the waist high indigenous plants and shrubbery. At the top of the hill I looked at all of Zimbabwe stretching below and surrounding me. I felt like an explorer searching for the stone pit structures, pulling aside intertwined branches and crawling under overturned trees. It was as if nothing had been touched since the 14th Century.

whoever had last left this place, had not wanted it to be easily discovered again
From my first year in Architecture school, I always needed to feel a connection to the structures I created. I believed in myself as an architect when I discovered how to let my personality emerge both in my drawings and in a freer style of presentation.

Just as we cannot separate ourselves from our architecture, we cannot separate people from the buildings in which they live or structures from the site in which they exist.

I went to Zimbabwe for two reasons. One, to do research on a level that was more experiential. I wanted to go out and experience a joint between elements to learn how it is put together. Two, to gain an understanding of the people, the culture and the WHY of building. It was not enough to learn how joints come together, I also wanted to understand how the touch of a person as he or she makes a joint changes and individualizes it. What made Zimbabwe a good outlet for my studies is its distinct cultural heritage.

With the background information I had on cultures of Zimbabwe, I tried to discover how technology, modernism and an objective eye could adapt the architectural language of the country and fit it into a modern day thesis project. Instead of trying to gain an overall understanding and produce definitive conclusions, I concentrated on making small discoveries and weaving the essential cultural elements together.

My project seeks to recognize the strengths of traditional building, restore an appreciation of local culture and preserve the beauty of Zimbabwean architecture.
CULTURAL DEVELOPMENTS 1400-1700's

Bantu tribes were forming into more defined groups. Wars were a matter of survival of the fittest, but resulted in intermarriage. These interactions diversified and strengthened the tribe. Even the earliest tribes were cultural hybrids of a migratory civilization.

CULTURAL DEVELOPMENTS PRE 14TH C.
The Bantu tribes were the earliest settlers. The Shona people developed from a mix of Bantu, Bushman and Khoisan, with some early Arab influence.

CULTURAL DEVELOPMENTS 1800-1900's
The colonial influence was the first destructive influence. It sought to destroy the roots of a successful, though underdeveloped culture. Forced rapid modernization of an African society by a Western model could only result in the disruption of the natural process of development. Much of the culture that Africans had prided themselves on for centuries was ridiculed, suppressed and consequently lost.
Development in Africa has and will continue to follow very different patterns of settlement and development. What is sometimes seen as “underdevelopment” in Africa could be attributed to rapid and imposed industrialization of parts of the continent during the colonial period. While Europe industrialized for over a hundred years, Africa was forced to catch up in a few decades, trying to adapt to ways of life and technology that they were not familiar with.

There was an influx of immigration in the United States at the turn of the century. Cities developed with pockets of cultures living next to but not necessarily merging each other. While areas of cities are no longer named for a cultural group, there are still small partially integrated pockets of culture; this is what makes America such a rich and constantly developing culture.

Areas such as South Africa and Zimbabwe, formerly Rhodesia, that have a history of political conflict due to tribal differences are rich in the diversity and strength of their cultures. Since the first influx of Bantu tribes in the early centuries AD, warring groups would conquer a tribe then absorb the women and children into their own tribe. Thus, a cross section of cultures developed, all similar in their roots yet each distinct in their ancestral heritage. A parallel could be made to building. While the patterns of settlement are quite similar throughout Zimbabwe, it is the structure of a hut and the layout of a homestead that is distinctive to each group. The pride with which individuals will distinguish themselves as being from a certain tribe, is reflected by how they will build a hut and arrange their homestead.

