An Embassy for Somalia;
Traversing the Boundary Between the Sacred and the Profane
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Traversing the Boundary Between the Sacred and the Profane

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

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Diametrically opposed forces, while independent, require the presence of the other to exist. Shadow is found through an absence of light. Earth exists as a result of the heavens, whether cosmologically or theologically. The following project explores dichotomies and the architectural elements that can span two disparate entities. The proposal for an embassy for Somalia strives to discover the threshold between the dualities of the Islamic faith and the profane environment. In the faith one must follow a path, whether physical or spiritual in order to find true enlightenment. By allowing the path of the thesis be the guide, the various elements of approach, entry, courtyard, garden and sacred spaces are illuminated as the thresholds between these diametrically opposed forces of public | private, heaven | earth, sacred | profane.
Dedication/Acknowledgements

In generosity and helping others be like a river.
In compassion and grace be like the sun.
In concealing others’ faults be like the night.
In anger and fury be like the dead.
In modesty and humility be like the earth.
In tolerance be like the sea.
Either appear as you are or be as you look.
~ Seven Advices by Moulana Jalaluddin Rumi

I dedicate this book to:

The memory of my grandmother, who always embodied these seven principles, impressing them upon me over the years I was blessed to spend with her

My committee, who ingrained a new set of architectural principles in me, always pushing me to the next level.

My parents, unconditionally supportive, through the various twists and turns my life’s path has taken.
CONTENT

............ ASL .................

ORIGIN

............ LIWAN .................

APPROACH

............ SAHN .................

COURTYARD

............ MAJLIS .................

ENTRY

............ JANNAH .................

GARDEN

............ MASJID .................

SACRED SPACES
| LIST OF DRAWINGS |
|-----------------|------------------|
| FIRST FLOOR PLAN | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| MEZZANINE PLAN    | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| ROOF PLAN         | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| CONTEXT MAP       | Autocad drawing, etched on lasercamm, hand-crafted, edited in Photoshop |
| SOUTH ELEVATION   | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SOUTHEAST ELEVATION | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| EAST ELEVATION    | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| NORTHEAST ELEVATION | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| DAYLIGHTING STUDY | Watercolor pencil on watercolor paper |
| SOUTHWEST ELEVATION | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SOUTH ELEVATION INSIDE COURTYARD | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SECTION THROUGH AUDITORIUM/ENTRY | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SECTION THROUGH AUDITORIUM/RECEPTION | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SECTION AXONOMETRIC THROUGH ROOF/RAIN SPOUT SYSTEM | Graphite pencil on watercolor paper |
| SECTION AXONOMETRIC THROUGH PRAYER GARDEN | Graphite pencil on watercolor paper |
| OBLIQUE SECTION THROUGH PRAYER GARDEN | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SECTION THROUGH PRAYER GARDEN | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| OBLIQUE SECTION THROUGH PRAYER GARDEN | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| LONGITUDINAL SECTION FACING NORTHEAST | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| SECTION THROUGH MOSQUE/SERVICE CORRIDOR | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |
| LONGITUDINAL SECTION FACING SOUTH WEST | Autocad drawing, etched on lasercamm, hand rendered with pencil, edited in Photoshop |

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According to the Islamic faith, in the beginning, the center of Eden gave forth to a river. This river parted into four branches, forming the shape of a cross. This center is both the beginning and the end, the alpha and the omega, the creation of life, and the intersection representing the meeting of man and God.

Working with this duality became a focal point for the thesis, more specifically, navigating the boundaries between sacred and profane spaces. ‘Sacred’ came to mean religious, or private, while ‘profane’ came to mean secular or public, associating the word with a less negative connotation.

Somalia is a country ravaged by war and famine. Its embassy was disbanded in the United States in 1992 during the Civil War. The thesis proposes to build a new embassy for Somalia, located in Washington D.C at the corners of O Street NW and 7th Street NW. The challenges presented include creating a country within a country, retaining the religious and cultural aspects inherent in Somalia while melding with the surrounding environment, and creating layers from the perimeter of the site all the way to the core of the building to allow for different levels of privacy and security.

