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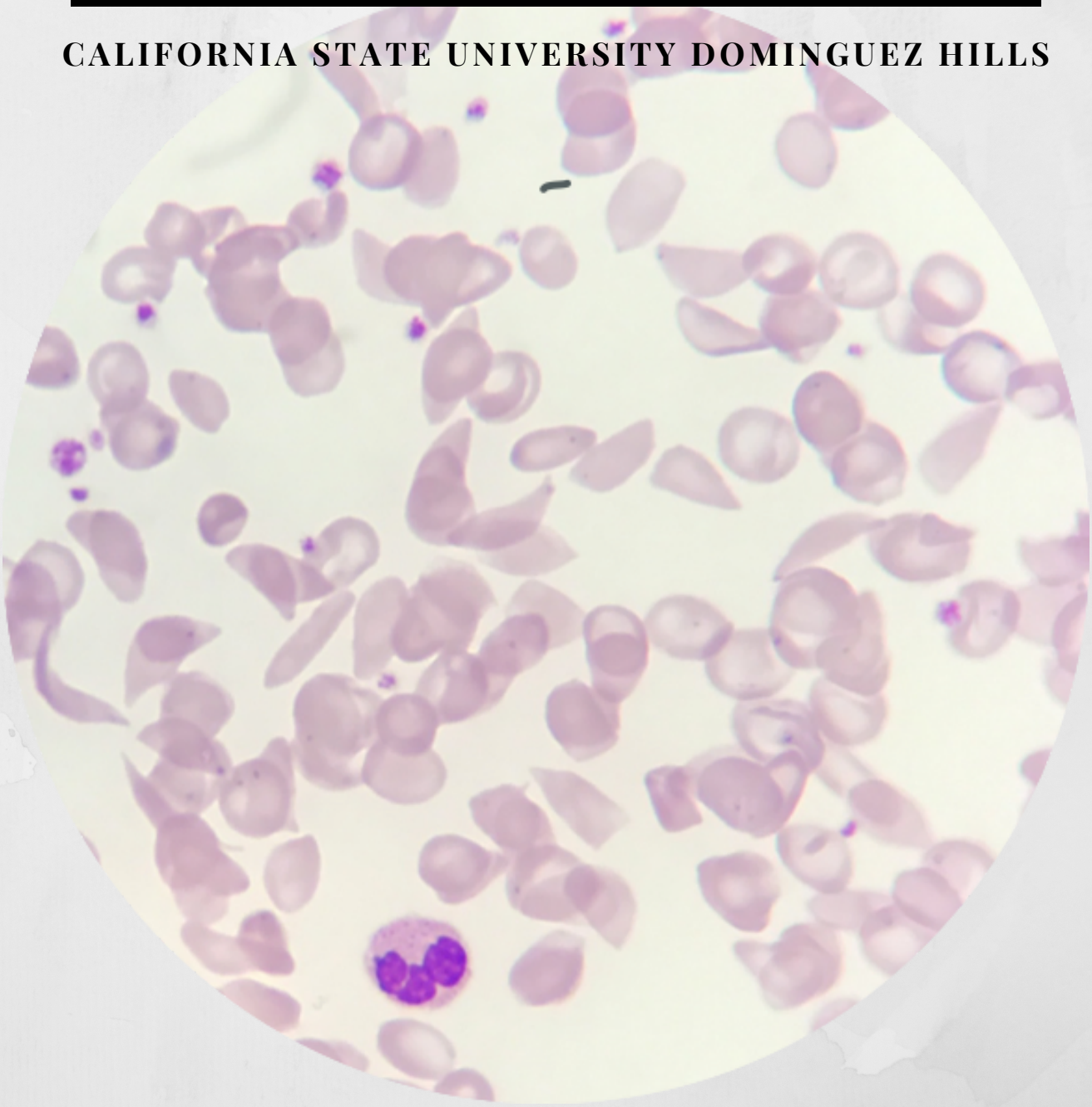

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Photo by Nicole Simbulan

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Editor-in-Chief **Nayely Barajas**

Design Artist **Yesenia Rubi Landa**

1000 E Victoria Street, Carson CA 90747
Email | CSUDHESJOA@gmail.com

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TABLE OF CONTENTS

ARCHAEOLOGY

A Woven History: The Understanding of Basketry in The Tohono and Aikmel O'odham Tribe

Katherine Gendron..... 4-13

BIOLOGICAL ANTHROPOLOGY

Thalassemia in the United States

Nicole Simbulan..... 14-22

CULTURAL ANTHROPOLOGY

Religion as a Means of Cultural Survival:
A Study of Cambodian Buddhist Immigrants in Long Beach

Matthew Fusco and Xamar Martinez Gil..... 23-29

A Woven History: The Understanding of Basketry in The Tohono and Aikmel O'odham Tribe

KATHERINE GENDRON

A dry heated wind blows across the sandy dry Sonoran Desert, the wind slightly caresses against small earthen mounds that once housed the inhabitants of this land, many centuries ago. Arizona and the Sonoran Desert is "an untamed piece of land that has not changed at all, a legend from the past hidden beneath a glittering mask of modern development," (Reid and Whittlesey 1997, 1). The unpredictable desert weather has covered many Native American villages that live here. The inhabitants of this desert have adapted to the harsh, intense heat, knowing where water is and what plants to eat, staying away from many of the creatures that occupy this land, since most are poisonous and can kill a person in one bite. The harsh desert comes with little plant life, the plants that do inhabit this area are rough and grow close to the small perennial rivers. Life here in the desert was not always this way, over twenty thousand years ago the Paleoindian Clovis migrated to Arizona and the Mexico area, following herds of mammoths, bison, and many other predatorial animals, these are the people that first landed in the Americas. There are many tribes located in Arizona and Mexico areas, such as, the Tohono and Akimel O'odham, the translated version of their tribal name is as follows; O'odham is the people, Tohono is desert in the Piman language, and Akimel is a river, putting it together they are the desert and river people (Reid and Whittlesey 1997). Plant material plays a vital role in the Native American everyday life; they use plant material for most of their objects in their villages, for roofs, doors, sleeping mats, baby carriers, kivas, and most importantly, they use these desert materials to make their baskets. Baskets are used for many essential routines in everyday life of the Tohono and Akimel Tribes; some baskets are used as plates or holding trays, bowls, or deep-water baskets. It is an essential piece of technology for both tribes, they used it for digging irrigation ditches to water their agriculture, and baskets, baskets were also used for many ceremonial rituals. Basketry is one of the most a quintessential technology, for the desert tribes, next to pottery, both are accompanied by intricate designs from deserts surrounding their environment. Design plays a crucial role in basketry; specific motifs resemble mountains from the desert itself, coyote prints, wind swirls, and many other designs, displays what the tribes see in their everyday life. I will discuss the Tohono and Akimel O'odham cultural and physical background, the materials, technique, designs, and how the baskets serve the Tohono and Akimel Tribe in this dry environment by introducing three baskets from the CSUDH Museum.

Physical and Cultural Background

In the deepest parts of the desert, modern towns now stand where thousands of years ago there was nothing but patches of grass and herds of mammoths roaming. Over twenty thousand years ago, the Paleoindian Clovis migrated across Beringia, during the Pleistocene era, following herds of mammoths and other predatorial animals. Towards the end of the Pleistocene, the climate changed from constant cold weather to the unusual desert weather seen today. The climate changed the way the O'odham lived, going from hunter-gatherers and following mammoth herds, to a semi-nomadic lifestyle. The start of the Archaic period brought forth four possible distinct prehistoric cultures; the Payatan mainly located near the Colorado River, the Mogollon located in parts of Arizona and the Colorado Plateau, Sinagua, Salado, and most importantly the Hohokam, from Southern Arizona and parts of Mexico (Reid and Whittlesey 1997). These prehistoric cultures are called by living descendants today, the ancient ones. The Hohokam or "those who have gone before" as this is what their name means in their language, mainly lived along the Gila and Salt rivers, using and manipulating these rivers to irrigate their crops. The Hohokam were split into two distinct tribes, the river, and desert Hohokam, the river Hohokam usually not always, lived in more unique communities with permanent houses, relying heavily on the Gila and Salt rivers. The desert tribes occupied the valleys and the mountains, living in these areas for short periods, they were a more seminomadic tribe. The Hohokam are believed to be the ancestors of the Tohono and Akimel, formally called the Papago and Pima. The Tohono and Akimel Tribes and possibly their ancestors, speak a Uto Aztecan language, undoubtfully there will be dialects within this language branch; the Akimel speak the Pima and O'odham language.The Pima language has several different dialects within their language community, the river dialects, a desert dialect, etc.

Of course, there is some argument towards whether the Hohokam are the specific ancestors of the Akimel and Tohono Tribe; however, there are so many similarities in both of their culture's ideology, agriculture, and movement of their tribe during the different seasons.

