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Table of Contents

Red Road to Recovery

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Introduction

The remnants of colonization, genocide, and the destruction of culture show that Native Americans are still suffering from marginalization and structural violence in the United States. As a result, many of these disenfranchised people have fallen into drug and alcohol addiction. This has created a cycle of trauma and violence within the native community that transcends multiple generations. Contemporary rehabilitation centers in the United States fail to address the historical generational trauma that has been passed down within Native families. There are approximately eight Native Based rehabilitation facilities within the United States that are addressing these issues. American Indian Changing Spirits, located in Long Beach California, is one of these facilities. We conducted ethnographic research at American Indian Changing Spirits, learning how this program incorporates the Sweat Lodge Ceremony as one of their methods used to assist residents with their recovery. Incorporating the Sweat Lodge Ceremony offers spiritual therapy and cultural knowledge that equips the residents with culturally relevant techniques for personal healing. Participating in the Sweat Lodge Ceremony is viewed as purification involvement that allows self-forgiveness and self-acceptance. The integration of the Western twelve step program and Native practices gives credence that legitimizes Native rituals and allows to better support the

residences on their road to recovery. Our research focuses on how culturally relevant ceremonies can be incorporated into rehabilitation programs.

After meeting with our primary and secondary contacts from American Indian Changing Spirits, the topic of historical trauma was proposed as one of the key causes of substance abuse. This led us to the conclusion that we needed to discover what intergeneration trauma is and how it affects the Native peoples. We begin with a brief historical overview of Indian experiences in the United States.

Background

Roxanne Dunbar-Ortiz, Historian and author of *An Indigenous History of the United States* (2014) estimates that indigenous population was reduced from 100 million to 10 million following colonization (32). These deaths, would be the foundation of trauma Native people would continue to deal with for the next 500 years. From the Iroquois of the Northeast to the Kumeyaay of the Pacific Southwest, each consecutive generation would add their own experience of trauma, including: massacre, forced relocation, a border that would separate families. The pendulous nature of American Politics would break-apart and reunite native families throughout the United States between the 1830-1975 (Gasco 2015). In certain areas, Native people would be hunted in an effort to remove them by the state. Each of these atrocities added to the shared cultural history of the Native People that would stay with them and would be passed on to their children beginning a vicious cycle, which is described by some theorist as intergenerational trauma.

Literature Review

Historical trauma is discussed in detail in Laurelle L. Myhra, MS, LMFT, (2011). Using work conducted by Marie Yellow Horse Brave Heart, PhD., Director of Native American Disparities and Research, Center for Rural and Community Health, Myhra augments to her work and builds on the connection between substance abuse and historical trauma. Historical trauma is defined as “the collective emotional and psychological injury over an individual’s lifetime and across generations” (Braveheart, 2003 in Myrha 2011). Myrha explores how trauma experienced by previous generations is passed on to the proceeding generations and what can be done to heal. Her findings indicate that one method of passing on trauma is vis-à-vis observable behavior. Maladaptive behavior, such as substance abuse and domestic abuse, exhibited by the adult caretakers (father, mother, is observed by the children, which then in turn repeat it. Most of her informants reported that their caretakers abused them and substances, like drugs and alcohol, because of their experience in the boarding schools (Myhra 2011). When the next generation had children, they repeated the same behavior. Her informants noted that reconnecting to their American Indian identity through rituals and practices such as sweat, powwows, and talking circles helped them become sober and maintain their sobriety. The restoration of cultural practices allowed the participants to reconnect with their identity and find pride in who they are. The reconnecting with Native ways through rituals like the sweat lodge, powwows and talking circles has played a key role in maintaining sobriety (Myhra 2011).

After reviewing the literature and interviewing our contacts at American Indian Changing Spirits (AICS), we are able to see how native based programs like AICS,

through their practices assist in reconnecting and healing. Our research supports the need for Native based programs and practices in healing from historical trauma.