This thesis is presented not chronologically, but through moments within the project which define transitions between the sacred and the profane.

“Behold! In the creation of the heavens and the earth; In the alternation of the Night and the Day; In the sailing of the ships through the ocean for the profit of mankind; In the rain which God sends down from the skies, and the life which he gives therewith to an earth that is dead; In the beasts of all kinds that he scatters through the earth; In the change of the winds, and the clouds which they trail like their slaves between the sky and the earth; Here indeed are Signs for a people that are wise.”

~ Quran, S.II V.164
KEY

1) Public Sidewalk - allowing entrances to the site via 7th Street NW or O Street NW
2) Semi-Public Courtyard - a space for gatherings to raise awareness, an open-air farmers market featuring Somali-made products and benefitting the relief organizations, or a place for travelers to wander around and view the embassy from inside the outer shell
3) Open Arcade - another space open to the public, allowing them to interact with parts of the structure
4) Entry - the first threshold from public to semi-public, leading into the more public entrance hall
5) Waiting Area/Security - screening area, guard station
6) Library - open to guests and embassy employees, includes books and other information about the country, customs, and religion
7) Gallery - double height space to display exhibits, and overflow from the formal dining area
8) Formal Dining Area - space for special dinners, charity functions, formal gatherings
9) Stage/Auditorium - performance space, accessible via the public sidewalks for open events, or directly through the embassy for private events
10) Restrooms - toilets never facing in the NE/SW direction, as this axis should be devoted to prayer
11) Ablution Pool - a pool to cleanse oneself before prayer
12) Shoe Niches - to store shoes and personal belongings before entering the mosque, each gender assigned a separate entrance
13) Mosque - a sacred space of prayer
14) Service Corridor/Kitchen
15) Private Office Area - for embassy employees only
16) Conference Room
17) Garden/Open Prayer Space - open to employees and guests as a place of retreat and prayer
18) Parking
19) Tower Fragment
KEY

1) Public Sidewalk
2) Courtyard
3) Stage Below - auditorium is tiered seating, open to the exposed rafters, acoustical panels and oculus above
4) Dining Mezzanine - to be used as a dining area for employees during their lunch break, visitors to the embassy, or overflow seating during dinner events
5) Relic Niches - while shoes can be stored below at arms length, the niches above can be filled with artifacts or relics, visible to anyone visiting the embassy, but out of reach
6) Women’s Prayer Space - open to skylight above
7) Men’s Prayer Space - open to skylight above
8) Restrooms
9) Private Offices - office space on the second floor, providing an even more private and secure space
10) Open to Below - areas including the gallery, entry hall, and dining area which are open to the roof above. The descending height of the roofs gives each space a proportionate volume
11) Performance Stage - raised platform to accommodate a singer or small performance group, for more intimate gatherings
12) Tower Fragment
KEY

1) **Tower Fragment** - Remaining tower fragment and adjacent brick walls from the former O Street Market building previously occupying the site

2) **Oculus** - circular glass skylight filling the void created by the compression ring on which the trusses bear for the auditorium roof. At the bottom, outer edges of the dome sits a tension ring, securing the base of the trusses

   **Skylight** - multiple skylights occur throughout the building, shedding light on the spaces within, and in most cases allowing the heavens above to directly interact with the water below

3) **Copper Roof** - standing seam shed roofs clad in copper direct the water toward the guttering system and spouts at the base of their slope

4) **Rain Spout** - once the water is funneled into the copper rain spouts it flows onto the next roof below or sluices down a niche in the face of the wall to a pool below

5) **Water Catchment Pool** - basins catch all the stormwater draining off the building, creating pools surrounding the perimeter. The pools also act as a security feature, deterring people from approaching the open sides
Two photos, taken years apart, show the tower fragment and its remaining walls standing proud at the corner of O and 7th Streets. This fragment became the origin for the thesis, an offering by the site to be the first building block of the embassy. From the Southeast approach, this familiar structure is the first visible piece of the embassy, tying itself to DC while the visitor crosses the threshold into another country.
Finding a ‘ruined’ site became essential to the project, a location which both borrowed from the past and contributed to the future. This threshold begins to weave the fabric of the city into the context of the site, creating a transition between the two countries.