The O'odham are one of the many Native American tribes that have lived here in the Arizona and Mexico desert. The O'odham are spread far and wide across the Sonoran Desert, split into many branches of family tribes, the Tohono and the Akimel are the most notable and written about of the O'odham. The land of the O'odham reaches an exacerbated number of miles; their eastern boundaries are the San Miguel valley and Sonora river; their northern boundary is the Gila River. The western boundary of the O'odham land is the Colorado River and the Gulf of California; the southern boundary goes all the way down to San Ignacio Arroyo, maybe in the past, it reached even further down. The O'odham ancestors have lived in the many small mountain ranges, from the Gila range, Baboquivari, and the Sierra Madre Occidental. Baboquivari range plays a significant role in the O'odham history; it is believed that this mountain range holds a cave where I'itoi the elder brother of the O'odham Tribe brought them to the land they stand on. "From the underworld, I'itoi led our ancestors, the O'odham, upward into the land, a land stark, and dry, yet beautiful. With patience, the O'odham came to understand the land, and from it, they learned to shape their lives and their unique and lasting traditions," (Erickson 1994). The thunderstorms were a constant occurrence in the desert that the O'odham feared lightning, some would say they admired it so much they brought it into their religious rituals and activities.The O'odham Tribe explicitly show their religious ideology in some instances of basketry. Baskets displaying religious motifs are usually used for ceremonial purposes as drums, from which the medicine men bang on the bottom of the baskets during the ceremonies.

The O'odham came about moving and adapting to the life of the desert; the O'odham can be split into two distinct tribes much like their ancestors, the river, and the desert O'odham. The river O'odham or Akimel live close to the salt and Gila river, where the willows, cottonwood, and other plant life is abundant, they have incredibly elaborate artwork especially in pottery and basketry. The desert O'odham or Tohono live in the desert valleys of the Papagueria region; they spent their time during the summer in the valley in the field villages. Their houses were built from the materials around them, such as mud and straw; they cultivated their farm plot by using the rainwater around them to go across their fields. In the winter they moved to the mountain to rely on the spring waters, this was called water villages. The O'odham as many Native Americans grow corn, beans, and squash sometimes pumpkin, and eventually wheat when the Europeans arrived. Reid and Whittlesey have categorized the O'odham into three categories; the first category is the nomadic "no villagers," or the Hia cie O'odham, who live a nomadic lifestyle, living near the desert sands of the Sonora desert (Reid and Whittlesey, 1997). Next is the "two villagers" or the Tohono, living in the valleys and mountains and small camps, a small, tight-knit community and the last is the "one village" or the Akimel Tribe (Reid and Whittlesey, 1997). The O'odham men were responsible for the hunting, medicine, responsibility for the tribe's activities, while the women played a crucial role in providing the village's basic needs, they gathered the food and agriculture, they were responsible for carrying water to the village every day to use in cooking, washing, cleaning, and drinking. The O'odham women were just one of the many, who made these baskets and pottery. The O'odham lived an egalitarian society; they did not have one specific person in charge, they relied on their elders for vital information on when to go to war, what to plant, and so on.

Materials Used in Basketry

The O'odham knew the land like the back of their hand; they knew where to get water and how to use it to their advantage. The desert has only two seasons, summer and extremely hot winter, which makes the growing seasons even longer because, in certain areas, such as the small mountains, the weather differs slightly and is excellent for a specific plant. The O'odham have adapted to their environment, manipulating the plant life, as well as the rivers and rain to help them grow their crops. Unbeknownst to the world outside, the desert mountains contain a vast number of forests that hold trees and good tough plant materials, but it does differ down the mountain and into the desert. Many materials grown in the Sonoran environment have adapted to the intense dry and arid places, where trees and shrubs cannot grow, water is a rare object. Water plays a crucial role for the desert inhabitants, there is little water except for the rivers that make the border of the O'odham land, rainwater is collected during the rainy season which helps irrigate the land. Most of the water the Tohono O'odham gather is from natural springs usually found in the mountain areas, these springs are called tinajas. The tinajas are a pothole that was made from constant batter from the rain made waterfalls onto the sandy ground and filled by the thunderstorms. The Akimel live near the rivers, so they have easier access to water, unlike the Tohono, who do not have to worry about where and when to get it. Certain materials discussed above are more cumbersome, stiffer, and are firmer in construction, the Tohono Tribe very much like this quality. The Akimel Tribe more likes the less durable lighter and thinner materials. Some materials give the light and dark effect both tribes very much like to have in their baskets. The most critical part of basketry is not only the binding but also the coiling; most coils require specific bendable material that can be manipulated to make these beautiful baskets. Some plants essential to both tribes, are not able to grow in specific regions and are found to have been grown far away from where the tribes live, showing evidence that these tribes traded with others outside of their O'odham land.

The Akimel have intricately maneuvered the rivers to water their crops of corns, beans, squash, and other agricultural resources that came about down the line in their history. Here are many materials the Tohono and Akimel have been ascertained to make their baskets; these materials must be good enough and bendable enough to weave these baskets. Basketry plays a vital role in native communities, holding their ideology, cultural views, and assisting them in everyday needs and routines of the desert life. The desert plants have learned to thrive and have been selected by the environment around them, a sort of cultural selection, only the most robust plants have survived this harsh environment (Nabhan and Rea 1987). The first plant that has been cultivated by O'odham Tribes is called devils claw, or Proboscidea parviflora, this plant was at some time wild but was either domesticated unintentionally or intentionally for basketry use. The materials to make the baskets must be bendable and flexible so the weaver can move it and manipulate it to the way they are trying to portray their baskets. Possibly, the most crucial material discovered and grown by both tribes is devils claw, this material is pliable and bendable enough to create the designs and motifs so profoundly cherished on each of their baskets. Devils claw plays a big part in basketry, as it is cultivated for the fibrous aspects, at one point it was thought to be cultivated for food originally but was subsequently used later for basketry. The O'odham planted these crops in what is called melon fields on the Pimeria Alta, sometimes the devil's claw was grown together with wild gourds or purposefully planted them together. These plants were put together so much the O'odham put it into their legends of devil's claw and wild gourds. "While devils' claw and wild gourds are the two plants linked with rattlesnakes in one version of an upper Pima legend," (Nabhan and Rea 1987, 22). Devils claw is one of the many desert materials the Akimel and Tohono cherish, domesticating the plant, to make the basket designs, motifs, rims, and centers.

"The dried boney fruit of annual Devils claw is found in exhausted, Cordova, Ventana cave sites in the southwest, associated with cultural materials ranging from 300 A. D. too late prehistoric times…Devils claw is found woven into baskets in caves within the upper Gila River... By the 1930s over 25 distinct cultural groups in the southwest were known to have used devils' claw in their basketry," (Nabhan 1997, 138-139).

Basketry includes many other desert materials, such as Yucca leaves, the Yucca eletaplants are enormous; they come in many different colors such as white, green, and yellow leaves; the Tohono Tribe's basket foundations are made of yucca eleta and agave or heteracantia.
Agave Schotti Englem is a part of the subgroup of Agave plants that is widely seen in the Arizona and Sonoran desert, "In Arizona the species is not seen far north of the Gila River, and only a little beyond the San Simon Valley on the east, while the western boundary is the Baboquivari Valley. In New Mexico it occurs only in the southwestern corner of the state, where it is common in the Upper Sonoran Zone of the Animas and San Luis mountains, and is reported from Guadalupe Canyon," (Castetter et al., 1938). They made these materials the foundation of their baskets, because of its fibrous and bendability; flexible material is highly liked among weavers because they can manipulate it to their will and creation. Mesquite is another plant both tribes use in their basket's foundation and binding, as well as plucca Borealis, which is mostly used by the Tohono Tribe and was occasionally traded with the Akimel as it grows specifically in the Tohono O'odham region. "...the Papago ordinarily employ bear grass (Nolina erumpcms) from the foothills, or occasionally Spanish bayonet (Yucca baccata); and the Pima use cattail (ThyphaAngustifolia Linn.) from along the streams, or less frequently brittle cottonwood splints (Populusfrcmontii)," (Kissell 2003). The Akimel basket foundation is mainly wheat straw. This material is found at the base of the root of the mesquite plant deep within its roots that grow heavily underground.

Certain trees are seen in the Akimel basketry since trees grow near the banks of the river where the rain and river water flourishes growing the cottonwood, willow, and several other trees that occasionally grow here.

The Akimel use these materials sometimes as either the foundation, coiling or binding, the Akimel usually traded this material with their sister tribes for other basket materials, that do not grow in their area. The Tohono use other materials in their baskets such as bear grass, yucca, mesquite, occasionally wheat straw, ocatilla shoots, and giant cactus, the Akimel use cattails and cottonwood sometimes but not always. These baskets have provided valuable information on who each tribe is, as a culture, since some materials are only located in certain regions and the only way a tribe located away from that material would be if they constantly traded with the tribe that lives near that materials source. Maguey or Tasyliron wheclers grows in the higher desert region closer to the Tohono Tribe and is traded to the Akimel for other materials that are not produced in the Tohono region.The Tohono use bear grass, ocatilla, saguaro, and sometimes wheat straw. For the Akimels, binding, and coiling, they use cattail, brittle cottonwood, willow, wheat straw, mesquite, and acacia for their coiling and binding materials. Justin Farmer discusses the coiling material mostly used by the Tohono Tribe:

Yucca leaf (Y. eleta) stitching, and Devils claw for black. Willow or Cottonwood (older pieces), cattail (rarely), bear grass (Nolina) foundation. Devils claw for black with Yucca root for the red pattern motifs before circa 1920, Willow as a stitching material. However, Willow is not as common on the reservation as it is elsewhere in Arizona. Consequently, post-1920 baskets rarely contain willow as a stitching material (Farmer 2010, 53).