Setting

The area in which we focused our ethnographic research was the spiritual and ceremonial space (sweat lodge) incorporated into the American Indian Changing Spirits (AICS) facility. AICS is located on the twenty-seven acre campus community known as the Century Villages at Cabrillo (CVC) in Long Beach, Ca. The CVC campus was established on a former US Naval housing site. The campus was created in 1997 when the United States Department of defense transferred the land over under the McKinley Act, for use as permanent and transitional housing to combat the homelessness in Long Beach and surrounding areas. The campus is accessed from Pacific Coast Highway with Cabrillo High School bordering the north, the Long Beach Job Corps to the east, the California State University, Long Beach Tech Park to the south, and the Terminal Island Freeway bordering the west. The immediate area surrounding CVC is primarily industrial property composed of warehouses, refineries, and the Port of Long Beach. AICS is one of twenty programs offered at CVC, labeled as a third party program that offers shared and transitional housing. While AICS focuses on recovery for American Indians the other programs and facilities at CVC are aimed to help children, families, disabled adults, and veterans recover from substance abuse and homelessness.

The AICS facility occupies two two-story buildings on the eastern edge of the CVC campus, which house those who participate in their rehabilitation and sober living programs. Building one houses those individuals who have graduated from the AICS recovery program and have moved into their sober living facility. The downstairs is the

kitchen and dining area, as well as several offices. Building one also contains an arts & crafts room where those in the program are able to do traditional metalsmithing and beadwork; these objects are then sold as a form of income. Building two contains six rooms on the second floor with a community room and counseling offices downstairs.

The individuals present at the research site during our observations were Raul Garcia, Jimi Castillo, Robert Jacobe, Volunteers, and the clients. Our primary contact at AICS is Raul Garcia who is the program director and has held this position for the past two years. He is the gatekeeper and the one who we contacted for approval to conduct our field research. Our key informant is Jimi Castillo who is a Native American Spiritual Advisor. He is the one who holds the talking circle and conducts the sweats every other week. Jimi is a wealth of knowledge regarding Native American history and spirituality. He is a native to the Los Angeles region, identifying with both the Tongva and Acjachemem, who are indigenous to coastal Southern Los Angeles and Northern Orange County. There are several others who are integral parts to the AICS program. Kem is one of these men; he is a registered nurse and has been working with Jimi for twenty years. He helps with those individuals who are on medication and would like to participate in the sweat lodge ceremony. He is very knowledgeable in pharmacology and closely observes those medicated in the sweat lodge. Robert Jacobe is also an integral part of the sweat lodge ceremony. Robert is Jimi's nephew and the water pourer for the sweat lodge ceremony. The water pourer is the one who essentially conducts this ritual. Robert is doing so because Jimi has had some back problems and is currently on several medications. Also, Jimi feels that it is in poor taste to pour water,

while heavily medicated, for a purification ceremony involving those who are overcoming substance abuse.

Methodology

The ethnographic research methods used to gather data include: participant observation, semi-structured interviews, secondary data analysis, and the creation of a sitemap as well as a hierarchical chart. Upon completion of our site observations we then coded all field notes and transcribed interviews looking for recurring themes. The participant observation involved our interaction with the staff and clients at AICS, including observation of their group counseling, participation in two *Inipi* ceremonies, and observation/participation of two talking circles. Along with these observations we conducted two semi-structured interviews, the first with Cheryl McKnight at 5pm on November 12th, 2015, and the second with Raul Garcia at 3:09pm on November 19th, 2015.

The first interview with Cheryl McKnight, the Program Director of the SLICE Department at California State University Dominguez Hills and a Board Member of American Indian Changing Spirits, led us to two of the now overarching themes of our research, historical trauma and micro aggressions. She also made a call to her good friend Amy Jo Kindler, who is a sundancer and well-respected member of the American Indian community, because she felt that Amy Jo's knowledge of the sweat lodge ceremony exceeded her own.

The second interview was conducted with Raul Garcia who is the Program Director at AICS and has held this position for the past two years. This interview provided insight into the AICS program and how it is run, identity issues that American

Indians face, social injustices present in modern day society, and the appropriate use of native ceremonies and traditions. The theme of micro aggressions also came up in this interview along with the appropriation of culture. Raul explained “the Indian in the cupboard”, a term used to address the service of a ceremony and song that later sets aside the glaringly substantial issues affecting the Native community.

