

This thesis addresses the issue of diversity within the discipline of architecture. More specifically it aims to bring light to the absence of an adequate representation of African Americans within the profession. The plan of action is to design a solution that will ultimately expose young African Americans to architecture, inspire them with, and equip them for practicing this profession. Exposure is provided by an educational program entitled DAPCAP (Detroit Area Pre-College Architectural Program) that will engage student from kindergarten through 8th grade. Inspiration is achieved by outlining various contributions to architecture provided by people originating from Africa. Likewise any student choosing to attend Detroit's Architectural Academy a proposed 9th - 12th grade architectural focused high school will receive an education equipping them with the skills to study architecture at any University in the United States or abroad.

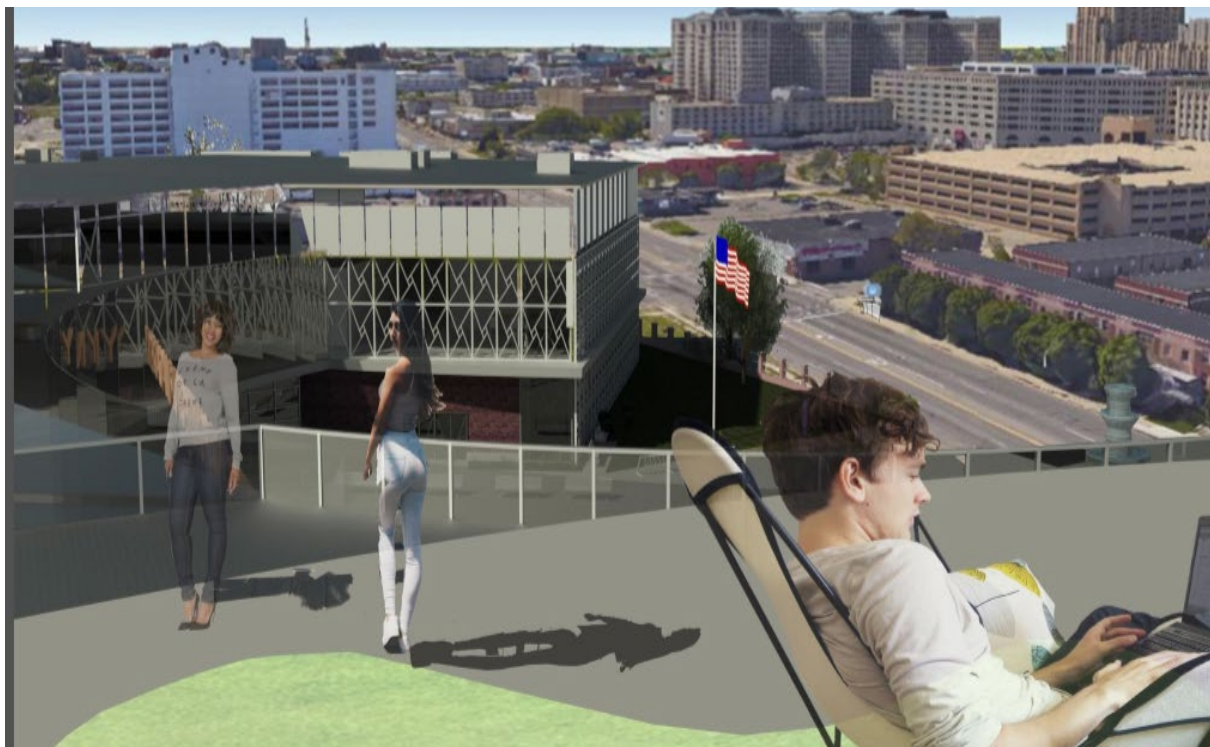
DIVERSIFYING THE ODDS

**AFRICAN HISTORY
AFRICANS IN ARCHITECTURE
AFRICAN AMERICAN HISTORY
AFRICAN-AMERICAN ARCHITECTURE
ANALYZING THE ISSUES
PROPOSAL OF EFFECTIVE ACTION
PROGRAM FOR IMPLEMENTATION**

DIVERSIFYING THE ODDS

BY: KEVIN PARKER

An Architectural Graduate Student at the University of Detroit-Mercy and from the city of Detroit engages a thesis that takes a look at the Social, Historical, and Economical conditions which have contributed to a poor African American presence in Architecture



DIVERSIFYING

THE  ODDS

Kevin A. Parker

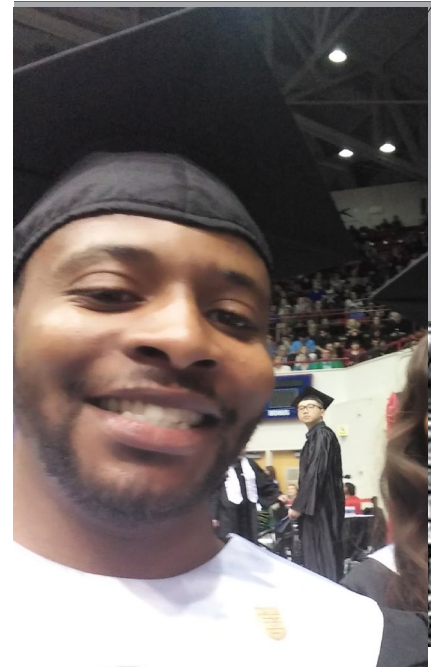
THE UNIVERSITY OF DETROIT -MERCY

MASTER THESIS 2017

Dedicated to the Loving
Memory
of
Carnell & Hester Parker

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AUTHOR INTRODUCTION

My future plans is to operate a private practice with one or more qualified partners within 10 years of becoming a licensed architect. I have always had a passion for drawing, painting, and various other forms of artistic expression. At one point as a youth I was producing a minimum of one or more sketches a day and built quite an impressive portfolio. This was during a time when I transferred to a new Elementary School where I met a group of pupils with very advanced artistic abilities. They eventually accepted me into their circle where it was soon determined that I was also artistically gifted. Consequently a greater respect for “the arts” was obtained by maintaining these friendships throughout my life. I discovered what the architectural profession was from a children’s book that I received as a Christmas gift which was written on various career choices available to children. Upon arriving at the chapter about architecture I read that an architect developed blueprints for buildings and bridges, and created plans for cities and towns. This was the first time that I had ever heard anything about architecture and this awakening left a lasting impression on me, I was seven years old at the time. I considers myself lucky to have come into possession of this book and I’ am grateful for the inspiration it provided me for pursuing the field of architecture. The path I traveled to reach architectural graduate school proved itself to be rather difficult . The obstacles that I faced ranged from an absence of any architectural related courses until attending The University of Detroit-Mercy, to counselors suggesting that I enter into the field of engineering instead. I allowed myself to be influenced into initially pursuing a degree in mechanical engineering. I actually studied engineering for approximately two semesters at the University of Michigan-Dearborn before deciding that that profession was not a good fit for me. Negative experiences and obstacles that are African American specific have convinced me that I have an obligation to reach out to as many young minority students as possible concerning the challenging goal of becoming a licensed architect. Similarly I’ am convinced that many African American students are facing similar obstacles as I have faced that could possibly be deterring many promising candidates from a career in architecture.