Basketry material plays a crucial role in displaying both the tribe's environment, and how they trade between other tribes for certain materials that they cannot grow.

Weaving and Coiling

Basketry is a unique artistic composition of intricate designs in coiling and weaving, much like knitting or crocheting, weaving and coiling are the main elements that make the entirety of the basket. Weaving consists of several types of known weaving styles within the Tohono and Akimel communities, the first types of weaving are used for their mats, doors, walls of their huts, and granaries. This is called, wrapped weaving, an open work structure seen more in modern times. Second is twined weaving, or the twining of left two or more strands into a weaving style, and the third is called lattice, it is stronger than wrapped weaving when crossing these weaves, it creates a binding for the baskets. Lattice is one of the many weaving techniques the Tohono and Akimel use; there is no definite difference on who uses what for their basketry. Since weaving styles for both tribes are much of the same and probably were traded techniques among both tribes and possibly further outside of their land. Coiling, much like weaving has several different styles for specific purposes, three individually unique styles stick out for the Akimel and the Tohono Tribe; which are coarse, crude, and most notably close coiling. Coiling and binding are the movements of material through the foundation of baskets, making a swirl of coil materials and binding.

Every tribe has a novel method to make baskets, whether it is to hold food, water, sleeping mats, or the roofs of their huts, whatever the tribes needed to use it for, the coils did their job to keep the materials together. "Many of the principal differences in the coiled ware must be a personal expression of the temper and individuality of each tribe. Papago woman, living within herself, who constructs not fine, light form, but the substantial large, globular, and at times crude with firm thick wall…Pima living an outflowing life, who makes not the stout, solid structure, but the thin, less heavy form with up-springing, out curving wall, of more artistic build and finish," (Kissel 2003, 60).

The binding of coarse coiling plays a significant part in making the entire baskets, the Tohono and Akimel binding move either clockwise or counterclockwise interlocking a second coil on the other side of the basket making it the watertight close coils. Most binding for the Tohono, has a not so perfect outline, weaving a spiral of binding elements from the base to the rim, the Tohono love this perfect tight binding, of course, it does depend on the coiling whether it is tighter or looser, depending on the weaver's desire. Farmer explains the coiling material heavily resent in the Akimel Tribe, "Willow stitching, Devils claw, may have cattail bundle, possible Cottonwood stitching, willow three-rod or bear grass foundation mostly rods foundation. If stitching is Yucca leaf, the basket maybe Tohono O'odham," (Farmer 2010, 54).

Coarse coiling, a technique used for basket granaries by both tribes, these granaries were not anything like the notable baskets; they were shaped more like a beehive if a beehive was the size of a trashcan. Coarse coiling requires specific plants grown in the Tohono and Akimel region. To differentiate from both tribes, the coiling tightness and strictness are very different especially for the Akimel Tribe, while the Tohono is inherently more spread out and narrower, the Akimel is tighter regarding this coil. Coarse coiling has two methods for making its foundation, and a binding element which is generally practiced by both tribes, one element is used explicitly for the granaries, and the other is used for basket foundation. Plaiting basketry is where the weaver plaits the foundation which uses the flat part of certain materials. The Tohono use this in their baskets because they did not have specific plant materials for crude coiling, unlike the Akimel who had a vast amount of plants for this type of coiling. The plating used by the Tohono is different with different stylistic art, there are several types of plaiting the Tohono practice such as lattice, checkered, and twilled.

Crude coiling is another unique style, this type of coiling is generally seen more in the Akimel roofs and platforms, crude coiling is rarely seen in the Tohono Tribes weaving style, the coiling is thicker and broader than coarse coiling making external shaped coils. This coiling is not used just for baskets but for roofs and platforms. Close coiling is the most important and widely used coiling by both tribes, making bell-shaped baskets for the Akimel and the Tohono use the barrel-shaped solid basket foundations and tight coiling. The closer the coils, the more likely the baskets were used to store water, seeds, beans, something good enough to hold small items. Both tribes do not always use these techniques; the Akimel do not use the old methods of weaving any more, this is due to the impact of western ideas. The Tohono mainly use old traditions turning their back on modern concepts of weaving and basketry, focusing on the artistry of weaving and basketry.

Design

An artist is not an artist without their specific addition to their artwork; every culture has their artisans who have a specific trademark, basket makers have their trademark as well as specific designs for their families within the tribe. "The tools of textile production, especially spindle whorls, are found everywhere. This is consistent with other evidence that the societies of the central southwest at this time were egalitarian, although there was a flourishing agricultural economy, growing long-distance trade, and increasingly elaborate ritual" (Teague 1992, 53). There is no specific written record on the design of basketry since most of the Native American traditions are orally passed down, nothing was ever written. Basketry design is specific to the artists, whether it is something they see in their environment such as coyote prints, turtles, mounds, whatever inspires them. Designs in basketry use certain materials, said previously they use devils claw for the dark designs. The Tohono who live a semi-nomadic lifestyle, their design is not as elaborate in their

basketry, unlike their sister tribe the Akimel whose designs were elaborate and more delicate in design. The Tohono have specific materials they use in their basket's designs; which are simple and less elaborate because they live in the driest valleys, the Tohono artesian design was not elaborate because they moved half of the year, not putting specific elaborate designs on their basketry. "Papago design is dignified and reserved, while the Pima is full of action and grace; that in handling the Papago is simple, strong, direct whereas the Pima is elaborate, delicate, intricate; that in appearance the Papago design shows a feeling for large masses of dark and light, but the Pima a feeling for line expressed in a network of pattern with small spotting in black; that in technic the Papago make a crude irregular line, while the Pima line is clear cut and perfect in craftsmanship," (Kissell 2003). These designs were more specific to the environment they saw every day, motifs especially step design, which is what they seem to be, which is steps making swirls or turning into one another making boxed shapes. Dark centers are the base of each basket encircled by a small open circle, where the step motifs, swirl spirals, or turtles come out of the second open circle becoming the design. Some designs portray the Tohono and Akimel religious ideology such as gods, lightning bolts, wind, crossroads, etc. Design plays a crucial role in basketry; it shows what the Native tribes believe in, especially when it comes to their ideology, what they see in their environment, and how they portray themselves as a culture.

Function

Baskets were and are still used for many unique purposes for many Native American tribes in the past several centuries, giving them a helping hand when they are not able to carry or hold a specific object. Functionality plays a crucial role in both tribe's everyday routines in basketry; some baskets have many uses that have helped many tribes in their culture's life, there is not anything that they do that does not involve some device or basket to hold these objects. "The distinctive textiles of the Hohokam and Mogollon traditions in the central area were heavily influenced by Mesoamerica and represented a major change from earlier Archaic fabrics… above the Colorado Plateau there was little evidence of Mesoamerica influence during this period," (Teague 1992, 57). There are many different baskets which range from small cylinders to flat trays, deep bowls to full bowls, and bowls and trays that have lids. The flat trays are watertight with thick walls carving inward. The Tohono use the long slender bottle-shaped baskets while the Akimel use different, smaller styles. The baskets were used in many ways; bowls were used as trays and vice versa, trays as bowls. Each basket has a specific function even ones that have been overused or worn from other uses; broken trays were used to cover usable trays; the Tohono were known to sell their baskets, they used completely different designs, unlike their everyday basket and trays.

Trays play a specific role in both tribe's routines; they are used in the kitchen to hold their food materials; sometimes covered trays are used over hot coals to keep the food warm. Some believe that trays acted like plates, the most critical function of the tray is when the Akimel or Tohono, would gather the wheat from their field and dry it out in the sun, letting the wind take away the pieces of wheat the farmer would not want to eat, this is called winnowing (Kissel 2003). Trays were occasionally used in the kitchen along with bowls. Additionally, trays were used to help clean the irrigation plots for the rain to get to the crops, or to clean an irrigation tunnel to track the water from the river to the crops. "A significant result of these differences in textiles was a clear expression of social identity within sub-regional areas, and an equally clear distinction in social identity between areas," (Teague 1992, 53). Baskets were also used to clean and hold waste from ditches and houses to hold trash, to store food, used for transportation, and sometimes for ceremonial purposes, and possibly drinking, eating, or musical play. Bowls played an even more prominent role as they were the ones that could be put aside with pottery bowls to hold grain, plant materials, and other materials that could be eaten by the animals in the desert.

Bowls held water for the Tohono and Akimel to carry to their villages from the rivers and streams that were near, or to hold the rainwater they needed to accumulate during the rainy season since water in this desert was so sparse.