Analysis

Outside to the east of the two buildings was the sweat lodge, and talking circle. The sweat lodge and talking circle take up a sixty-foot square plot of land along the eastern fence of the Changing Spirits facility. The lodge itself is centered between the four cardinal directions (North, South, East, and West) which are separated by about thirty feet and marked by willow branches with prayer ties affixed to the top. The sweat lodge is roughly ten feet in diameter and constructed with willow branches picked by hand from the forest for this specific use. At each intersection of the branches is a prayer tie used to fasten the structure together. The opening to the sweat lodge faces east and opens toward a fire pit about six feet away. Travelling further east out of the sweat lodge past the fire pit is a circle of benches with another smaller fire pit inside. This is the talking circle, where all the members of AICS meet and talk prior to entering the sweat lodge to participate in the ceremony.

Once the talking circle has been concluded, those that will be participating in the sweat lodge ceremony dress down into basketball shorts and line up to wait for the rituals of the ceremony to begin. The first ritual is cleansing of all of the participants before they enter the sweat lodge. This cleansing is done through smudging, where sage is burned and the smoke is allowed to envelope the participant’s body to remove

any negative energy the participant may be carrying. The next ritual is the tobacco offering to the fire by each participant. This offering is viewed as a prayer, that when the tobacco is burned the prayer is released and the smoke carries that prayer to the heavens to be heard by the creator. Now is the entering the sweat lodge itself. Once a participant's tobacco offering is made he then proceeds to enter the sweat lodge. The participant drops down to his hands and knees, asks for permission to enter the lodge, and the proceeds to crawl on his hand and knees, in a clockwise motion (left to right), to his place within the circle inside the lodge. The last major ritual process is sweating aspect itself. Once all participants are seated in the lodge the rocks are brought in one by one. The sweat lodge ceremony consists of four rounds or "four doors" and for each round seven rocks, that have spent all day in the blazing fire, are brought in one by one. Each rock is pulled out of the fire, dusted to remove any ashes, and placed into the lodge. Once the red hot rocks are placed into the lodge, it is then blessed with a sequence of cedar, sweetgrass, and kopal. These are three other herbal medicines that are used for cleaning negativity as well. Now that the rocks have been placed, a bucket of water is brought in, the fireman is seated, and the door is closed. Once the door has been sealed, blocking out all outside light, the water pourer begins to pour water onto the hot rocks causing the temperature in the lodge to rise, and the participants to sweat. Four prayer songs are sung during each round and the end of the fourth prayer song concludes that round of the ceremony. After a round is finished the doorway is opened to allow energies to be exchanged and more rocks to be brought in. This process of adding rocks and singing prayer songs is repeated four times to complete the sweat

lodge ceremony. The door is the opened and the participants come crawling out on their hands and knees, symbolizing a rebirth.

The Sweat Lodge Ceremony itself holds great cultural significance to the individuals at Changing Spirits and to the Native Community as a whole. The Sweat Lodge ceremony has been a key aspect in Native American Spirituality for hundreds of years; this ceremony is one of few remnants of Native American Culture that has survived the ethnocide in the wake of European Conquest. The way the AICS incorporates the Sweat Lodge Ceremony into their rehabilitation program provides a tangible resource that connects the residents in the program back to their indigenous identity and helps provide a more stable foundation for their recovery. The Sweat Lodge Ceremony is a powerful metaphor for the resilience, struggle, and survival of the Native American population and their will to continue their traditions for generations to come.