PREFACE

This thesis addresses two concerns about architecture that have often been visited and revisited in the past. It analyzes and evaluates the scope of exposure to the architectural discipline in minority schools systems. This thesis also desires to perform extensive research on the unrecognized architectural achievement of the African culture. Countless mystical and monumental ruins exist in Africa of African origin that have never been documented as so except very recently by a few interested geologist and anthropologist such as Michal Teller and other scholars that will be reference later in this thesis. Michal Teller alone has compiled extensive amounts of information and presented relevant

arguments about Africa's undocumented contributions to civilization and the developments achieved in architecture.

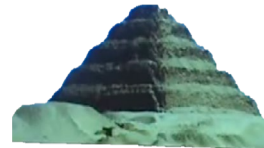
All cultures have their own forms of architectural expression that is unique to their regions and patterns of life. African architecture shares this characteristic, but is very diverse and employs a wide range of materials and methods depending mainly on natural resources available in various regions. This thesis will focus on African architecture from Ethiopia, Nubia, and Egypt. It aims to present valid arguments supporting the premise that the African continent contains the most ancient and original architecture on the face of this planet. Similarly it aims to validate the premise that the architecture of Egypt, Ancient Nubia (Sudan), and Ethiopia share the same building techniques and was erected by the same individuals of African decent. Primitive African architecture employs a series of native materials and methods

including thatch, mud and rammed earth. Other popular methods of building include the use of sticks, wood, dry stone, and mortar.

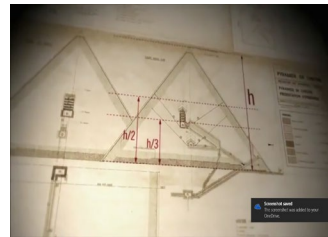
The pyramids in Egypt are regarded as the most extraordinary structures ever built. Although the construction of these monuments is widely accepted as mystery among many anthropologist and Egyptologist, the methods used to build these structures are evident in architectural structures throughout Africa. Other experts point to the fact that the countless drawings adorning the walls of these architectural marvels and any remaining sculptures and statues clearly illustrates that ancient Africans from the area were the craftsmen that were responsible for erecting these world wonders. This thesis recognizes and respects but aims to discount the counter arguments that Egyptian architecture could have influenced the architecture of the remaning African countries, however most similar African architecture predates



**CIRCULAR
RUINS**
Image
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Egypt today



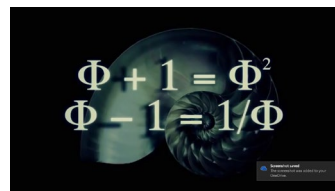
MASTABA
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Alifin



**PYRAMID
GEOMETRY**
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Dome Hut
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Golgen Ratio
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Mysteries of
the Mummies



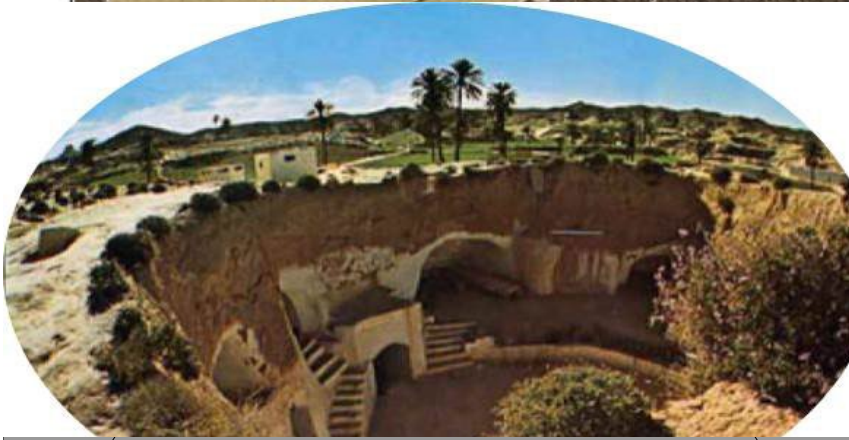
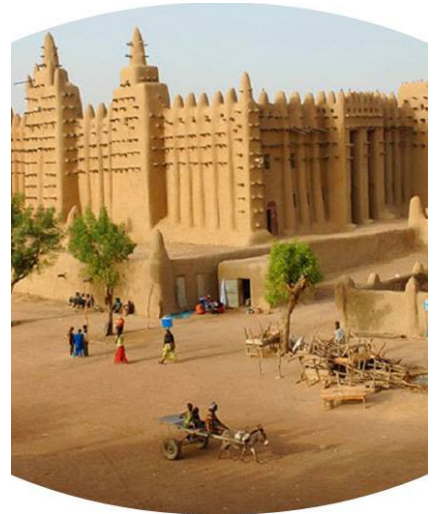
**Egyptian
Mystery**
Image Source
Mysteries of
the Mummies



Golden Ratio
Image Source
Kemetnu

the supposed timeline of and level of detail.
ancient Egypt's history.

This thesis also should be taught alongside,
acknowledged and respects and as a part of , ancient
the theory that the Egyptians African architecture and
despite their likeness to history in traditional school
Africans could have also systems. The attempt to
been of European, Asian, expose the African cultures'
or Arab decent. The group accomplishments in archi-
of cultures mentioned is tecture is encouraged by
also combined by theorist the recognition of a need
into one creating a copper for more African inclusion
skin extinct race known as in modern architecture and
Egyptian, with no genetic planning which will provide
ties to Africans. In addition a platform for more cultur-
to arguing African people's ally sensitive design. This
contributions to civilization much desired recognition
rebuttals denying these claim is additionally essential to
are researched as well. Sub- help remedy the common
topics visit as a method of negative views shared about
supporting the main premise African Americans by other
will range in subject matter races worldwide. Finally this



renewed image is essential to life for a troubled race. building pride and presed- The lack of diver- ents among architects and sity that exist within the people of color in general practice of architecture has that can be used to attract consequently oppressed other qualified candidates of architecture's full potential. color to architecture, entre- It is 2017 and the thought preneurship, or other leading of a more diverse field is roles in their community finally starting to gain more leading to a better quality of momentum. Imaging if this

Left Top/RightTop

TIMBUKTU

Image Source

From Babylon to Timbuktu

Bottom RT:

TUT

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Africanlight

phenomenon could have taking root 50-100 years ago. The characteristics of this world would be more customized and sensitive to the specific cultures that design and utilize them.