CSUDH Baskets

Understanding the techniques of coiling, binding, and foundation, as well as understanding the materials both tribes mostly use in their baskets, sheds light on what the baskets at the CSUDH Cultural Museum possibly could consist of. The first basket I will discuss from the CSUDH Museum is, Site 137 DH 6, an approximately 100-year-old basket tray that has a unique design which is known as the butterfly design. The tray is made up of many materials, starting with the foundation based on research and understanding of the plants mainly used by both tribes. The foundation although the basket seems to be Akimel in origin, which means the foundation of Site 137 DH6 consisted of wheatgrass. The butterfly trays coils consist of cottonwood and willow mainly because of the color of the lighter part of the basket; the darker part of the designs is, of course, devils claw but lighter, probably from overuse. The coiling is close coiling; evidence can be seen by the tightness of the coils as well as the signature center coil that has a crossing pattern much like a small braid but starts in the center of the foundation and spirals counterclockwise. The center of the tray is dark for several coils, the sides of the trays are made of three boxes sticking out of the sides; in-between the three colored boxes are stepping box motifs and at the center a cassette looking design. In the darker tables, arrowheads are pointing down towards the center for a total of six arrowheads, a rare composition for the Akimel Tribe. The basket has several characteristics that represent both tribes such as the arrowheads, the dark center, and black rims. The design does not flow correctly. The black areas are filled with obvious arrow points, this basket holds conventional fret designs, however, the common themes in Akimel style are present here, therefore the basket is primarily Akimel. A beautiful tray that shows signs of wear and tear, this tray was most likely used to winnow wheat or to hold precious materials they did not want to lose.

Site 132 DH 1 is another beautiful basket possibly close to 100 years or older. It is a vibrant basket that has several trademarks of the Tohono Tribe. The tray is made up of many materials that have grown in and around their local tribes' environment. The foundation of this basket is mainly made of yucca and agave. The coiling is made of bear grass and saguaro which gives it the darker and slightly yellowish tint to this basket bowl. The center of the basket is dark and coming out in four corners of the center are four boxes that continue to the top in the step motif style. Zigzags can be seen between the box step motifs, again going to the top of the rim; the design material is made from devils claw. The design of the bowl is intricate and resembles a lightning strike swirl. The coiling is again close coiling with its four-square braid encircling counterclockwise all the way to the rim; the coils in this basket has the passive spiral with a smaller second spiral on the outside. This basket shows every aspect of the Tohono O'odham Tribes' ideology, the darker the materials including the paler part in between the devils claw shows the Tohono influence of their preference for darker materials, making this specific basket made by the Tolono's weavers.

Site 135 DH 4 the final basket that I will be talking about, this basket bowl is bottomless with high walls; it looks more like a bucket. It is extremely worn down from use and time still showing the resemblance of a long history of design. The foundation of this bowl is made of wheat straw which can be seen by the coloring of the foundation, its paler and more bark like coloring which is present in the Akimel basketry; the design is made of devils claw. The basket coiling technique is close coiling in design; the coiling is possibly made of cottonwood and Willow. The basket's close coiling is much broader and thicker than usual. This basket resembles Akimel in design and has very light basket coloring regarding the Tohono baskets. The center is a dark circle kind of like a

turtle back, with a five-star design with open tips stretching out to the rim, turning into a zig-zag of designs. The turtles end curves to the left side, kind of like a swirl, continuously going counterclockwise. The turtle is seen stretching out to the rim; the lines zigzag out making what the Akimel call irregular designs, this design can be possibly linked to the designs of the Akimel tribe in Santa Rosa.

Conclusion

In the end, all materials and patterns made and weaved together are for specific reasons, whether it is for bowls and trays to hold certain important objects like water, seeds, and dirt to move to essential areas and places. Growing and evolving using the materials around them to help their community grow; passing on traditions that have been in their tribes for generations. The Tohono and Akimel Tribes have learned to adapt to their environment using every material that surrounds them to make their baskets as tight as they could be, using the best material that surrounds them in their environment. The materials play a crucial role in everything the tribes do. Specific materials live and grow in certain tribes, and some of these materials can be seen in other tribes such as the mesquite plant which grows in the Tohono region and is traded with the Akimel. Coiling shows different designs from different tribes; these coils are used in different ways by different tribes as well as the binding material. All the coiling, binding, and material have been used by both tribes to show their design and their ideology. Basketry today has changed drastically, from the plant-based foundations and coils to something unique, the Tohono and Akimel, mainly the Tohono Tribes, today use metal wires to make metal baskets. Basketry is a unique topic, something that can be seen through many cultures in the world giving them a voice to speak about their culture's ideology, environment, and traditions.

The CSUDH Museum houses over twenty Tohono and Akimel baskets with all unique designs; there will need to be further investigation to understand each basket's unique coiling and materials that make up each basket. Basketry has a long tradition that can be seen even today, changing to adapt to the artesian needs as much as it adapted to the needs of its artesian in the past.

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Thalassemia in the United States

NICOLE SIMBULAN

Introduction

Hemoglobinopathies, or hemoglobin disorders, are becoming more common worldwide due to migration. Thalassemia, for instance, is a group of genetic mutations in the hemoglobin protein of red blood cells, which affects the shape of the cell and causes abnormal distribution of oxygen throughout the human body. There are various types of thalassemia depending on the location of the mutation on the chromosome and severity of the disease depending if it is a homozygous or heterozygous trait. There are four globin chains in each hemoglobin protein, and if there is a slight mutation in one of the chains, the protein will lose its full proper function. Thalassemia is more prevalent to certain regions: Mediterranea, South Asia, and Africa; however, it is popularly known as a "white disease," and thalassemia is discussed heavily among race in genetics. Unfortunately, this causes problems regarding treatment and prevention within non-white populations. The healthcare system controls society's access to treatment, and the patterns of genetic diseases prevent patients from obtaining the proper care. A patient's ethnic background is a significant part of their medical history. If left untreated because of racism and poor diagnoses, the patient can die.

Pathophysiology of Thalassemia

Blood itself is made up of various functioning components including red blood cells, white blood cells, platelets, and plasma (American Society of Hematology 2017). Easily recognized for its the bright-red pigment, red blood cells make up roughly 38% - 52% of the whole blood volume depending on each individual's physiological circumstance (American Society of Hematology). These red cells contain an important protein called hemoglobin that functions as a transport molecule delivering oxygen to the tissues from the lungs and carbon dioxide and hydrogen ions from the body's tissues back to the lungs (American Society of Hematology). It is one of the most crucial functioning proteins in the blood because without it, a patient will suffer from hypoxemia, or low oxygen in the blood and body tissues (American Society of Hematology 2018). Unfortunately some genetic variations within the hemoglobin protein may produce decreased or loss of function. According to the Mayo Clinic, thalassemia is an inherited blood disorder that does not produce enough or absent hemoglobin in the red blood cells. Adult hemoglobin is typically composed of four chains: two alpha-hemoglobin chain and two beta-hemoglobin chain (Mayo Clinic). The chromosomes that determine the phenotype and structure of hemoglobin are chromosomes sixteen and eleven (Darlison and Modell 2008). Any genetic mutation in these chromosomes will cause a significant change in the molecule physiologically and architecturally. *Figure 1* shows a blood smear displaying the even shape and distribution of normal blood under a microscope. In comparison, *Figure 2* and *Figure 3* exhibit patients with thalassemia major and thalassemia minor (taken by the author in 2017).

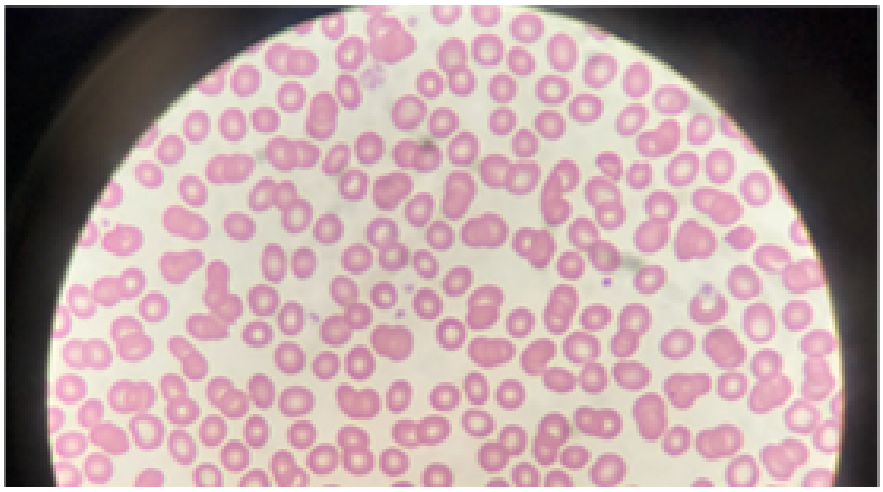

Figure 1: *Blood smear of a normal, healthy individual under the microscope. Note the even distribution of red blood cells throughout the slide presented with lesser pale central pallor (Taken by Nicole Simbulan).*