The pattern of development within a Zimbabwean homestead is very different from the American household. There is a natural progression that occurs in an extended family. A homestead grows and expands as the family members increase; for example, a headman will acquire a new wife, more children will be born or a son will reach adulthood and build his own adjacent homestead. The size of a hut does not indicate prestige. Similarly the amount of land given to a family depends on the families needs not on their wealth. Wealth is the number of cattle, wives and children a man has.
I began my research in the rural areas of Zimbabwe, hoping to find the roots of traditional building in areas of the country less touched by modernization. In a sense, rural Africa is fortunately. Due to its isolation and lack of resources, change has been slow and much of the tradition remains. I began my studies looking at how environment, climate, materials and resources have influenced methods of building and created traditional elements. In trying to understand what makes a hut unique and why some traditional elements of building still exist today, I had to account for factors such as family, culture and personality.
<table>
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<th>Hut Type</th>
<th>Pole &amp; Dagga</th>
<th>Mud Brick</th>
<th>Reed/Grass</th>
<th>Pole &amp; Thatch</th>
<th>No Roof</th>
<th>Unfinished</th>
<th>Old Hut</th>
<th>Other</th>
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<tr>
<td>Cooking Hut</td>
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<td>Platformed Storage</td>
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**Symbols Chart**
I chose seven areas of the country to study, looking both for patterns and for unique elements. I began comparing the organization of the various homesteads to see if it would help me understand how people relate to each other and how they arrange the spaces in their environment.
"Musha" is the word for home, but it does not mean "house." It is a grouping of huts in a village plan that encompasses the extended family. The layout of a homestead provides great insight into the roots and personality of a family.

In Jekero, for example, many families had been exposed to modern building techniques since the 1970's. There were more square huts, organized in a linear formation. However the strong roots of the Shangani culture remain evident in the well built huts, the quality of their interior woven grainaries and in the organization of the headman’s wives in a cluster of sleeping, cooking and storing huts.
This man learned to build in the South African homelands. He is very thoughtful and careful in his orientation of the huts, placement of columns, and plan of a future homestead. He uses solid Mupane wood posts, infilled with unburnt bricks or dagga and plaster. He says the latter method is better because the wood is placed closer together, making the walls stronger. He has a neat compact thatching technique. When asked if he would rather have an asbestos roof, he said it is less work as it lasts longer without repair; but he likes the coolness and look of the thatch roof. He suggested building homes with cement material but in the style of a traditional hut.

SHANGANI TRADITION: as the original compound expands some family members remain within, some travel next door while a few may move to other areas. Parents remain living with the last born son in their own homestead. The first son is often sent away to find his own homestead (or more recently to work in the towns or cities). In the past some families may have brewed beer and conjured up spirits to protect their homestead; but the Masiya’s are Christian, so they “just pray like everyone else” for protection.

The “Shangani weave” is a type of interior granary. Softened wood strips are woven into a beehive shape. This weave has the strength of wood, but is more durable and helps preserve grain by allowing air to pass through. This inner granary is elevated on a wood platform over the cooking area. Smoke from the fire keeps insects away from the grain stores. Another advantage of a self-contained granary is that stores can be protected with less durable outer walls and by children sleeping around the fire.

Mr. Masya's family lived in this region before the war of independence. During the war people left their homelands and moved outside of the country, many to South Africa.

Mr. Masya’s ancestors have been in the Jekero area since the 1940’s (at least). He returned to his plot in 1984. He described his structures as very “typically” Shangani. His method of building was taught to him by his father and grandfather. While placement of the huts within the homestead is not carefully considered, direction of doorways and ventilation gaps are important for avoiding rain and wind.
FORM:
Shape can be a loose diagram, or a hard line plan.

FOCUS:
While Westerners are concerned with outward looking views, the African homestead faces its structures inward to focus on the centralized family unit.

PATHS/CONNECTIONS:
How one traverses from one place to the next establishes the boundaries of public and private space. How places are connected establishes a hierarchy between structures and within the homestead.
CULTURE
knowing a place is a matter of getting inside it
maybe handing someone a camera, then getting down and looking at things from their perspective
interior of kitchen hut; walls and storage are pounded earth, roof is thatch
Why are people so quick to get out of rural Africa and into the city; so quick to deny an association with village life?

I asked one man, a builder, how he compared modern materials, such as asbestos roofing, to the traditional thatch. A few of his friends laughed, unsure if I was curious or ridiculing their methods. The man replied carefully; modern roofing, he felt, was more durable, but thatch was more beautiful. But how he really felt could be seen in his eyes as he looked with pride at his newly constructed homestead.
We can not disconncet people from places. We adapt our environment to make every place we inhabit feel like a home.

How do we interact with our environment?