Left AFRICAN AMERICANS

Image Source

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RT:

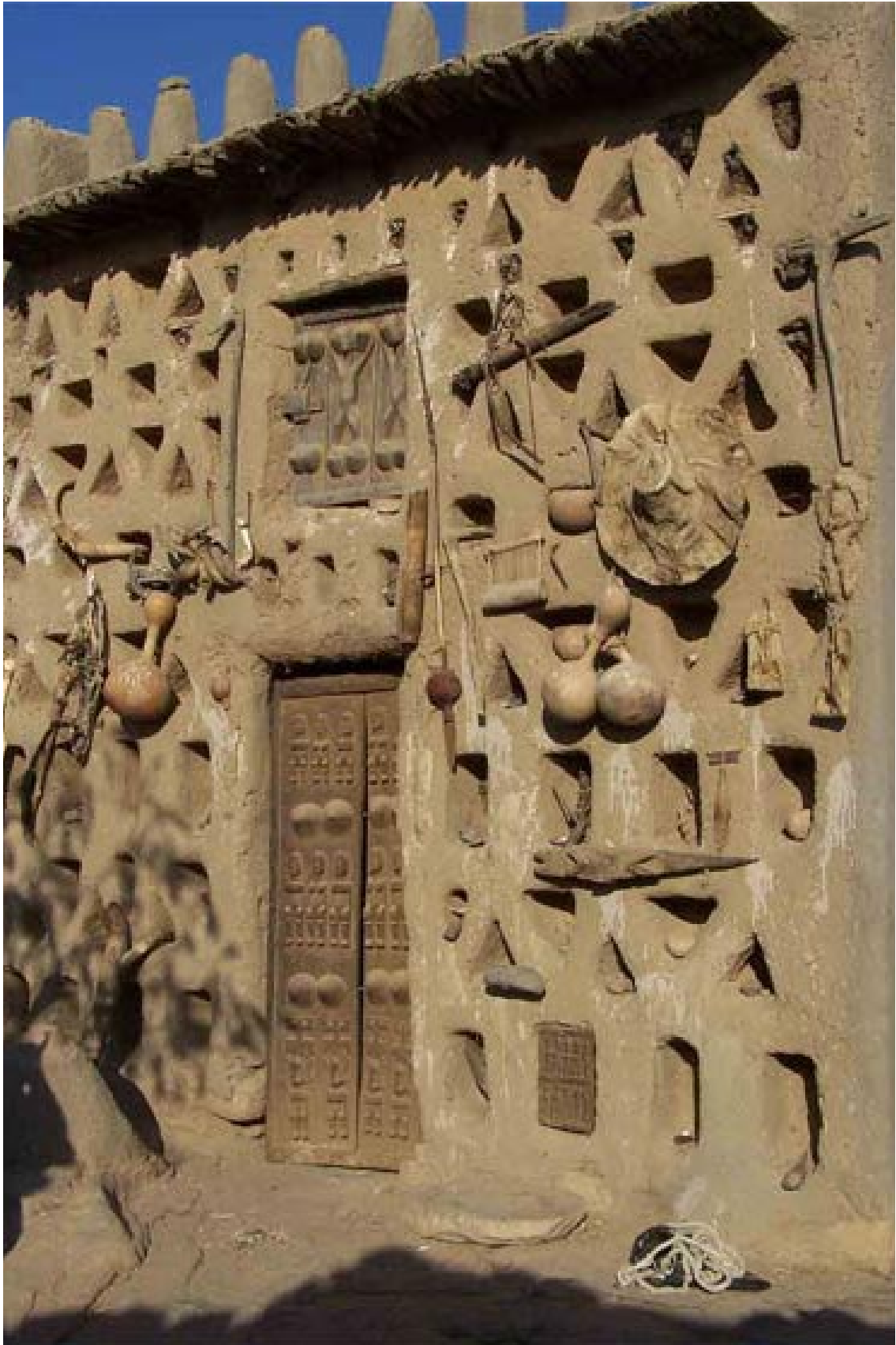
12TH STRRET RIOT 1967 Detroit

Image Source

Detroit great rebellion







Left DOGON HOUSE

Image Source

African origin of
Civilization

RT:

ANCIENT ETHIOPIA MAP

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CHAPTER I

AFRICAN ORIGIN OF CIVILIZATION

Reason

Ethiopians' historical documentations claim that the original colonies that migrated to the area known as Egypt were direct descendants from Ethiopia. This Ethiopians passage also explains that the melting from the last Ice age caused the entire Nile Valley area to flood for thousands of years. When this water finally receded mudslides from the land masses of Ethiopia formed Egypt and resulted in survivors from the area migrating to this lower elevation as well. Greek historian Diodorus actually supports this despite the fact that he later neglects or just refuses to tie this coincidence to an African

presence in Egypt. In African Origin of Civilization by physicist, philosopher, and historian Cheikh Anta Diop it is argued that Greek historian Herodotus upon his visit to Egypt after the crusades gave a detailed description of a predominantly African people inhabiting the country. Based on this information this thesis argues that if Egypt was predominantly white before the Greeks conquered then it would have remained so shortly after when Herodotus arrived there.

A succession of invasions starting with the Persians in (525 B.C.), then the Macedonians under Alexander the Great (333B.C.), and then the Romans under Julius Ceasar (50 B.C.), stripped Egypt of its' status as a world power. Egypt's location in the middle of a dessert bounded by two seas protected it from the barbarism that was commonplace throughout the rest of the world for atleast 10,000 years. This innocent existence left these Africans unprepared for the might

of these materialistic invaders. While the Africans in Egypt lost their political and social power the younger Europeans were civilized by this ancient people's scientific, religious, and moral knowledge. It is also written in Ethiopian scripture that around this period extraterrestrial Beings known as Anunaki shared the sacred knowledge of sacred geometry/mathematics, the celestial (heavens), and of the terrestrial (earth) that empowered them to evolve into the great civilization known today as ancient Egypt. To provide support for such a claim the Dogon tribe in Mali has expressed knowledge of the Universe for thousands of years that has only recently been validated as accurate by scientist using modern technology. This tribe still claims to this day that all their knowledge of the heavens was shared with them by beings known as Annunaki.