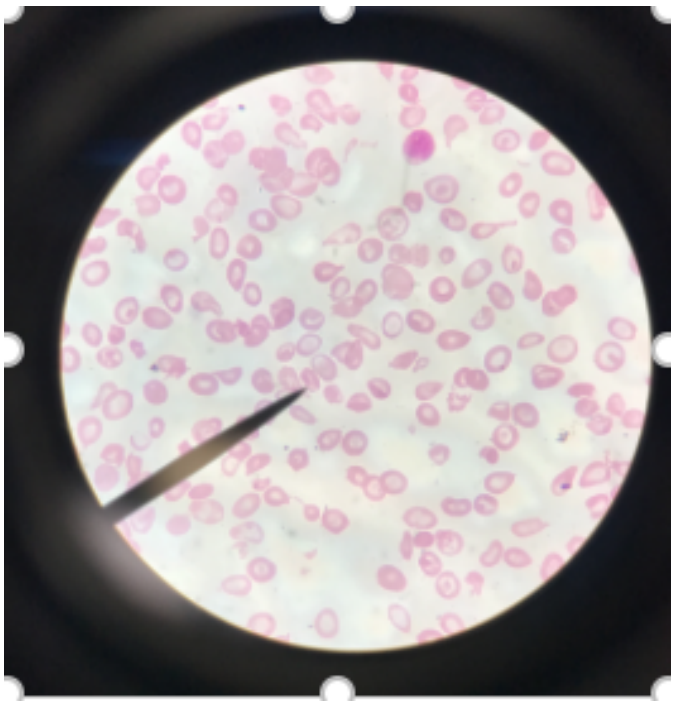

Figure 2: *Blood smear with thalassemia major under the microscope. Note the severity of cell variation (Taken by Nicole Simbulan).*

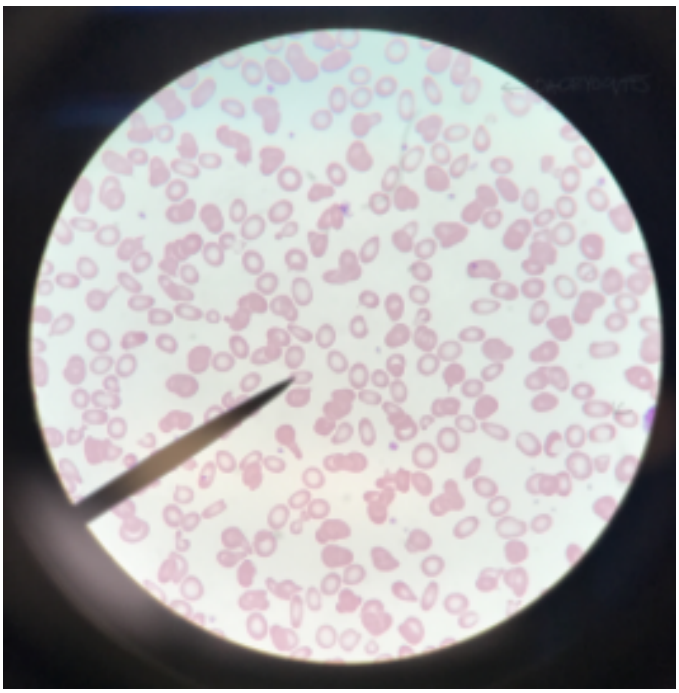

Figure 3: Blood smear with thalassemia minor under the microscope (Taken by Nicole Simbulan).

There are various types of thalassemia depending on the amount of the chain missing, and if the alpha or beta chain is affected (Mayo Clinic). The types of thalassemia indicate the severity of the genetic disease. According to the World Health Organization, or WHO, one mutated allele is asymptomatic, and clinically, the patient is only a carrier; two mutated genes out of four indicate a heterozygous trait presenting milder symptoms; three mutated genes presents severe symptoms, and finally, four missing genes is specifically called Bart Syndrome which sadly, presents a stillborn child at the time of birth. Newborns with no functioning hemoglobin are incompatible with life. Thalassemia of one to three mutated genes are presented with innumerable symptoms and physiological complications.

Symptoms and Complications

Thalassemia is an incurable disease that exhibits various symptoms and complications in the human body (Centers for Disease Control 2016). Each individual's anatomy and physiology circumstances varies; therefore, not all symptoms present them self similarly in each individual case. Symptoms may appear months after birth or years into adulthood. The Mayo Clinic elaborates that thalassemia symptoms include: fatigue, weakness, pale and yellowish skin, facial bone deformities, dark urine, arrhythmias, also known as abnormal heart rhythms, and anemia (2016). The Centers for Disease Control, or CDC, explains that anemia is a condition with a decreased amount of red blood cells, which intensifies the complications of thalassemia since lower amounts of red blood cells limits the cell's capability to deliver oxygen throughout the body (Mayo Clinic). Anemia is present because the spleen is overworked to filter out abnormally shaped red blood cells (CDC). Like many hemoglobinopathies, thalassemia presents abnormally shaped red cells in the peripheral blood smear. Thalassemia is differentiated microscopically from other hemoglobinopathies specifically with an increased variation in cell sizes, paler-centered cells, teardrop-shaped cells, and lower amount of cells overall also shown in *Figure 2* and *Figure 3* (Nasr 2017).

Anatomically, the spleen normally functions to filter the blood from old, dead and foreign cells (Mayo Clinic), but since thalassemia produces atypically-shaped cells, the organ recognizes it as foreign material (Nasr 2017). This phenomenon damages the spleen severely, which disrupts its normal functions because the cells are working harder than usual (Nasr 2017). The spleen also plays a crucial role in the immune system, so if the spleen is damaged, a patient with thalassemia is prone to infection. This complication defines a patient as immunocompromised (CDC 2018). An infection worsens any pre-existing disease or corresponding complications a patient may have since it attacks the body severely (Nasr 2017). Like many diseases, thalassemia comes with countless symptoms, and unfortunately, it snowballs to create more complications in the body worsening the physical condition of the patient with age.

Diagnosis and Healthcare Determinants

Thalassemia, a chronic condition, is diagnosed in many ways. There are multiple initial and confirmatory tests that determines if an individual has thalassemia (Mayo Clinic 2018). Thalassemia is identifiable at birth or later in life because symptoms may present themselves at any time (Mayo Clinic). For example, if an individual merely has a trait, or one gene missing, they are asymptomatic as a heterozygote and therefore, it is highly likely that they do not need treatment (Mayo Clinic). On the other hand, a patient with three genes missing display symptoms a couple of months after birth (Mayo Clinic). A collection of opinions from doctors, family, and the individual can determine the outcome and treatment of the diagnosis. For instance, if two parents are carriers, they should be aware that their expecting unborn child is also a potentially a carrier or has the homozygote genetic disorder.

Fortunately, the United States offers prenatal diagnosis and antenatal screening. In this case since thalassemia is a genetic disorder, it is important to diagnose the disease holistically, and the doctor will most likely ask about the patient's family history and existing symptoms, if any.

Many consider race in clinical diagnosis because some genetic disease pattern regional or across populations. Thalassemia is popularly known as the Mediterranean Anemia disease because it is common in Mediterranean areas. But it is also fairly common to the Indian continent, Southeast Asia, Pacific Islands, and parts of Africa as shown in *Figure 4*. Once the doctor suspects a blood disorder, a blood sample is collected. With this, microscopic tests are done for cell morphology, cell counts, and bone marrow studies (WHO). Additionally, chemistry tests are ordered for iron and hemoglobin quantitation, electrophoresis, and for confirmation, DNA analysis is performed to determine the exact variation of the genes located on chromosomes sixteen and eleven (Mayo Clinic 2016). Unfortunately, clinical exams are not free of charge in the United States, and are heavily determined by the patient's health insurance coverage. If the patient cannot afford testing to determine the specific type of thalassemia, they may not receive the correct treatment or worse, no treatment at all which eventually leads to worse symptoms and death.

Healthcare is one of the most controversial and important discussions in the United States. According to the World Health Organization, there are tedious factors that determine a person's access to healthcare: income and social status, education history, physical environment, personal characteristics, behaviors, and most importantly, genetics (WHO). Income and social status clearly imply that the higher income an individual makes, the better insurance is offered in countries where it is not universal (WHO).

Many argue that those with poor health are linked with lower education and other psychological stress, which also suggests the importance of the physical environment (WHO). The environment in which an individual lives in plays a crucial factor in the biological and physiological state. Homeostasis is defined as:

the self-regulating process by which biological systems tend to maintain stability while adjusting to conditions that are optimal for survival. If homeostasis is successful, life continues; if unsuccessful, disaster of death ensues. (Encyclopedia Britannica 2018).

This further explains that the body changes its physiological and morphological state in order to maintain the conditions in which it needs to survive. Any changes in the body to provide homeostasis is not under conscious control. The World Health Organization elaborates that physical environment including characteristics like quality of air, drinking water, workplaces and housing conditions, and overall communities are factors that contribute to good health. While all of this allow safer conditions, it should not be a crucial factor for determining access to healthcare. Lastly genetics, or a person's inheritance to predisposed diseases and overall health is also considered a main factor to access for healthcare (WHO). Regrettably, thalassemia is a genetic disease, and as stated above, in order to diagnose thalassemia, genetic tests are done before and after birth.

Any data collected from these exams are not completely protected, and therefore could be used to determine healthcare insurance in the future (WHO).