By looking at the cultural aspects and rituals involved with the Sweat Lodge Ceremony we see many social actors and relations that have developed within the Native American Community. One of the greatest elements that became apparent to us was the respect reserved for the elders and individuals with essential roles in a Sweat Lodge Ceremony. One of the things that we noticed was the respect and admiration that was given and directed to Uncle Jimi, the spiritual advisor for Changing Spirits. The men at Changing Spirits were always quick to tend to Uncle Jimi's needs. We also noticed the respect that was given to the individuals that took on important roles in the preparation and conduction of the ceremony. The residents also showed the upmost respect and gratitude for the men volunteering and enabling the Sweat Ceremony. The water pourer, doorman, and fireman all were held with greater respect for their services

in making sure all elements needed for the ceremony were attended and fulfilled. These observations provided insights into the social structure within Native American Communities.

Conclusion & Reflection

The semester long research project at American Indian Changing Spirits opened the doors to the Native American community's resilient nature, regardless of being subject to reoccurring generational trauma expressed through alcohol and drug abuse, and the overwhelming underrepresentation in contemporary society. Our prior knowledge of this site was that it was recovery program focusing on helping American Indians while incorporating native ceremonies and traditions as a form of heritage preservation. Our views have changed dramatically after observing and participating in the *Inipi* ceremony, we now know it's true significance to the people as well as the important role it plays in the recovery process. We were able to gain in depth understanding of the obstacles the Native American community faces- such as alcoholism, substance abuse, historical trauma, micro aggression and casual racism- by interviewing and speaking with the staff and clients of AICS.

Given the opportunity to continue working in this community we would like to further our research regarding historical trauma and its relationship with substance abuse while also assessing the effectiveness of the AICS program. We would do so through extensive participant observation, the conducting of anonymous surveys regarding family history, demographics, and the programs' success rate. The group also discussed the possibility of visiting various other native based recovery programs across the nation in hopes conducting similar research and being able to compare and

contrast the data found in said programs. This would allow for a more holistic analytical interpretation for what is being done to combat the substance epidemic in the native community. This research has provided historical and experiential knowledge that has helped the group become more sensibly aware of the ongoing adversity and admirable resilience found in Native groups.

Fig.1. James “Uncle Jimmi” Castillo, Photo by: Thomas Cordova

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Ancient Maize from Pre-ceramic Huaca Prieta and Paredones, Peru

By: Ernesto Morales

Intorduction

In the article, preceramic Maize from Paredones and Huaca Prieta, Alexander Grobman, Duccio Bonavia, and Tom Dillehay discuss new insights of the initial domestication and diffusion of maize into South America (Grobman et al. 2012). The northern Peruvian sites of Huaca Prieta and Paredones provide ancient maize remains in the archaeological record that are dated between 6700 – 3000 BP, referred to as the middle and late pre-ceramic to early ceramic periods. The macro and microbotanical record of maize remains at Huaca Prieta and Paredones are some of the earliest in South America. The macrobotanical remains show evidence of racial diversification during the preceramic era (Grobman et al. 2012). This suggests that maize migrated into Central and South America much earlier than previously thought.

According to archaeological records, initial occupation of Huaca Prieta and Paredones occurred before the large semi-artificial mound was built. Studying the archaeological records of nearby surrounding sites gives us an insight to ancient societies of South America, as well as to their tools, technology, and subsistence strategies. The people of Huaca Prieta and Paredones were maritime foragers that relied on marine resources, but were also hunters and gatherers that practiced small scale cultivation. The practice of burials along with offerings was evident at the site of Huaca Prieta and Paredones within the mound. Postholes were discovered along with cane fragments, indicating perishable structures were built on top of the mound. Over

the millennia, the site of Huaca Prieta and Paredones changed in size and function as more construction, such as ramps, stone-walled structures, and burial chambers were was added to the mound.

Archaeologists gain clues to societies of the past by studying the macrobotanical and microbotanical remains of ancient maize along with technology and subsistence strategies. The maize remains shed light on the chronology of the dispersal of maize from Mexico. Archaeologist think that maize evolved very quickly as it made its way to South America. The planned mound building portrays a complex society that was sedentary before the introduction of ceramics and agriculture.