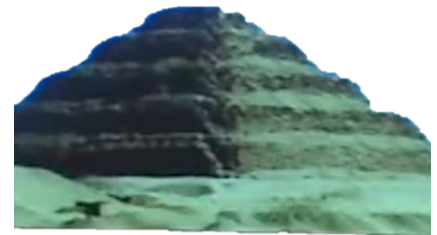
Ethiopians text also states that the Sphinx being over 500,000

years old was their landmark to know where to settle. This ancient migration of Africans is further supported by Cheikh Anta Diop in *The African Origin Of Civilization* saying "It is generally agreed that by 7000 B.C., the Sahara had dried up. Equatorial Africa was probably still a forest zone too dense to attract men. Consequently, the last Blacks who had lived in the Sahara now presumably left it to migrate toward the Upper Nile: This civilization, called Egyptian in our period, developed for a long time in its early cradle; then it slowly descended the Nile Valley to spread out around the Mediterranean basin. This cycle of civilization, the longest in history, presumably lasted 10,000 years." 1

The first king of Egypt was King Narmer (3200 BCE) his lineage has been traced to Central Africa through ancient Nubia (Sudan). He is always depicted in paintings using the sacred geometric sciences that later became known as Freemasonry

(England 1717) to erect structures in Egypt. Manly P. Hall a 33rd Degree Master Mason and respected writer and source on the subject of modern Masonry explains the connection between the Mystery Schools of Egypt and the first Fraternal Order ever formed. In *The Lost Keys Of Freemasonry* he demands that “Recognizing Egypt to have been the cradle of superior culture and most exalted philosophy, and admitting the almost undeniable evidence that the Egyptian Mysteries were the progenitors of modern Freemasonry.”² admitting that many of the hieroglyphics in Egypt can only be speculated upon and the true meaning of Egyptian Masonry is hidden beneath layers of symbolism. Manly P. Hall who was rumored to be a strict racist surprisingly wrote that the Western civilization owe all thanks to Egypt of Africa of which all literature, mathematics, and knowledge of the heavens was derived. He continues by thanking Egypt for answering and facing the difficult human questions of life and death. Hall’s novel makes numerous comparisons between the rituals of the ancient Egyptians and modern Freemasonry. He cautions that although many similarities exist between the two many of the Egyptian rituals employed the use of magic, the occult, and spiritual transformations.

Another ancient African Mason important to the history of Africans in architecture is Imhotep (2650-2600 BCE) he was the only non-noble to be raised to the status of a deity. They also considered Imhotep



to be the father of medicine, and it is rumored that he developed the ability to regrow limbs as a response to the numerous injuries caused by a dangerous pyramid construction environment. In addition to these miraculous accomplishments Imhotep also was a great engineer and inventor who invented many tools still used in modern times. The qualities he possessed that are most relevant to the field of architecture is his mastery of the mysteries of Masonry which developed into the practice of what we know today as architecture. Using this sacred knowledge

Left: KING NARMER

Image Source

MNtrealtalk

Top RT:

DJOSER MASTABA

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WE arr

Bottom RT: KING NARMER IN FREEMASONIC APRON

Image Source

MNtrealtalk

of the earth and the heavens ancient builders were able to align their architecture perfectly to earth's four cardinal points as well as to countless stars thought to be undiscovered celestial bodies.

Evidence

TOTEMISM which is known to only be practiced in African populations has been found in Egyptian writings, art, and artifacts. Likewise African tribes still exist sharing totem names like N'Diaye, Diop, and Fall with their Egyptian ancestors.

Secondly the Egyptian practice of CIRCUMCISION of both girl and boys is known only to Africa. This tradition is only known to have only been adopted by the Jews and extreme Islamic groups.

Next this thesis targets COSMOGONY which Cheikh explains in more detail suggesting that "This similarity of mores, customs, traditions and thinking has already been sufficiently stressed by various authorities. Perhaps it would

take more than a lifetime to report all of the analogies between Egypt and the black world."³

Most words existing in the EGYPTIAN LANGUAGE and African WOLOF LANGUAGE are identical with a simple swapping out of the Egyptian letter - N with the Wolof letter - L.

Egyptian's original rituals of KINGSHIP which mirrored the African tradition of putting an unhealthy King to death. Although this practise is only figuretively played out in modern Egypt it is still an authentically practiced custom in many other African countries.

Arguments against the premise of an African origin of civilization and modern architecture. The author Cheikh Anta describes the common positions taking by Egyptologist to dispute the connections that are often referenced to support similarities between Egypt, Ancient Nubia, and Ethiopia. One such argument is "To the modern mind the word "Ethiopia" conjures

up Addis ababa Here again, we must insist on the fact that in this region, except for one obelisk and two pedestal of statues, nothing is found.”⁴ Likewise the father of Egyptology Champollion-Figeac demands in an deliverence of his brother’s research on the subject reading “The opinion that the ancientpopulation of Egypt belonged to the Negro African race, is an error long accepted as the truth. Since the renaissance, travelers in the East, barely capable of fully appreciating the ideas provided by Egyptian monuments on this important question, have helped to spread that false notion”⁵ he assures the Pasha of Egypt in 1833 with this memoir.



AFRICAN TOTEM

Image Source

God the Black man and the Truth



EGYPTIAN HIEROGLYPHICS

Image Source

Kemetnu



AFRICAN KING

Image Source
treybokim



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IMHOTEP

Image Source
African Origin of
Civilization



MASONIC

TOOLS

Image Source

Phoenix
Masonry

**ANCIENT EGYPTIAN
MASON**

Image Source

Kemetnu





**Top RT: EGYPTIAN
LIMESTONE**

Image source

**Temples of Ancient
Egypt**

Top Left:

NUBIAN MUSEUM

Image source

ttre45lll

Bottom RT:

SCHOOL AT UTTAR

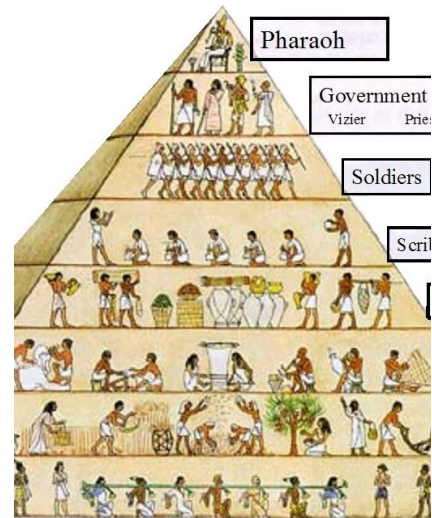
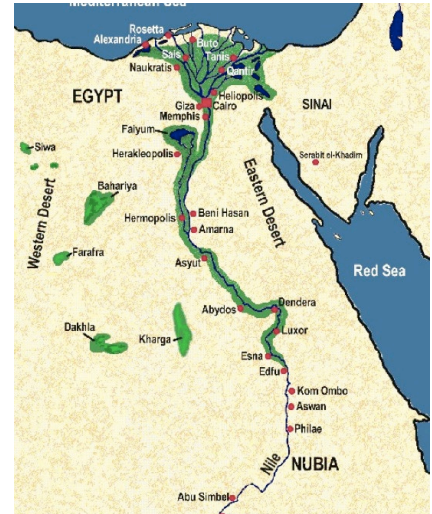
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SouthIN

**WEST AFRICAN
WOMAN**

**Image Source
Africapridggy**





**Top Left:
ETHIOPIAN WOMEN**

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The Diary

Top RT:

NILE VALLEY MAP

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**EGYPTIAN
HIERARCHY**

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wherewho





**THEME
BUILDING**

LAX

Image Source

**Travel
survivors**

**GREAT
PYRAMIDS AT
GIZA**

Image Source

atlasa85

CHAPTER II

EGYPTIAN/AFRICAN TEMPLES, PYRAMIDS, & MYSTERIES

Many authors have attempted to publish works that adequately explain the architectural forms of Ancient Egyptian architecture many with less success than others. This thesis will use this chapter as an initial attempt to explore some brief detail of African architecture more specifically the most influential which is that of ancient Egypt and the Nile Valley area.

Primitive brickwork and reed - and - mud construction is evident in the latter construction of Egypt's great temples and pyramids. However a unexplained leap of knowledge was experienced by the Egyptian people around the same time that the Sumerians advanced

in knowledge and technology also. Some theorist insist that pyramids are simply the evolution of primitive stone graves which were conical piles of stones. This could be possible when ignoring the fact that pyramids were architectural structures planned out on flat square plots of land using elevations, section drawings, and scaled models. Additionally they can be found in other countries dating back to this period and constructed by customs; for example the Mayans that did not share the previously mentioned burial rituals.

Zoser's reign signified an astounding advancement in the use of masonry. He introducing the first true masonry free-standing column to Egypt. Columns used prior to these times existed only in the primitive form of tree trunks and palm and reeds stiffened with mud. Temple roofs in ancient Egypt fail to display any origin from the roofs of a traditional Egyptian hut which employed reeds and palms



EGYPTIAN SANDSTONE
Image Source
Alamay.com



EGYPTIAN FOUNDATIONS
Image Sourc
Alamay.com



SPHINX IN EGYPT
Image Source
Hot stuff works

as well. In contrast to subjects examined in chapter I only vague connections can be made between African Primitive architecture and Egyptian temples and pyramids. There is a shared acceptance among Egyptologist that an unexplained shift in knowledg is evident to have occured prior to the construction of Egyptian, monuments. This escalation of enlightenment is present in many other areas of the world including South America and Asia. Relying on the confidence that the previous passages have successfully presented arguments supporting this thesis goal of re-aligning Africans and African Americans with their true history in architecture and contributions to society, the following passages will focus specifically on the form, function, craftsmanship, and mystery surrounding theses works.

Egypt is famous for massive temples, enclosed cities, and advanced plumbing systems similar to what was accomplish in Asia

and Europe. Historic record support the idea that Egypt influenced more aspects of western civilization than any other nation. This thesis wishes for a clearer understanding or a resurrection of this knowledge which is not well understood by modern architects. Likewise this thesis wishes for a clearer understanding of the true architectural history of the African, so that authentic information may be spread on this topic.

Foundations

Foundations in Egypt offer a range of building conditions. The absense of rain offers dry hard rock which provides a firm and suitable surface on which to build upon. However areas closer to the Nile suffer soft and yeilding soils which offer much difficulty for construction operations. The preservation or lost of many of Egypt's temples and pyramids by natural causes is in direct correlation to the condition of the alluvium (soil in Egypt) it was

erected upon

Rocks

Quarried rocks was the primary materials used in ancient Egyptian architecture. The types used, methods of harvesting, and methods of employment are as interesting subjects and achievements as the structures that they were used to build. Two types of rocks were employed in Egyptian architecture - soft rocks and hard rocks. Soft rocks consisted of limestone, sandstone, and at rare times calcite or alabaster. These stones were primarily obtained from the Tura and Masara quarries four miles south of Cairo. Limestone was the principal stone used for structural building in the Old Kingdom with a maximum span of approximately nine feet. In the New Kingdom the stronger sandstone harvested from Beni Hasan, Silsila, and Qertassi quarries. These stones allowed the New Kingdom architects to build at much larger scales and using longer spans than before. To erect structures of huge scale, harvested stones had to be enormous to carry the load of the massive roof-slabs and to span the long distances between architraves. Somers Clarke describes the dimensions of a stone of this type seeing one in person for the first time at the Silsila quarry he writes "there is a block that has not yet been detached from its' bed, but is in all other respects ready for removal. It measures 20 feet by 2 feet 7 inches by 5 feet high"⁶ which is miraculously not too large by comparison to stones from other sites. Most soft rocks were removed and worked using copper chisels struck with wooden mallets. Pink and grey granites harvested from Aswan were the primary hard rocks used. Basalt also a hard rock was only found to be used in the Temples of the Great and the second Pyramid of Giza.



Hard rocks were believed to be quarried by using balls of dolerite. Many experts disagree, but do not believe that these stones could have been worked using the metals available for chisels at the time either. Although the knowledge of steel cannot be completely ruled out no known evidence of this metal has been confirmed. The actual tools and technology used to cut, shape, and sculpture hard rocks in ancient Egyptian architecture remain a mystery. However the earliest signs of the use of hard stones has been traced so far back of the roof-blocks in the pyramid of Menkewre at Giza.