Genes contribute to disease variations, but there are other factors that play important roles as well. These include other factors such as environmental conditions, heritability between or within populations, and mutations. Most of the diagnosing exams are done using race as the focus, and not taking into account the environmental factors (Duster 2014). For example, thalassemia itself does not change genetically, but symptoms and complications alter depending on the patient's physiological state based on the environment in which they live in (Encyclopedia Britannica). When a person living in a lower-caste neighborhood have thalassemia, they are more prone to infection in contrast to someone in a better environment, and sadly, insurance determinants take the place of living into account heavily. The factors that play into healthcare in the United States worsens political and societal issues because not all have equal access. Specifically, racism produces worse healthcare outcomes for those with genetic diseases like thalassemia.

Figure 4: *Demographics of populations with alpha and beta thalassemia.*

Access to Treatment

Thalassemia is an incurable disease that requires countless amount of maintenance and treatments throughout a lifetime. The primary treatment doctors consider is bone marrow or stem cell transplant, which is a procedure that replaces the damaged progenitors of the red blood cells with healthy ones (CDC 2018). Unfortunately, a risky procedure such as transplants is associated with difficulties like finding a donor to complement the patient's body. The United States is known for its lengthy organ donor waitlist because there are several pre-requisites for consideration of being included on the waiting list, which includes: physician referrals, contacting hospitals that handles transplants, scheduling appointments, and compatibility testing between patient and donor (Mayo Clinic). Completing the necessary tasks does not guarantee a spot on the waiting list. Hospital doctors and staff still take the time to review if a patient is a favorable candidate and that can take months to years (Mayo Clinic). An agonizing amount of bureaucratic stalling can worsen the condition of the patient as time is precious to any disease. This is clearly a problematic approach to deciding organ transplantation because not all patients have access to decent healthcare in the United States. In order for patients to even visit a physician, the insurance may have to approve of the decision ahead of time (WHO). As stated above, healthcare determinants are not equitable in the United States, and there are other treatments involved that potentially adds additional fees.

Another crucial treatment involved in Thalassemia is frequent blood transfusions every two to three weeks. As discussed before, red blood cells in thalassemia patients do not survive its full normal lifespan of twenty-eight days, so patients need replacement functioning cells.

Since hemoglobinopathies, including sickle cell and thalassemia, are more common in the United States due to migration, the Centers for Disease Control focuses on blood donor collection specifically for the genetic disease as shown in Figure 5. It is an ongoing struggle to find donors that complement the large variation of blood types within the population especially because donor-matching is a tedious practice. Like all clinical treatments, blood transfusion has other complications. Recurring blood transplants can result in an accumulation of iron, a mineral abundant in blood. An increased amount of this substance is toxic to the human body; therefore, iron chelation, or removal of the excess, is another necessary and frequent treatment to thalassemia. With all of the obligatory maintenance associated with the hemoglobinopathy, thalassemia is costly in time and finances.

All procedures mentioned above correspond to expensive payments especially if required habitually. The genetic disease is treatable, but most patients and family worry about the cost related in addition to the actual procedures. As previou sly mentioned, thalassemia is popularly known as a "white disease". The medical field itself already creates racial discrimination, but referring to certain disease as "white" or "black" as with sickle cell generates issues politically and socially. As stated in a journal article, "Taking Race Out of Human Genetics", "racial assumptions are not the biological guideposts some believe them to be, as commonly defined racial groups are genetically heterogeneous and lack clear-cut genetic boundaries" (Yudell et al., 2016). This clearly defines that most scientists and doctors categorize humans so heavily on the alleged genetics of race that it affects non-clinical decisions such as policies and inequalities. The use of race in genetics do not provide clear evidence that ensures its relevancy among all diseases. Genetics in personalized medicine is a fairly new field, and most scientists are still learning the process (WHO). The "Taking Race Out of Human Genetics", article continues to use hemoglobinopathies as an example of misdiagnosing sickle cell and thalassemia at first only from blindly using race. The author sets up that the use of race in genetics is often used to justify racism in the medical field. This is often seen in advertising for the search for donors. For example, the American Red Cross' sickle cell page quotes that:

In the United States, an estimated 100,000 people of various racial and ethnic backgrounds have sickle cell disease, with more than 90% of African descent. Blood from people of similar race and ethnicity is important in ensuring the best transfusion results, with the least potential reaction (American Red Cross).

This is a great example of using race in medicine. The first sentence claims that there are multiple groups of ethnic backgrounds involved; however, it limits the call for blood donations to people of African descent. The website clearly used people of African descent as advertisement for sickle cell specifically stating the need for only the same racial blood.
In contrast, American Red Cross' thalassemia page shows mostly white patients, and does not state any specification on the blood needed. It merely says, "DONORS NEEDED: All eligible donors are encouraged to make and keep donation…" (American Red Cross 2018). This slight variation on journal advertisement eliminates certain groups of people to attempt to donate towards sickle cell because they might confuse the eligibility requirements. Unfortunately, it implies that sickle cell disease donations are lower in quantity than those for thalassemia. Patients with either disorder are pulling from the same donation pools. Race plays a significant role in diagnosis and treatment decisions.

Treatment costs are determined by the type of healthcare insurance an individual has. Genetic and population data are discretely collected and distributed to those who decide healthcare insurance disbursement. The basic needs

for thalassemia treatments are not easily accessible because of healthcare determinants like income and social status, education history, physical environment, personal behavior and characteristics, and genetics. The World Health Organization collected data on hemoglobin disorders which includes sample number, demographic data, age, birth, and mortality rate. The stated Hardy Weinberg prevalence and birth indicators were based on different types of hemoglobinopathies (WHO). Darlison and Modell hope to provide ideas for prevention and treatment, which claims that, "choice of strategy varies with social attitudes, costs, and opportunities within the health system" (Darlison and Modell 2008) The authors discuss that it is difficult to control the symptoms and complications of the hemoglobin disorders because of the healthcare insurance. Treatment and disease maintenance for thalassemia are theoretically understandable, but are not easily accessed because of poor healthcare in the United States.

Proposed Improvements

Genetics is one of the most important and gripping conversations in the United States lately. While there are loads of fascinating ideas and experiments out in the medical field, the data should be protected in a standardized way because genetic conditions are taken into account when deciding the type of insurance an individual can have. Thalassemia, an inherited disease, is diagnosed through DNA testing, which creates problems when deciding healthcare insurances (WHO). Popularly known, today's society believes that external source of genetic testing, like Ancestry and 23andMe, are reputable services for personalized medicine, but this business is tricky (Martin 2018). According to a *Forbes* article, "The spit-in tube DNA you send in is anonymized and used for genetic drug research and both sites have been selling the data to third-party companies, like P&G Beauty and Pepto-Bismol, and universities, like The University of Chicago, for some time" (Martin 2018). While the article mentions the anonymity, no one knows for sure if it is anonymous. While most people believe that the "at-home" DNA tests are cool and hip, there is not enough data proven for its protection against outside sources like pharmaceuticals, beauty businesses, Google, and most controversially, healthcare insurance. Geneticists who claim these genetic testing are helpful with personalized medicine still do not provide clear evidence for protection. In some cases, the idea itself is helpful to provide data about conditions to provide a cure and other treatments to an extent, but the data should be heavily protected universally. In addition, misinterpretations of the unregulated DNA tests are common nowadays, which leads to unnecessary treatments done (Yudell et al., 2016). The tests done under doctor's orders can undergo counseling whereas external unregulated do not provide direct genetic counseling (WHO). Genetic tests regulation and implementation are needed.

Rejecting race from genetics in the medical field should also be considered as well. There are other factors besides race that is practical to improve medical research. As stated in Tory Duster's article, "Social Diversity in Humans: Implications and Hidden Consequences for Biological Research", "When scientists report findings indicate differences, the danger is that these findings can seductively divert policymakers from seeking alternative interventions that could better address health disparities (Krieger 2011)" (Duster 2014). The author explains that when humans see differences within each other, it is too easy to blame and assign the evidence to that instead of finding the right cause and correlation. The variation between humans is easy to determine physically, but the use of race to consider ethical policies is lazy and ignorant. There are other elements that are useful to medical research, not just age, race and ethnicity, and sex and gender.

For example, data collected on racial differences is discretely used to advertise specific medication to a certain racial groups (Brody and Hunt 2006). Specifically, Bidil was tested only within

African-American populations, but not others so the effectiveness is other groups is unknown (Brody and Hunt 2006). The use of these sole identified factors, namely sociological racial identification, to determine healthcare and pharmaceutical access in the United States is unethical. Duster also specifically mentions that, "The United States is the only country in the world that, as public health policy, does not operate on the assumption of the single standard human" (Duster 2014). The United States has such a problem with poor healthcare outcomes because of the focused idea on human differences and scientific racism.

Conclusion

Thalassemia, a genetic disease, is an incurable disease with multiple symptoms and complications. The associated treatments for the complications are costly especially if it is required throughout the patient's life. Sadly, the United States does not have equitable access to healthcare. This magnifies the problem for those with genetic diseases because most are unable to obtain the necessary treatments. Sadly, healthcare is viewed as an opportunity for good business in the United States. If thalassemia is not well monitored, the disease is deadly, therefore it is important to provide regulations and protections for equal access to healthcare for everyone in the country.