The chosen site for the thesis is located at the corner of the block of 7th St. NW and O St. NW. The building occupying the site was previously the old O St. Market, built in the mid 1800’s. It had been partially demolished and all that remained was a tower and three adjoining brick walls, braced by wooden girders to prevent them from crumbling down.

The tower fragment, located on the Southeast corner of the site, emerges as a monument to the previous structure, evoking that image of momento mori. Yet it becomes much more than a memory, as it determines the first point in the axial spine running through the building. This establishes its orientation to the Southeast, facing Mecca. Call to prayer occurs five times a day, so facilitating the direction of prayer is crucial.

The remaining walls then create a permeable boundary between the city and the embassy’s courtyard, which has been resurfaced using the existing terrazzo tile, extending into the public path of travel. The courtyard is made available to the general public, open at certain times of year for vendors and Somali awareness events.
This photograph shows the approach of the site from the corners of 7th and O St. The tower fragment rises from the Southeast corner, its two walls embracing the courtyard of the embassy. The embassy walls are visible beyond the existing structure, extending out onto the sidewalk and allowing the public to pass through. A dialog of opposites is painted through the contrast of stark white concrete and the rich color of aged brick, delineating the boundaries between old and new.
The South elevation shows the changing heights of the bearing walls in the embassy. The highest level corresponds with the top of the old market wall, while the centralized mihrab forms an answer to the tower fragment at the corner of the site.
The Southeast elevation gives the vantage point of one standing on the corner of O St. and 7th St., approaching the embassy. The semi-public exterior courtyard is veiled by the market walls in this view, but the colonnade arching over the public sidewalk is completely accessible by pedestrians.
The East approach starts to hint at the wooden screen walls which make up the partitions on the Southwest/Northeast axis. They stand in opposition to the heavy bearing walls, in material as well as transparency.
The full range of perforated wooden screens is seen from the Northeast elevation, including the smaller scale screens making up the fence enclosing the sunken garden. This elevation, in contrast with the adjacent one, allows the observer to catch a glimpse through the veil to the space within.
This closeup of the auditorium colonnade gives the vantage point of a pedestrian walking down the sidewalk. Unlike most embassies, which are intangible and withdrawn back from the street, parts of this building extend directly into the fabric of the city.
The courtyard establishes itself as the centerpoint of the axis, acting as the generator for the building schematic. It becomes not just an element of the thesis, but an integral part defining the whole. The courtyard has remained a constant fixture in Islamic architecture since the beginning of time, so using it as a guide to organize and orient the building seems a natural solution. 

The entry courtyard, or sahn, is accessible to the public at all times, however separated visually and materially from the public street and sidewalk. By extending the existing terrazzo floor tile of the market throughout the site, the threshold between the public walkways and extents of the embassy is more clearly defined. As reminder of the structure which previously occupied the space, the vestiges of the foundation walls are to remain. 

The form of the courtyard is greatly influenced by tradition and culture. The four elements of earth, air, fire and water have been considered sacred from the beginning of time, with water revered as the source of all things in the Islamic context, but also divisive. A vein of water runs from the exterior courtyard into the building, dividing the entry, yet also feeding the ablution pool at the heart of the building. While water represents the source, the sun, which is pure light, symbolizes the Absolute Being. Its illumination is essentially the origin of the source, the infinite and all-powerful. To respect this connection, all areas of the building which contain water, both inside and out, are exposed to the sun.

“O you who believe! When you intend to offer As-Salat, wash your faces and your hands up to the elbows, rub your heads, and your feet up to ankles. If you are in a state of Janaba, purify yourselves. But if you are ill or on a journey, or any of you comes after answering the call of nature, or you have been in contact with women, and you find no water, then perform Tayammum with clean earth and rub therewith your faces and hands. Allah does not want to place you in difficulty, but He wants to purify you, and to complete His Favour to you that you may be thankful.”