Columns

The primitive columns used in ancient Africa was wooden made to resemble the papyrus-plant, the lily, the palm or the lotus. Fluted columns are a rare commodity in Egypt and seem to have been an art lost after the mastery of it by King Zoser of the 3rd dynasty. The only other reappearance of this craft we have discovered is at Hawara and Kahun during the Middle Kingdom. Several Egyptian structures were adorned with contemporary columns ie: the Lotus column found in the temple of the 5th dynasty at Abusir.



The papyrus was a more common contemporary column of the Middle Kingdom. Two examples of the papyrus column can be found in the new kingdom at the temple of Amenophis III and that of Seti I at Sesebi however both of these sites happen to be in Nubia. Columns

were always finished with carvings and inscriptions honoring the Pharaoh this dressing was always done after the stones had been laid as R. Englebach describes saying “Columns, like walls and pavements, were always dressed after the blocks forming them had been laid.

**EGYPTIAN
COSTRUCTION**
Images Source\

This proved not only by the frequent incorporation of the base or the capital into the shaft, but also by columns that have been either wholly or partially unfinished.”⁷ which is rather strong evidence for this observation.

Windows

Doors served as the primary fenestration for light and ventilation in early Egyptian architecture. Not until the New Kingdom did windows begin to take-on this role in its’ temples and pyramids. Windows did exist in Old and Middle Kingdom architecture but Clarke and Englebach insist that “These slits were far too high to see through, and too narrow to enable anyone outside on the roof to look inside: they usually open out to the sides

of the temple, but occasionally they open to the top of the roof” similar to modern skylights. Ventilation and light was serviced by these small openings which grew in scale and sophistication over time. The clerestory was not utilized until the New Kingdom. The most beautifully and successful examples exist within the Hypostyle Hall at Karnak, the temple of Seti I in the Ramesseum at Thebes, and the temple of Khonsu at Karnak. Ornamental windows seem to have always been incorporated into Egyptian architecture. A well known chapel from king Zoser reign during the Old Kingdom has a rather unfunctionable side window decorated with a row of hieroglyphs. Not until later times are side windows used for light and ventilation such as the ones employed at the little temple of Hakor at Karnak.

Roofs

In the Old Kingdom, time must have been of little concern provided the fact that in that architects freely employed granite slabs in roof systems of which the dressing of them alone must have been extremely exhausting. Egyptians spanned the maximum distances using stone materials so care and ingenuity was imperative to placing architraves on columns to support the huge stone roof slabs. The New Kingdom employed flat roof slabs rather than the thick blocks laid on edge as in previous Egyptian roof construction techniques. Stone was actually very unsuitable for an application as a roof. Stone performs well in compression but poorly in tension. Stone roofs must have withstand a combination of these forces with the underside being in tension while the top is in compression. Additionally extreme desert

temperatures continually cause expansion and compression on the upper exposed side of these slabs. This has resulted in the rapid disintegration of numerous roofs from this period. In the Old Kingdom water was prevented from entering the interior by use of mortar in exposed joints. This method is evident in many of the Old Kingdom temples with their roof's still intact such as Seti I at El-Qurna in the Ramesseum and in the temple of Ramesses III at Karnak. An even more efficient method of controlling rain involved filling the channel with a elonged piece of stone with a rounded head resembling a linear peg. This caused water be be directed to either side of the joint and directed to the roofs' slope. Some temples notably the Festival Hall of Tuthmosis III at Karnakno, contain roofs with no apparent drainage systems at all. Theorist suggest that these roof s may have once been covered by thick layers of mortar probably rather effective against the infrequent rain. More elaborate Egyptian drainage systems

used stone gutters and downspouts that discharged into open courts.

Construction

In respect of the fact that the building methods of Egypt are still far from a definite resolution. This subject will not be addressed to protect the integrity of the research that is presented as fact throughout this book.

Ancient Nubia (Sudan)

Similarly Nubia strongly influenced many of Africa's, Asia's, and Europe's first known civilizations the oldest structures uncovered there according to carbon dating are the Speos (3700BCE-3250BCE) which were carved out of a solid blocks of stone. The first known city state was created by Africans in a settlement known as Kerma. Kerma was settled around (2400 BCE) and this city much like Egypt contained palaces,

religious structures, and a series of successfully designed road systems. In addition this ancient city also provided funeral facilities, a central chapel, and a protective wall surrounding the entire settlement. Kerma was a model for many civilizations that followed, more notably African civilizations such as the Kingdom of Kush, city of Napata, and Timbuktu which acquired enormous wealth, and traded goods with many other powerful civilizations throughout the world.

MYSTERIES OF THE NILE

The better portion of Egyptian mysteries remain unsolved. Egyptian science developed the cubic which demonstrates the knowledge of the golden ratio, pi, and the meter. Similarly these ancient Africans left carvings that resemble modern inventions like automobiles, rocket ships, and helicopters. Egyptians

also produced a number of carvings containing tool-work markings with tolerances of accuracy that cannot be duplicated with modern computers and technology.

CHAPTER III

AFRICAN AMERICANS

African Americans exist due to use of the African race for cheap and easy economic gain. This has caused a disconnection from their true homeland and identities. After slavery African Americans became religious Republican voters for decades. During the early 19th century the Democratic party were slave owners and the Republican party led by Abraham Lincoln, freed the slaves. Since then African Americans have overcome unimaginable consequences, but are still a long way from reclaiming their true identity and realizing their true potential. Contributions in areas such as innovation, medicine, and engineering have been achieved by

African Americans since their arrival in North America. Their contributions in architecture are also quite extensive despite the enormous oppositions that they faced throughout America history. This chapter highlights several African American architects as a gesture of respect and appreciation for these talented and brave individuals and their works. As a testament to Africa's descendant's continued ability of defying tremendous odds and achieving the impossible when failure is expected. This section will start with a few examples of African American's contributions outside of architecture, providing a more respectful and inclusive snapshot of African American history.

Lewis Latimer (1848-1928), who was responsible for inventing the most essential part of a light bulb which is the Carbon Filament. This invention increased the life of light bulbs at the time significantly and was also responsible for decreasing the cost and increasing the efficiency of manufacturing this product. Mr. Latimer



**BREWSTER
PROJECTS**

Image Source
NRP.org

also worked alongside Alexander Graham Bell assisting him with drafting the original patent drawings for the device that would later become the telephone. Another important African American invention was the pacemaker for an Artificial Heart Control Unit. This device was invented by Otis Boykin (1920-1982) and it has helped to save countless lives since it was patented into use. One of the best known African American inventors is Benjamin Banneker (1731-1806) an astronomer, author, inventor, mathematician, and surveyor. Although not usually included in his list of credentials he was a self-taught architect and worked as a draftsman on many of the original plans for Washington D.C. Several of Banneker's most prominent accomplishments were publishing six rather accurate and useful almanacs that included social and political commentary focusing primarily on the rights of slaves and free African Americans. Banneker also hand

carved a wooden timepiece from memory that was capable of keeping accurate time within a second.