For a Zimbabwean, home is where the spirit of their ancestors are. Home is not a specific structure or plot of land, but a place where you are tied to the community.
as an outsider, reach for the culture subtly, as an architect touch the site softly.
rural area, Nyanga
We entered the spirit medium’s homestead and were formally seated on a mat at a distance from the raised granary under which the community sat. In an official’s home we were not asked to join the family until our purpose was assessed. After the usual greetings and formal introductions, I began my questioning with my favorite question.

Why did you come to this place?

“The spirit told us to,” was the reply.

How?

“A spirit came to the medium and told him,” they answered.

So which hut did you build first?

They pointed to the one behind the boy’s head, “That one.”

Why?

“Because the spirit told him too.” A very talkative spirit, I thought!

Is the hut special in any way?

“Yes,” they replied. “The hut is special because it is where the spirit enters the medium when it has something to say.”

Is it built differently?

“Yes, it has a front and back door, so the medium can enter from this {the public} side, and leave from the other side to go to his dare.”

Can I see this dare?

“No, No,” they shook their heads firmly, “only those visiting with the spirit can go there.”

My translator later told me that the place had been inhabited previously by another spiritual medium’s family and these people probably just took over the land.

I liked the spirit story much better, I replied!
I asked why there was new grass on one part of the roof; there was a gap in the thatch as if the people were still building. The man told me that someone had died in that hut, so they had put a gap in the thatch to let the dead man's spirit out.

When a homestead site is chosen, the first action is to clear the ground. Tradition is to have a witch doctor, sprinkle herbs around the edge of the site to protect it from bad spirits. According to old tradition, if there are markings on the ground the next day, a witch has come through and the site can not be used. Thus, the neater the earth is swept, the easier it is to catch a witch. Of course this method of ground treatment also allowed animal prints to be seen, and today is used to spot snakes, to help mothers keep an eye on small wandering children.

Whether the creatures of the night are mythical witches, dangerous beasts or modern thieves night time fears are universal. The tradition of sweeping the earth and sprinkling herbs is still used in the rural areas of Zimbabwe today. It is like the African version of an alarm system!

Thus the tradition of sweeping the earth serves a functional purpose, while the practice of sprinkling herbs on the ground remains out of tradition.
“Somehow Hallie thrived...like one of those miraculous fruits that taps into an invisible vein of nature and bears radiant bushels of plums while the trees round it merely go on living.”

Animal Dreams
Barbara Kingsolver
Why are some elements lost through the process of modernization, while others remain long after their original function is forgotten?

The southwestern area where the Shangani and Venda are the predominant cultures is considered “oppressively hot” according to climatic zoning. Outdoor platforms developed out of the need for a cool place to sleep on the hottest nights. These platforms are still used for sleeping, but have also become a traditional or stylistic element found in huts that are not used for sleeping.
"When an architect forces on a material any form contrary to the nature of that material, the result is failure."

Frank Lloyd Wright
hand-made mud bricks, Mzolo

interior grainery, Chikafa

Venda washstand, Dite

outdoor endased pit area - a central focus point.
tree used as a dare, Chikafa

roof, Chikafa
Stonework was laid according to how the broken pieces of limestone fit together. Originally, no mortar was used; wall strength came from thickness of wall, and progressive layering and overlapping of the stone.
traditional building materials - wood pole & daggha (mixture of clay, water & ); mud brick; stick & reed; stone & mud mortar.

pole set onto dip in stone, set 50cm into ground; reinforced with small stones to filter rain away from wood into ground

stone wall - a bigger stone at bottom provides foundation support and protects rest of wall from erosion
Mr. Musmeki's Church: made out of traditional wood and mud, it was the largest structure that I saw.

- **Materials:** wood posts, mud brick infill, clay plaster, thatch, plinth
- **Height:** 7.7 meters
- **Diameter:** 16 meters
- **Wall:Roof:** 1:2
GENERAL:
proportion varies according to region, ground condition, climate and hut diameter
similarities exist within an area, the limitation of materials influences design & construction
diameter: height 2:1, 3:2, varied
4:3 raised huts
wall: roof 1:1.5 drier regions
1:2 wetter regions
stoops .300-.500 meters
doorway 1.8-2.0 meters

INTERIOR GRAINERY, varies according to region and available materials; Shangani was most intricate

materials Mupane wood supports, river reeds for thatch
inner grain Mbarrio purling - woven about .2-.300 m.
height 2.75 meters
diameter 2 meters
wall:roof 1.5:1.25
paths
connections