~ Quran, S.V. V.6)
Rather than create a standard perforation pattern for the wooden screen walls, a daylighting study was conducted to factor in the thermal heat gain on each facade during the hot and cold seasons. This in turn determined the size of the octagonal penetrations in the screen to provide the most efficient shading technique as well as a visually pleasing veil for the embassy.
In the Southwest elevation, one can begin to see inside the courtyard formed by the fragment walls and the perimeter wall of the embassy. It forms a passageway, effectively cutting the corner and allowing pedestrians to travel through the courtyard, whether during market days or simply to take a better look at the building.
The only way to view the front entry straight-ahead is to step inside the courtyard and approach it from the Southeast. At this point, the fragment of DC starts to melt away and one steps across that threshold into a foreign country.
Copper is used as the material to come into direct contact with water. As a metal, its properties lend themselves well to roof systems. Aesthetically speaking, once the copper begins to oxidize, the resulting patina will begin to resemble the color at the bottom of the water catchment basins below. The shed roofs and copper rainspouts celebrate every stage of the movement of water, from the moment it hits the roofs, cascading through the spouts and down the niches in the walls, to its resting place in the pools sunken into the site.
In Muslim culture, the entry toward the courtyard from the street can be interpreted as a journey. The path to the center moves along a bent axis, hiding the court from view until the actual moment of arrival. Within house plans, the courtyard is the center of the internal movement of activities. An internal 'spine' runs through the building, knitting together the public and private spaces and tying them all together in the introvert moment of the courtyard.

The indirect path ensures visual privacy from the street, the public domain, and physically separates it from the private areas. This exemplifies the Arab-Islamic attitude of the individual versus the community, again a part to a whole. At times entry courtyards can serve as a semi-public space, extending the journey between public and private.

The entry, or liwan of the embassy funnels the visitors into the building, through the security checkpoints, and releases them into the two story reception, or majlis. This semi-public space within the embassy consists of the gallery, the dining area and the auditorium. At these junctures the most sacred courtyard of the building is still veiled, yet the exposed mihrab hints at what lies beyond the massive wall, marking the threshold between the semi-public and private areas.

**Quran, S.VI.V.153**

> And He (commands you, saying:) This is My straight path, so follow it. Follow not other ways, lest you be parted from His way. This has He ordained for you, that you may ward off evil.”

<table>
<thead>
<tr>
<th>Origin</th>
<th>Approach</th>
<th>Courtyard</th>
<th>ENTRY</th>
<th>Garden</th>
<th>Masjid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asl</td>
<td>Liwan</td>
<td>Sahn</td>
<td>MAJLIS</td>
<td>Jannah</td>
<td>Sacred Spaces</td>
</tr>
</tbody>
</table>
The structure of the auditorium roof is visible in this section. Pre-engineered trusses make up the support system for the copper roof, culminating at a tension ring in the center. This is not only necessary for the structural integrity, but allows an oculus to bring in natural light to the stage below.
The section cut through the bay at the stage level of the auditorium elevates the view of the mihrab rising as a monument from the floor through the roof and above the walls of the embassy. At the first landing, a mezzanine runs between the two stairs, allowing access to a niche in the mihrab. Through this niche the call for prayer is rung, the chain descending from the suspended chime above.
Inside the main entry, a vein of water runs along the axial spine, leading the visitor to the ablution pool, as well as anunciating the Southeast orientation towards Mecca.
The decision to use perforated wooden screens for the non-bearing walls continues through the inner rooms of the embassy. Because of the light streaming in from the exterior screens and the skylights above, an ever-changing mural of light and shadow is painted on the white concrete canvas, depending on the season and time of day.
According to the Islamic faith, in the beginning, the center of Eden gave forth to a river. This river parted into four branches, forming the shape of a cross. The garden in the courtyard symbolizes the ancient garden of paradise, reflecting the relationship between man and nature. This meeting of the physical with the spiritual can be experienced within the embassy’s garden, recessed twelve feet below grade at the back of the building, and completing the axis.

In the Islamic tradition, water is one of the most symbolic elements, and holds precedence for the design of the courtyard. In the typical courtyard, the pool/fountain/well is the center, the focal point of the garden. The paths in the courtyard intersect in the center, meeting at the water source. This intersection represents the meeting of man and God.