The history of African Americans in architecture is very vague but no less compelling as the accomplishments made in Africa. As previously mentioned Benjamin Banneker played a major role in the design and construction of the United States capitol, Washington D.C.

William Pittman born in 1875 worked on the design for the Capitol Building in D.C., and was responsible for designing the famous Knights of Pythias Temple in Dallas, Texas as well. Another African American known for setting milestones and defying the odds in the field of architecture were Robert Robinson Taylor who was the first licensed African American architect in the United States and one of the first African American AIA members, in the history of the organization. Likewise brothers Moses & Calvin McKissak

formed the first African American architectural firm which presently remains operational in New York City. Paul Williams (1894-1980) was an African American architect from Los Angeles, California. He is famous for becoming the first black “Starchitect” as his design earned the title of contemporary styled and exceeded the confinement of what modern architecture was thought to be during this period. A few of the Hollywood star that Williams designed homes for include Frank Sinatra, Lucille Ball, and Charles Correll to name a few. His most famous architectural work was the Theme Building at LAX airport in Los Angeles, California. This original restaurant and exhibition space was designed using an innovative Tuned Mass Damper to resist seismic vibrations. An interesting fact about Paul Williams is that he taught himself to draw beautifully upside down across his desk because Caucasian clients refused to sit next to him. This ability that

was developed out of a need to defy odds became a main characteristics that attracted new clients interested mostly in experiencing this gift rather than supporting a talented African American architect. It is this thesis position that taking into account everything that the African American has endured, that the most effective weapon against the economical, political, and social issues that plague Africans in America is education. Voting, protesting, and rioting have fostered change at very heavy cost, but the vehicle of education if properly administered has the ability to truly free African Americans’ from cultural ignorance, financial ignorance and oppressive conditions.

Standing firm on this premise the plan of action devised for attracting African American youth into architecture is educationally focused. It uses a platform of action words that divide this plan into steps that can be directly implemented in African American communities. Using education as a vehicle of positive change

towards the issue of poor diversity within the architecture field is the method chosen by this thesis, explained further in the next chapter. read on please....

CHAPTER IV

A PLAN OF ACTION

This Thesis goal is not to just describe the past contributions of minorities to the practice of architecture, but to also propose ideas and options that will be effective in influencing the diversity needed to move it forward today.

Ideas developed through this thesis to address the issue of a lack of diversity in architecture include but are not limited to incorporating more design focused courses into minority school systems. Recognizing the importance of engaging African American elementary aged children with the realities and possibilities of architecture as a career choice as early in their lives as possible, this

thesis devised a system for achieving this goal that is divided into two major programs. Program 1 will be successful exposing, inspiring, and empowering young African American youths by using a non-profit architectural program modeled after DAPCEP (Detroit Area Pre-College Engineering program) which is a non-profit formed during the 90's in Detroit that exposes students to technology, science, engineering, and mathematics from a very young age. This needed in minority dominated school districts for the architecture profession. It could be coined DAPCAP (Detroit Area Pre-College Architectural Program) borrowing from the acronym of the prior program mentioned.

Additionally new and existing supplemental programs must be formed and supported in Detroit and other U.S. cities. After success is achieved in America, they should be mirrored in minority communities around the world. One example

of the latter is NOMA- Detroit's Project Pipeline Architectural Summer Camp which is a spin-off of a program originally created by NOMA's (National Organization of Minority Architects) national committee. This program is geared at increasing the scope of architectural exposure in urban communities predominantly populated by minorities worldwide.

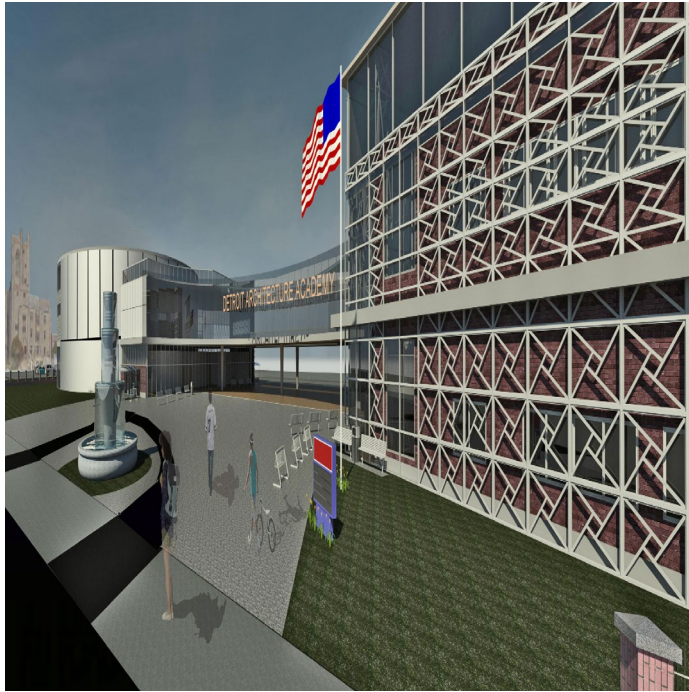
The second part of this plan is an architectural school that has been designed by very sensitively examining all of the content of this thesis research. Wishing for this facility to be a staple of the community this thesis researched "educational communities" around the world. This precedents was used to examine how do Americans and other cultures learn, live, and coexist in community learning environments. The next area of research studied traditional American educational environments such as K-12 schools, Architecturally focused institutes, and vocational schools. From this

research this thesis abstracted the program and curriculum that was deemed essential to a minority focused architectural academy. Finally a similar study of African learning communities was performed, contrasted, and compared to the prior research.