Mbare, township streets

path leading to a dare, Chicafa

entrance to a homestead, Mzolo
roofing pattern, Chisuko

light through bamboo wall, Creative Space

reading/play area, Creative Space
rooik hoang, Mzolo

resting stoep, Binga

stoep sketch, exhibit area

sketch, Machaya

circular structure - roof extension detail

gathering/resting places
Interior weave, Chicafa

Platform construction, sketch

Platform, Creative Space
a memory is left, an experience is taken away
The telling of stories through language and vocal intonation cannot be replaced by the written word. The preservation of history and culture can be made permanent through modern recording devices, without losing a sense of tradition.
as an outsider, reach for the culture subtly, as an architect touch the site softly

stepping onto a homestead can be a subtle movement from grass to cleared ground
entering a structure should be as fluid a movement as entering a homestead
not an abrupt crossing of a line
but a barely discernible passage from one part of the earth to the next
Why Africa? It is difficult to explain the beauty and power of Africa. There is something so special about the rural areas of that continent that keeps drawing people back. There is an intensity about the land, whether it is the contrast between the low green veld and the expansive blue sky; the coolness of the damp red earth and the heat of a constant, yellow sun; or the stench of rotting mealie husks in the township of Mbare and the clean fresh scent of the earth after the rains. There is an untouched beauty about places where human existence and structures seem to emerge from the earth and then blend back into it. The huts dot the landscape like thick, short trees scattered naturally by human development.

Why the site? What makes the existing site so striking is the abundance of flowers and shrubs that literally attack you as you make your way from the road to the historic pit structures; the view from the mountain top that allows you to see all the way to Mozambique on a clear day; and the sense of history and timelessness that surrounds the 10th Century pit structures.
The struggle between man and nature is reflected in the tension between structure and site. While life in the bush is always a struggle, there appears to be a mutual agreement that develops; structures are never taken from the earth, merely borrowed as needed, and returned for use by the next generation.

Why do some people take such care with their environment, while others leave it to be trashed? If it is not a matter of economics, perhaps it is culture, or just personality.
A hut is a purely functional structure. It is the space around the hut that allows freedom of movement and social interaction.

In Africa, a border is not necessarily created with a structural line. A boundary can be indicated by a subtle differentiation in the treatment of the ground.
architecture is not forced; it forms from the natural rises and falls of the landscape
Most builders spend a lot of time and money moving and replacing earth, adding or depleting vegetation, forcing a structure onto a place. Is this really necessary?
The structures should just occur to the site, just as the right stroke appears on the painter’s canvas; merely as a fluid conclusion to the arm’s movement.

sometimes it is hard to explain WHY we choose a place
perhaps we see a piece of ourselves in a tree
or hear our soul calling in the soft tones of the breeze

old to new, Venda, Dite Area
in architecture, we study form and structure, planes and the spaces in between
but what about the art of making?
a building eventually goes back to the earth from which it came
it is knowledge and an understanding of the process that remains
My biggest questions regarding my research and my project were:

How does one recognize culture in the way people build and tap into it to create “culturally appropriate” architecture?

I wanted my work to remain true to “pure” Zimbabwean culture, but questioned whether there can be pure culture or design. Africans have always been a hybrid of migrating tribes. There is no “Zimbabwean” tribe, but numerous cultural groups, speaking many dialects. So, how could I expect myself to create a pure “Zimbabwean Design”?

How could I incorporate the best elements of the old and the new?

The best I could do is take the essential elements of a culture (instead of the stereotypical symbols) and use them as a method of discovery in developing a project. I chose to use the LANGUAGE of Zimbabwe architecture: use of available materials; the methods of joining and building; spatial patterns of the homestead; patterns of development and growth; and relationships between family and community.

Can we separate who we are from the way we design and build?

Our design is influenced by the sights sounds and smells that surround us, our education, and our personal tastes.

How can a designer influence the architecture of a place without destroying the culture?

I chose to use elements that were evident in a range of homesteads, from the very traditional to the more modern: entrance; proportion; sheltered outdoor living; room for expansion; adaptability to land; consideration for the site; preservation of family and permanence of culture. I wanted to leave the site intact, to appreciate its natural beauty. I struggled to find a middle of the road approach. To build without compromising the site, become involved without losing myself and use tradition without cheapening it.
All the cultural groups influenced my project on some level. I based the plan of my cultural center on typical Tonga villages.