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Religion as a Means of Cultural Survival: A Study of Cambodian Buddhist Immigrants in Long Beach

MATTHEW FUSCO
XAMAR MARTINEZ GIL

Generosity has always been an important tenant of Buddhist spirituality. An additional component of this generosity is the maintenance of the *sangha*: the community of monks and nuns who follow an ascetic lifestyle in accordance with Buddhist teachings. As a result, the relationship between the monastic and lay community is a symbiotic relationship where the monks provide the laity, non-monastic Buddhists, with crucial spiritual services and, in return, receive food, money, help, and other means of sustaining themselves. Taking place at a Buddhist temple amongst the Cambodian community in Long Beach, California, our research aims to illustrate the interdependent relationship between the monks and the greater Cambodian Buddhist community. This bond also reinforces the cultural identity of the Cambodian community and forges social bonds between both groups of Buddhists. While other scholars have discussed the connection between the monastic community and the laity, our research aims to elaborate on the bond between religious and cultural identity among immigrant Cambodians living in Long Beach. This research was conducted through a series of interviews, tours of the temple, book research, and mapping. This paper will support our thesis by describing the history of both Buddhism and the Long Beach Cambodian community, findings from our fieldwork in Long Beach, and our final analysis.

The Sangha, the Buddha and his Teachings

The Buddhist religion was first founded in the fifth or sixth century B.C.E along the India-Nepalese border. The Buddha began his life as Siddhartha Gutama, a prince of the Indian warrior caste. Siddhartha was a kind and intelligent young man, but was also very sheltered from the hardships of life. One day, Siddhartha left his palace to tour the surrounding settlements, witnessing sickness, death, poverty, and old age for the first time. Shocked by what he had seen, Siddhartha left his life as a prince to find a way to end human suffering. Siddhartha initially subjected himself to extreme asceticism, mortifying his body and learning meditation techniques. After discovering that torturing his body did not give him the answers he sought, he found a balance between excessive comfort and extreme ascetism. After many years studying and meditation, he one day he sat beneath a Bodhi tree to contemplate the question of life and suffering. While meditating he concluded that desire is the root of all suffering. By ceasing desire, one can end suffering. When Siddhartha woke from his meditation, he became known as the Buddha, which means “the Enlightened One.” He then spent the next forty-five years of his life teaching men and women to become monks and nuns. This was how the *sangha* was born (Chodron and Llama chap. 1, 2017; Vail).

A basic tenant of Buddhist teachings encourages its followers to believe in the Three Jewels: the Buddha, the Sangha, and the Dharma. The Sangha is described as the community of monks who follow the teachings of the Buddha and provide spiritual services for the lay population (Harris 2005, 45) (Buswell 2004b, 740). These services can include performing weddings, "baptisms", and funerary rites for the laity (Needham 2015, 105). These monks, who attempt to snuff out desire to attain enlightenment, do not receive paychecks or own any extravagancies. The monks must rely on the charity of the lay-community in order to survive (Ward 2000, 53-54; Buswell 2004b, 196).

Another practice found in Buddhism is known as "Dàna". Dàna is translated to "giving" and is described as "a supreme virtue perfected by Bodhsattva's, a key practice of providing economic support to monks and nuns and the Buddhist establishment, and a means of generating religious merit." Dàna describes the dependency monks and nuns have on the laity for survival. Monks and nuns do not have to reciprocate the gifts they receive, but can offer to teach people about their faith, which is considered the most valuable repayment (Buswell 2004a, 196).

The acclimation of merit is another part of Buddhist spirituality. The cultivation of merit is tied to the concept of karma. Karma, as understood by Buddhists, is similar to the law of cause-and-effect: the actions of this life reflect the circumstances of your next reincarnation. The acclimation of merit is tied to activities such as giving, meditation, adhering to moral precepts, and listening to or teaching the Dharma (Strong 2005, 5872-5875).

Buddhism in Cambodia differs from other variations of the religion because it incorporates elements from Brahmanistic and animistic beliefs. These beliefs are not seen as separate from their Buddhist practices but "part of the spectrum of choices for dealing with moral, physical, and spiritual needs" (everyculture.com). Buddhism, like many religions, is transformed by the local customs and beliefs of the people who practice it. Cambodian Buddhist's believe in a world inhabited by various spirits who affect the day-to-day lives of people. Other beliefs, such as the use of talismans, magic and ancestor worship are not part of Buddhist canon but still practiced by monks and the laity (Needham and Quintiliani 2008 102, 104, 106).

The Field Site and Observations

The city of Long Beach, California is home to the largest population of Cambodian refugees outside of Southeast Asia. Most of these immigrants had settled in the city to escape the persecution wrought by Pol Pot and his radical Communist organization: the Khmer Rouge. The Khmer Rouge was only in power for four years but succeeded in killing over 1.7 million people (Holocaust Museum Houston n.d.). Pol Pot targeted anybody he considered a threat to his regime. In the case of Buddhism, the religion was labeled as "reactionary" and targeted for elimination. Pol Pot sought to destroy any connection the Cambodian people had to their past in order to reshape their society into an agrarian utopia. Reports show that five-out-of-eight monks in Cambodia were murdered at this time with the rest being forced to give up their vows. Temples were destroyed or re-appropriated into storehouses or prisons. In spite of his best efforts, the spiritual practices that Cambodians hold dear to them managed to survive this assault and continue into the modern day (Keyes 1990).

The relationship between Theravada Buddhism and Cambodian culture reaches back hundreds of years. People born in positions of authority legitimized their power by referring to Buddhist concepts of re-birth. Someone earned that position because of their "karmic inheritance" from the good deeds of past lives (Marston and Guthrie 2004, 46). Despite colonialism, social upheaval, and war Cambodian Buddhism has remained an important part of Khmer cultural identity. When Cambodian refugees came to the United States in 1975, they brought these beliefs and spiritual practices along with them. Because they are seen as intermediaries between the Buddha and the people, monks are seen as holding exalted positions in Cambodia (Needham and Quintiliani 2008, 9, 106).

Our research took place at the Wat Bothiprikrattanram in the city of Long Beach, California. The temple, located off Cherry Avenue on Market Street, would be very easy to pass without a second glance. The lot the temple is located on houses two structures: one acts as the Buddhist Temple and a home for the monks while the other, still under construction, is going to be the new location for the temple.

The current temple has been erected in the garage of the first building and houses a large golden Buddha statue surrounded by various offerings. The Buddha has been placed on an elevated platform so that it rises over six feet tall and looks over those who prostrate themselves before it. The offerings surrounding the Buddha consist of incense, candles, fruit, LED plastic flowers, and smaller effigies of the Buddha. The floor is carpeted in ornate rugs where devotees can kneel before the monks and bow to the Buddha. The walls are covered in tapestries depicting the life of the Buddha from his time as a prince to his death. Beyond the ritual space is a small kitchen where the monks can eat and lay-help can cook and provide for them. The monks live on the second floor of the building where they each have private bedrooms.

Our primary contact at the temple was Sokhanarith Chan, or Narith for short. Narith arrived in the United States in 1982 and had immigrated in order to "escape the war." She first settled in Atlanta, Georgia but moved to Long Beach in 2001 and currently acts as a community organizer in the Cambodian community. Narith's guidance was an indispensable part of our field research. She acted as our translator and a guide to the temple and the Cambodian community at large.

Over the course of our fieldwork, we saw several members of the lay community come to help the monks in their daily activities. These volunteers were often seen cooking, cleaning communal areas, and doing laundry for the monks. We were informed that these volunteers came to the temple on their own time to help with daily chores while the monastics performed other duties. Narith also informed us that her husband was helping with the construction of the new temple by helping create some ornamentation for the roof. These acts of dána helped them gather positive karma and allowed the monks time to engage in other spiritual activities. On one visit we were informed that the monks had gone to San Bernadino to help perform a ritual for some people living there. While they were gone there were still members of the lay-support cleaning and doing laundry during the monk's absence.

As we met with Narith, she described the functions and purpose of the monks in the Cambodian community. Monks are often called to cleanse new houses of lingering spirits or bless newborn children. The monks also can act as intermediaries who pass offerings from the living to the dead. For example, if someone dreams about a dead relative who asks for food and clothing, the monks can present these offerings to the dead behalf of the living. Only monks or similarly "holy people" can perform these spiritual feats.

Narith also told us about a "hair cutting ritual" that the monks perform for children. When children receive their first haircut the monks would come and bless the occasion. In return, the family will give money to the monks and provide food for any invited guests. In Cambodia this ceremony can be expensive and is usually orchestrated for the children of the wealthy. Because the cost of food in the United States is much less than in Cambodia, Narith informed us that more people can afford to host this expensive ritual.

Buddhist traditions like these remain important for the Cambodians living in Long Beach. At the Buddhist temple Wat Bothiprikrattanaram we witnessed monks offering prayers and gifts to the dead. At another temple, we saw the Cambodian community come together for the Pchum Ben, a festival meant to honor the dead and provide food for "hungry ghosts" lingering on earth. Food and prayers were offered to the spirits, the community and their families gathered to eat together, and the monk in charge of the temple offered prayers and blessings for those who wanted them.