The garden in the embassy treads the boundary between the secular and the sacred. It is a place for strolling, resting, reflection, and the meeting of man and his god. The tiers leading down to the lowest layer of the garden are held in place by thick walls, which act as benches for most of the day, or mihrabs indicating the way towards Mecca during the 5 daily prayers.

The garden is also a gathering place for the water which drains off the roofs from the middle of the building to the rear. A central pool catches the water at the very last roof, in alignment with the ablution pool at the center of the building.

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"The symbol of four rivers, which branch out from a common source or centre in the direction of the four cardinal points, stands for fertility and timelessness."

~ *Earthly Paradise: Garden and Courtyard in Islam*
This section cuts through the shed roofs as well as one of the rainspouts. The beam system, composed of steel flanges and flanked in oak support the copper roofs. They sit in recesses cast into the concrete bearing walls. The coping caps are copper as well, creating a drip edge to protect the face of the walls and prevent leaks.
This section cuts through the prayer and meditation garden, detailing the construction of the gabion wall. Wire mesh straps in the rubble, allowing it to become a structural retention wall for the earth up to grade. The terrazzo tile continues down the walkways, delineating the paths of travel. Low walls form extensions off the ends of the bearing walls. These act as a terracing device, as well as housing niches for prayer five times a day or seating in between.
This South facing section cuts through the prayer garden, showing the scale of humans to the depth of the depression and the size of the niches.
This Southeast facing section shows the scale and proportion of each of the bearing walls from one to another. It is also in alignment with the Southeast axis, showing how the mihrab answers the peak of the tower fragment with its own vertical ascension.
Cutting through the opposite side of the prayer garden, this section shows the view from the West side of the embassy. The relationship of the auditorium with the rest of the building is visible, clearly defining it as a separate entity in program and form yet still at one with the embassy in style and definition.
The mosque exists as the central sacred courtyard of the embassy. It is expressed as an internal moment within the rest of the building, and the city as a whole. One such rationale for the sacred interpretation of the courtyard is derived from a Hadith warning against the use of public spaces for semi-private activities. Since the courtyard was considered a communal space, but private at certain times, this warning could not be avoided. Therefore, certain standards and principles of behavior were enacted so that even while assuming the role of a public arena, the courtyard remained solemn and spiritual.

At the center of the embassy, a large mihrab extends up and out of the embassy, an answer to the tower fragment at the corner of the site. This is the only indication of the sacred space within. From an opening in the top of the mihrab, a chime is hung. It is rung through another opening below to signal the call to prayer. In an extended analogy between heaven and earth, the four walls surrounding the courtyard symbolize the four columns that carry the dome of the sky. A skylight allows daylight into the space, and opens up a more direct relationship between the worshipper and his or her maker.

The inner sanctum of the courtyard “provides a profound sense of association with a spirit, or with ideas, felt to be greater than man himself.”

~ Pope Benedict XVI
This section cuts the entire length of the embassy, just off the center Southeast axis. It runs from the depth of the garden, through the private employee offices, to the entry vestibules for the mosque, through the mezzanine stairs, the semi-public gallery/gathering space, security room, and out to the public courtyard for the building.
This Southeast facing section looks in the direction of prayer. At the center of the section, the private mosque with the mihrab penetrating the roof plane is visible. Directly adjacent to prayer space are the storage niches carved into the massive wall. On either side of those run the service corridor. The bathroom fixtures are carefully placed along the Northwest axis, directing the unclean business away from Mecca.
Cutting directly through the center of the embassy along the Southeast axis, this is the most revealing section. The path leading from the secular outside world to the sacred inner sanctum runs through the series of courtyards and vestibules to the mosque, the heart of the embassy, and finally steps down to the garden, becoming part of the earth itself.
"I sense a Threshold: Light to Silence, Silence to Light – an ambiance of inspiration, in which the desire to be, to express, crosses with the possible … Light to Silence, Silence to Light crosses in the sanctuary of art."

~ Louis Kahn
Works Cited