Important elements of a Tonga homestead:
- Grouping of huts for one family unit (wife and children)
- Organization of huts according to relationship to head man
- Uses of the central space
- Defined focus of dare (meeting place)
- Line of site from center to all areas of homestead

A growing "homestead" centered around a meeting place, consisting of adaptable, naturally occurring mini groups (each with their own function).
Troutbeck is a small town located among the tall peaks of the Nyanga mountains. The area is popular as a cool and beautiful retreat from the African heat. There is frequent rainfall, bracing winds and hot midday sunshine. The site is located on a hilltop with an elevation ranging from 2000m at the entrance to 1600m at the perimeter. On a clear day, the view from the pass looks all the way to the Mozambique mountains. Obviously this place was an advantageous site for the early 16th century Shona people.

I chose the site not only for its beauty, but also for the ancient pit structures scattered around the hilltops. These pits were 16th century kraals (anthropoids), dug into the ground about 2 meters, and reinforced with stone in a manner similar to the construction of the Great Zimbabwe.

Located near water that was dammed and streamed over the hill, surrounded by forests that provided building and cooking materials, and set in a clearing that provided a natural look out point in all directions. It was, and still is, an ideal place for a protected kraal.

The terrain is hilly, sloping steeply in the main site area yet also flattening out into tablelands. A variety of indigenous plants such as widderinga, cycad and tree ferns grow tall and wide. The colors of yellow hypericum, red hot poker and white cosmos come alive in the hot sunshine. Local trees good for building are wattle trees inside the pits, are matasset (hard), mulu, and gum trees. There are Wattle trees around the pit areas grown large from the natural fertilizers on the pit floor. Perhaps these were originally meeting trees (Dare's). Stone typical to the area is dolomite, a grey stone that turns reddish as it decomposes, and granite which can be split easily. Living indigenous, locally found materials is not only cost effective, it is also appropriate for a project based on the traditional.

Occasionally a log rolls in and covers the site with a blanket of moss/fern. Whether it is the presence of ancestral roots or a sense of history related to the ancient pits, when you are on site there is a strong connection to the past.

CREATIVE SPACES

Comfy places to learn and create. Similar to a traditional village, spaces can expand and the number of structures can multiply or decrease as artists and teachers move in and out of the community. The idea is to have an amorphous community that is a mixture of new and old. Temporary structures that could be built individually, then passed on while still useful, or reused as material for new structures. More permanent structures that can be adapted to a variety of activities.

EXHIBITION SPACES

Crafts should be regarded as something more than tourist trinkets. If displayed with care, a piece can become an art object that tells about past cultures.

MARKERS

From the road, a single curve marking the highest point on the hilltop is the only indication that landscape is giving way to a cleared area. Once within the boundaries of the site, a small cylindrical post is a clear marker for the next area.

AUDITORIUM

Stories can be told through movement and expression. Songs and dances are not only entertainment, but also tell the history of a people and explain relationships between tribes and families. A more close of the hands can welcome a stranger or thank someone for their hospitality.

BENCHES & VIEWS

Stone half moon benches could provide solace to contemplate the landscape. Groups of rough wood stump stools along a long path provide a resting place or a flexible arrangement for casual conversation.

TOILETS

Toilets, simple mud & stone outhouses, are set into a sharp rise. Seen only as a round shape in the hill, they are connected to the site by a path.
What became important was not to create a permanent dwelling but a permanence of spirit, so that whoever returned to this place would know that something special had occurred there.

EXHIBIT SPACES
cross section - wall materials and thicknesses
outer 50 cm stone wall, acting as retaining wall, backed by 30 cm. mud wall reinforced with 22.5 cm. pole, every 2.5 m.

view from above
TRADITION

- a human cell - a group of voiced yet mutually dependent parts that make a simple functional whole.