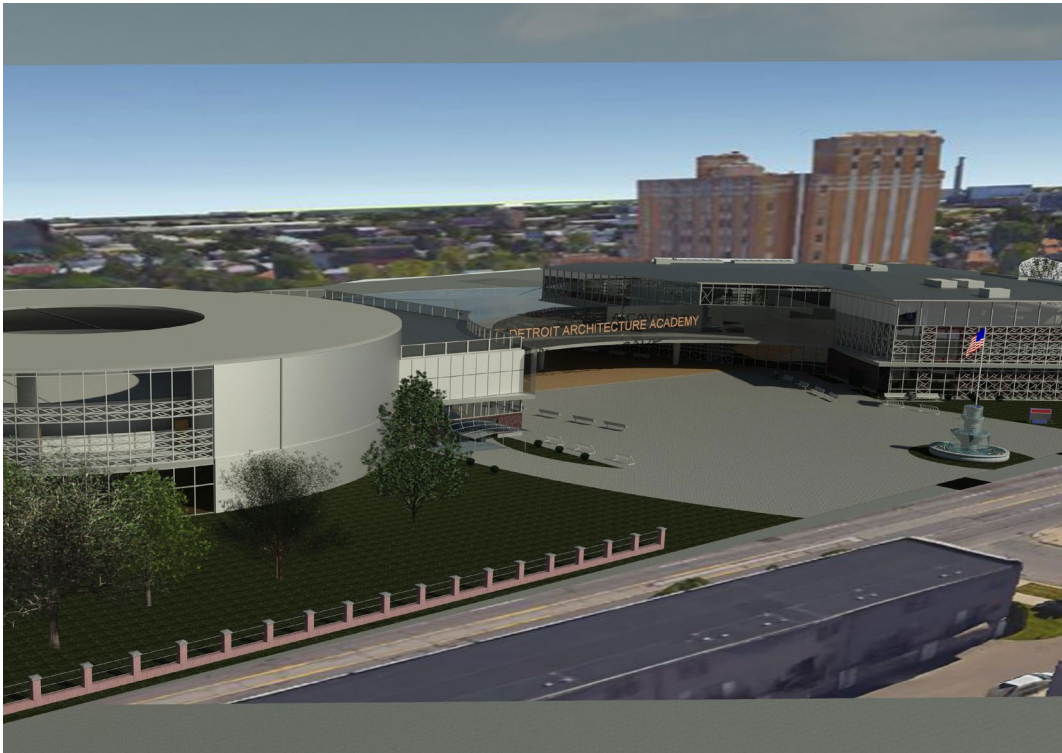
A intelligent compression and digestion of everything that was addressed, researched, or rebutted by this year long thesis project was compressed into an educational facility with the knowledge, will, and intellectual understanding of the minority students that will be extremely dependent on its' competence to ablige them. The named coined for this prototype is Detroit Architecture Academy. The site chosen is a neighborhood in Detroit entitled the New Center Area. This area was chosen first of all to adhere to the idea of triple bottom line and create a facility that can foster diversity into the field while addressing certain social problems of the adjacent North End community. secondly this site is adjacent to some of Detroit's most iconic architecture, and lies at the edge of Detroit's Art Center which is minutes from Downtown Detroit and its' remaining architectural gems. Finally this site is in close proximity to all of Detroit's major highways and transit systems

more specifically this site lies along the Q-Line which is Detroit's newest source of transit a rapid railway system.

This school is designed at approximately 150,000 s. f. to accommodate 210 students annually. The grades serviced are 9th through 12th with extensive financial and preparatory college assistance programs. These students would attend for half- a-day commuting from their primary educational facility 3-5 times a week. 9th and 10th grade courses are more focused on visual communication, history, and abstract design. While 11th and 12th grade courses are more focused on theory, graphic design, and construction technology. This academy will set precedents for all architectural institutions in America by developing a model that prepares student with more knowledge of how to actually build what they design. Implementing this plan is viewed by this thesis as a major step to a more diverse profession.



RENDERING 5 OF DETROIT ARCHITECTURE ACADEMY



PERSONAL REFLECTION

In the United States African Americans currently account for less than 1.7 percent of the 105,000 licensed architects, and as of enrollment for Fall 2016 minority students accounted for only 5.3 percent of all new enrollments into architectural programs. That is equivalent to a mere 1,500 of every 30,000 students accepted. This thesis finds it necessary to research and gain an understanding of the current statistics and trends. In addition to performing this research a high level of focused effort is essential to the advancement of minorities in architecture and to spark a change that begins to usher more diversity throughout the architectural practice. With increased exposure, more resources, and architecturally focused funding for minorities we will begin to

curve this lack of inclusion and begin to witness an architecture that reflects the concerns and values of all cultures.

The amount of influence that Africa, the birthplace of civilization has provided to the modern world is astounding. I insist that qualified people of African descent deserve a larger role in decisions on architecture, planning, and politics, in order to improve the current state of their communities and the world as a whole. Architecture is one of the few discipline that possess the ability to shape the environments in which we live as humans on this earth. Diversity in the field of architecture will transform our world in many ways yet to be seen. A more diverse approach to designing the built environment is the primary medium that will open up doors to possibilities that are not presently accessible. The innovation that a diverse field can provide, can only be imagined until Therefore mankind is falling short of its' true potential by failing to utilize every talented person in the manner that is most beneficial to the human race as a whole. If we

continue to allow pride and egotism to dictate who is giving an opportunity to prove their potential then this unjust state of existence that we have driven ourselves into will surely continue.

WORKS CITED

1. Cheikh Anta Diop, *The African Origin of Civilization* (Lawrence Hill & Company; Chicago Illinois) p.22
2. Manly P. Hall, *The Lost Keys of Freemasonry* (Penguin Group Inc.; New York, New York) p.92
3. Cheikh Anta Diop, *The African Origin of Civilization* (Lawrence Hill & Company; Chicago Illinois) p.2139
4. Cheikh Anta Diop, *The African Origin of Civilization* (Lawrence Hill & Company; Chicago Illinois) p.156
5. Somers Clarke and R. Engelbach, *Ancient Egyptian Construction and Architecture* (Dover Publications Inc.; New York New York) p.50
6. Somers Clarke and R. Engelbach, *Ancient Egyptian Construction and Architecture* (Dover Publications Inc.; New York New York) p.16
7. Somers Clarke and R. Engelbach, *Ancient Egyptian Construction and Architecture* (Dover Publications Inc.; New York New York) p.145

BIBLIOGRAPHY

Ammi, Ben. "The Black man and Truth" Communicators Press (2008)

Clarke, Somers and R. Engelbach R. "Ancient Egyptian Construction and Architecture (Dover Publications Inc, New York New York (1990)

Diop, Cheikh Anta. "The African Origin of Civilization" Lawrence Hill & Company; Chicago Illinois (1974)

Hall, Manly P. "The Lost Keys of Freemasonry Penguin Group Inc.; New York, New York (2006)

Wilkinson Richard H. "The Complete Temples of Ancient Egypt" Thames & Hudson: New York New York (2000)