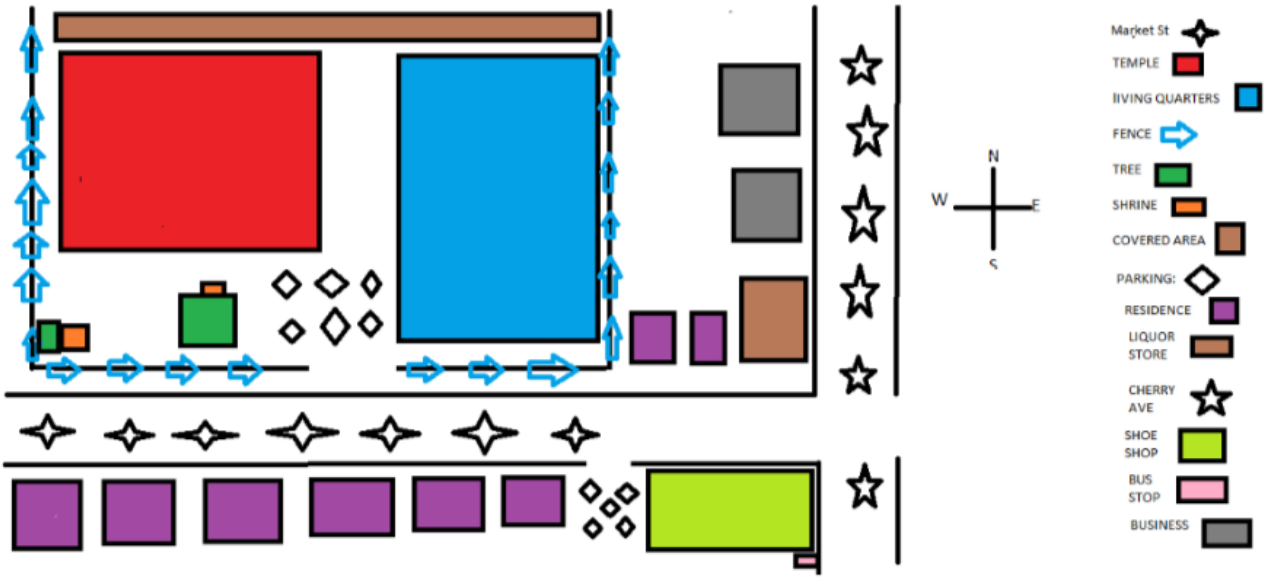
Rituals such as these show how important the monastic community can be to the Cambodian people. Buddhism is so important that it is associated with influencing Khmer art, culture, and individual personalities. One study of the subject quoted a Khmer-Buddhist woman talking about how her faith connects to her cultural identity: "How can I be a tree without my roots?" (Marston and Guthrie 2004, 40).

Final Discussion

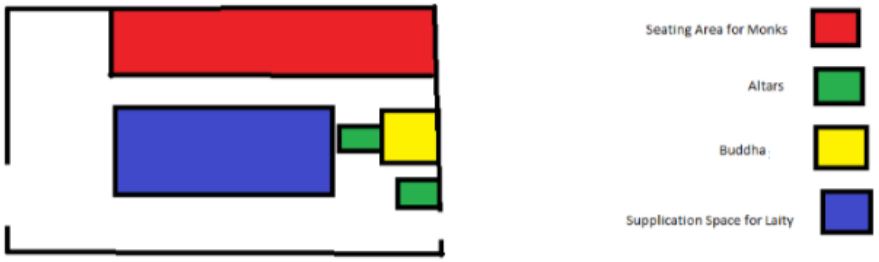
Our final results revealed that the monastic community acts "living embodiments and spiritual generators of Buddhism" (Ebihara chapter. 5, 2018). Without the monastic community, the Long Beach Cambodian community would be unable to engage in the spiritual practices imperative to their cultural identity. The monk's involvement in Cambodian society is manifold. Their ability to provide offerings to the dead give solace to the living and help keep the connection to their ancestors alive. Without the monk's ability to give such offerings, ancestors can be left hungry and uncared for. Familial, personal, and social tribulations attributed to spirits can be aided with the blessings and counsel of the monastic community. Blessings for children and the hair cutting ceremony can be considered rites of intensification which further reassert their cultural identity and ties to their community. In exchange for these rituals and spiritual services, the laity cares for the monks by offering time, labor and goods. These behaviors are further encouraged through the Buddhist concepts of "dàna" and "merit." A large population of the Long Beach Cambodian community was displaced as a result of the Khmer Rouge, our informant included among them. The Khmer Rouge targeted Buddhist's especially due to its connection to Cambodia's history. As a result, maintaining a connection to the homeland they were forced to flee and the religion which was persecuted remains extremely important. The quote "To be Cambodian is to be Buddhist" encapsulates how important this connection is (Coggan 2016).

Appendix

1.

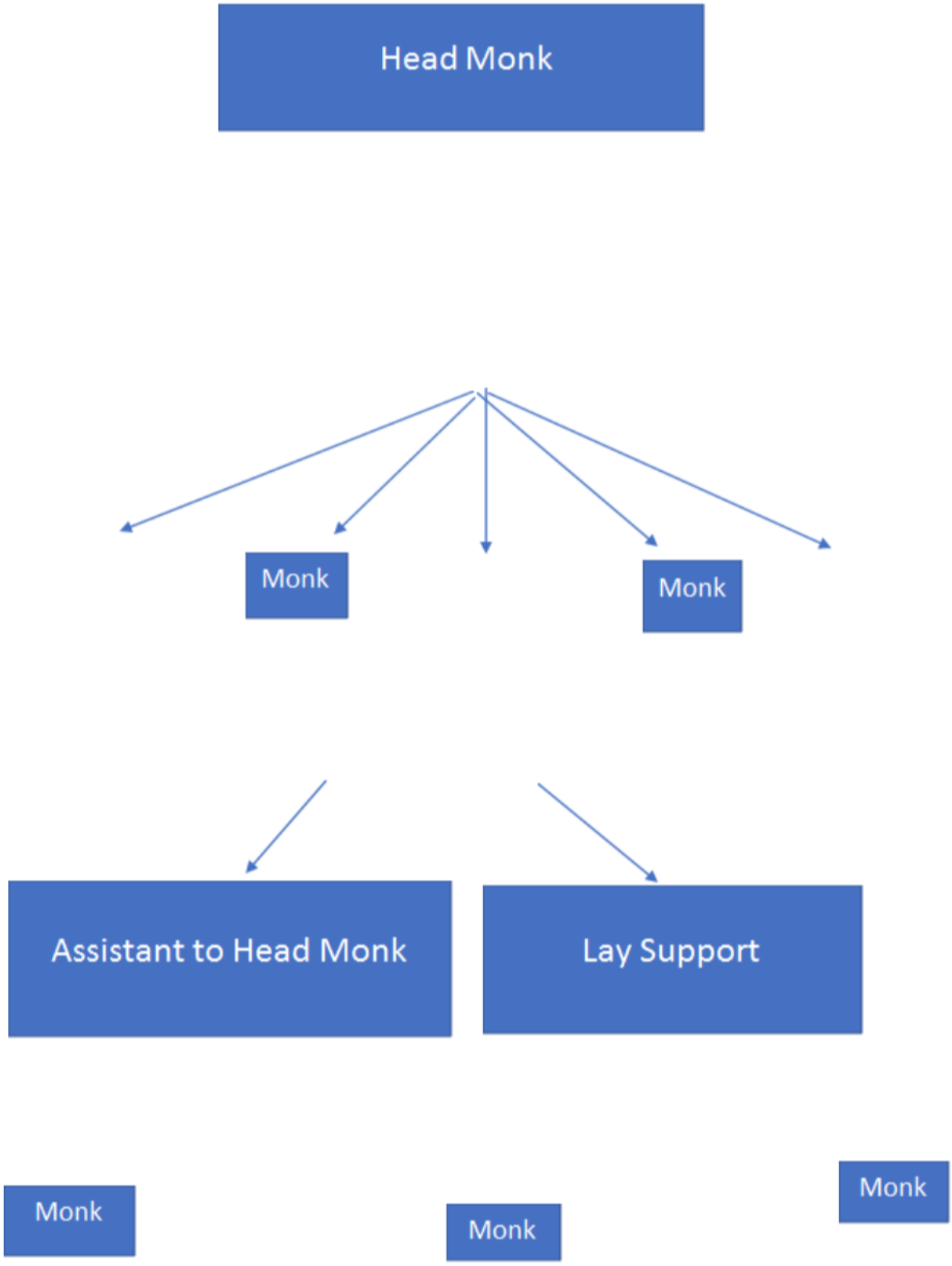


2.



1. Exterior of Field Site and Surrounding Area.

2. Interior of Temple and main Ritual Space.


Head Monk
Monk
Monk
Assistant to Head Monk
Lay Support
Monk
Monk
Monk

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