Great Zimbabwe - entry walls

Great Zimbabwe - Great Enclosure - plan

Great Zimbabwe - stone work

DIAGRAM

In art we are told there is no such thing as a solid line, only gradations of grey.
In architecture we represent three dimensionality with line, hierarchy with the weight, and distance with the gap. In Africa a boundary is not defined by a structural line, but with a subtle differentiation in the treatment of the ground.

enclosed in a circle of stone, one feels protected open to an expense of sky, one retains a connection to nature.

sketch

Amorphous - state of matter in which it is without regular or definite shape.

CENTRAL AREA

central space - level changes

entry space - levels follow the grade of the land, establishing a hierarchy of places.

WALLS/LEVELS

cross sections - wall finishes and thicknesses,

outer 50 cm stone wall, nesting an existing wall, bonded by 50 cm mud wall reinforced with 0.3 cm planks every 2.6 m.

wood post with mud brick fill, overlaid with crushed stone, clay plaster-faced the outer wall, inner wall remains unfinished back.

ENTRANCE

the site is not clearly defined. entrance is a subtle differentiation between natural earth and a structure emerging from an opened area.

DISPLAY

central space - information board

wood posts with wedge cut in wood or cork board to allow five wedges from above.

view from above

view from below

inner wall protect the inside, outer wall discover an entry area.
varying level of the floor and inner wall heights creates a path around the exhibit, orientation back to central space is provided by view over low walls.

varying levels of display areas provides a visual and physical hierarchy.
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<th>DIAGRAM</th>
<th>CENTRAL AREAS/PLATFORMS</th>
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<td>central space - level changes</td>
<td>wall heights vary with rise and fall of the ground</td>
<td>entryway - main exhibit spaces</td>
<td>Display spaces - set into stone</td>
<td>main exhibit spaces</td>
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<tr>
<td>Typical square hut - Nguni family</td>
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<td>varying level of floor and inner walls; heights creates a path around the exhibit; orientation back to central space is promoted by views over the width</td>
<td>gaps in stone bring light into space and visual connection out to site; varying levels of display areas provide a visual and physical hierarchy</td>
<td>pole &amp; diogha hut; stone reinforcement; thatch roof</td>
<td>hooks sunk into a mud wall can hold bâtkis, woven cloth for information barriers</td>
<td>typical exhibition space - N, S, E, W elevations</td>
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<td>Typical homestead - Venda</td>
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<td>core space; square building; connection between exhibits</td>
<td></td>
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<td>metal rods have horizontal braces through diameter to hold metal/glass shelves; front glass sheeting slides into vertical groove in roof; metal/mesh slides into slot at back of unit</td>
<td>central &amp; connection spaces</td>
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<td>square building - core center; the visitor is pulled into building by brightly illuminated glass &amp; metal display units; glass allows light to flood circular space, and also provides a visual connection to other exhibits</td>
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TRADITION
- cleared-earth structure entry into a homestead
- roof overhang - shaded space beneath - Notable
- oral tradition - stories of yono are passed down from oral sitters

DIAGRAM
- relationship to site
- stone wall complexes (site); wood & stone mark boundary; walls enclose and define interior spaces

CENTRAL AREAS/PLATFORMS
- elevated location and use of stone and mud plaster keep offices and storage spaces dry and cool
- overhang - interstitial space between wall and building
- an interactive place can be made between outer walls

WALLS/LEVELS
- section/portion
- overhang - strength of materials in walls and columns create structural tension in building
- spaces in stone wall provide access and connection to exhibits

ENTRANCE
- entrance - a break in the bamboo wall
- office spaces - a place for research & exchange of ideas
- central staircase, a transition providing a view to the large work table conducive to interaction

DISPLAY
- the history of Zimbabwe is both remembered and learned through the oral traditions; ceremonial enclosure encircles a sight & the spirit pathway climbs around an open fire
- recording station - a place where stories are told

EXHIBITION SPACE
- offices & wall
- telling of stories through oral tradition
- places for storytelling and learning
a place where the spirit possesses you

dances emerge from the trusted new inbox, inside they are masked in a flood of a light from the opening above

gathering place, Chikafa

AUDITORIUM
TRADITION

Closed rules - platforms create a hierarchy of spaces.
Stone walls follow pattern distinctive of 17th c.
Institutions.

DIAGRAM

LETS JUST MAKE SOMETHING MOTHER NATURE
WANTS TO HOLD IN HER HANDS.

CENTRAL AREAS/PLATFORMS

a hill is a natural vantage point;
removing part of the hill creates a protected enclosed pit.

WALLS/EVES

proportion:
traditional Shangral church (top)
project auditorium (bottom)

ENTRANCE

THIS IS WHERE THE SPIRIT POSSESSES YOU.

DISPLAY

performers hut - confederal site
mask space with demerits
changing rooms - separated by 1.75 m, high mud walls
small hut - interior perspective

AUDITORIUM
if one starts with a basic premise
allowing it to instinctively develop according to the parameters of the situation
allowing the idea to flow from the context into a cohesive whole
the idea will not feel forced
forcing ideas confuses a concept
rigidly holding to a rule diminishes the power of one's instinctive reasoning

a good idea will remain strong even with modification
### TRADITION

- shelves formed from mud walls - Nabirle homestead - Models
- platform - togga - pole & branch construction
- platform - connection places - differentiation between ground and liveable area
- when a simple structure is a room, the surrounding space is a living area and a tree becomes an important meeting place

### DIAGRAM

- typical homestead set-up
- the repetition of structure can create a pattern
- while still allowing variation of form
- a central space provides a focus around which life revolves

### CENTRAL AREAS/PLATFORMS

- platform construction showing:
  - head - wood poles (2 1/2 in. dia. & 3 in. dia. 3 m. long)
  - head - wood beams 1 1/2 in.
  - head - wall of reed & grass woven into wall with wood battens
  - head - wall with natural light and ventilation to flood the space inside
  - a doorway can be a primary source of light and air

### WALLS/LEVELS

- how can one be creative while only standing at four closed walls?
- outdoor/indoor areas provide venue for creativity to spill out of an enclosure

### CENTRAL SPACES/PLATFORM

- platform - construction - exterior:
  - side 1 & side 2 views
  - platform - construction - interior:
  - right & left views
  - pit - contained interaction area

### DISPLAY

- storage units
- bookshelves
- a rough cut wood table - an ideal work surface

### CREATIVE SPACES TYPICAL

- platform - typical - raising a hut on stilts protects the poles & mudda from insects and rain
- platforms - cozy meeting & talking places
- outdoor enclosed pit area - a central focus point
**TRADITION**

- The beauty of an African hut lies in the simple use of naturally occurring materials - Hoge Hut, Ridge

- While most will use a traditional dwelling as just a hut, variations of these simple forms can create a sculptural form that has the quality of a work of art.

**DIAGRAM**

- Connection of shape and form can be a loose diagram or a hard line plan.

- House forms are concerned with outward focus. The African homestead faces its structures inward to focus on the centralised family unit.

**CIRCLE STRUCTURES**

- Precedence - Circular structure - cross section

- Circular structure - roof extension detail - Circular structure - roofing pattern

**CENTRAL AREA/PLATFORMS**

- Circle structure - deck descending with slope of land

- Rectangular platform hut - platform construction - Side elevation: back elevation

**WALLS/SCREENS**

- Bamboo walls screens shading and visual barrier between outdoor platform and area outside of building boundary

- Wall of bamboo poles with glass mat woven through creating a subtle curve; positioning of walls under eaves overhang creates shade from sun.

**ENTRANCE**

- Corner entryway

- Entrance through staggered mud walls

- Entrance can be as simple as a break in the bamboo & matting.

**CREATIVE SPACE! EXCEPTIONS**

- Hut can be sculptural

- A slope inside a curved wall provides a bright, cozy living place

- Rectangular platform hut - interior perspective
people talk about the objective eye of the camera
i do not see how a photograph can be objective
from the moment i place the viewfinder to my eye i lose myself in the world of the camera
the image found is forever printed on my mind
i can no more separate myself from these images then i can separate my presence from my history
my photography and my architecture are about understanding the essential, observing the existing
and merely allowing what is already there to appear in form


Thanks to my mother for her unquestioning faith in me, and my sister for her stress relief tactics and hours of advice.

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# PLACES OF THE EARTH

Christie Savidge Sterne

**vita**

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<td>Master of Architecture</td>
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<td>1996-1997</td>
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<tr>
<td>1988-1992</td>
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<td>Bachelor of Arts - History; Art Theory &amp; Practice</td>
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