Background

The Huaca Prieta and Paredones site has been occupied since the late Pleistocene (13,720 – 13,260 BP). The initial inhabitants made stone tools, hunted sea lions, and fished. Settling at Huaca Prieta began around 8,979 to 7,500 BP, before the mound was built. This early occupation consisted of maritime foragers who practiced small garden cultivation around the lagoon.

The site of Huaca Prieta and Paredones is in the Chicama Valley on the Northern Coast of Peru (see Fig. 1). The site of Huaca Prieta consists of a large semi-artificial mound that is roughly 410 ft by 166 ft, and 39.4 ft tall. Archaeologist Junius Bird first excavated the site in 1946 and revealed one and two-room structures that were supported by cobblestone walls in the mound. The mound is filled with organic material such as fish scales, sea urchin spines, and shells, with plant remains such as cotton, bottle gourd, chili peppers, achira, beans, and maize (Moore 2014). The site of

Paredones is roughly a kilometer north of Huaca Prieta, 98ft in width and 229 ft in length and consists of 20 ft of cultural deposit (Moore 2014).

Mound building was first initiated on a natural terrace around 7572 to 6538 BP. The Huaca Prieta mound was built over a period of ~3000 years. The mound has retention walls made of cobblestones that were built to be filled to raise the mound (Dillehay et al. 2012). Postholes and cane fragments suggests that the inhabitants of Huaca Prieta built perishable structures on the mound. There is stone-walled rooms built on the eastern and western slopes of the mound on terraces. The mound has a sunken circular court created with cobblestone berms and retention walls, which is a distinct feature among ceremonial centers (Dillehay et al. 2012). There is evidence for burials in the mound, along with offerings, suggesting social differentiation, although there is no evidence for elites.

Analysis/Discussion

In the following sections, the macrobotanical and microbotanical fossil remains will be discussed, as well as comparing the maize remains found at the site to maize remains found in Mexico. The last section will show evidence of social complexity within contemporary sites along the coast of the Pacific coast in South America.

Macrobotanical Fossil Remains of Maize

The recent data of maize remains gathered by Grobman and colleagues at the site of Huaca Prieta and Paredones is essential for understanding the chronology of morphological and racial diversification of maize into South America. Macrobotanical remains of maize ears, cobs, seeds stalks, husks, and tubers are all sources of

plants used in the archaeological record. The macrobotanical remains in the stratigraphy at Huaca Prieta and Paredones show that it was spread out intermittently through space and time (see Fig. 2). The macrobotanical evidence suggests that maize was a minor crop during the middle to late preceramic periods. Because of great preservation, evidence also suggests that the people from Huaca Prieta and Paredones were growing maize nearby. The maize cobs and phytoliths recovered during the excavations reveal two distinct types of maize that are roughly 6 cm long, consisting of ancient popcorn and a floury corn with larger kernels (Dillehay et al.2012).

Microbotanical Fossil Remains of Maize

The microbotanical remains that were found throughout the site consisted of pollen grains, starch grains, and microscopic phytoliths. Phytoliths are soluble silica that accumulate on leaves and stalks that are absorbed from groundwater and earth by plants (Piperno 2009). Phytoliths are important because they display distinct surface geometries among different plant species. Phytoliths can vary depending on where they are formed, such as stalks, leaves, or fruit (Dillehay et al. 2012). Domesticated phytoliths are usually much larger than their wild ancestors. Pollen grains, much like phytoliths, are durable and reliable sources that last thousands of years. Soil samples are often collected and tested in a laboratory by going through several chemical baths to separate it from clays and other organic materials.

Fifty-four samples of sediments were studied in the various sediment layers of stratigraphy from Huaca Prieta and Paredones. Sediment samples were found on a blade made from andesite where phytoliths and starch grains were recovered. The spread-out maize remains in the stratigraphy is evidence for the low-frequency of

maize. A reason for the low frequencies could mean that phytoliths were absent on some cobs of maize due to the humidity and high water table produced by the Pacific Ocean, or larvae eating the maize (Moore 2014)[1]. One sample was taken from the teeth of a human burial, dated 4500 BP, but it does not support evidence for the adoption of maize (Dillehay et al. 2012)[2]. There was a husk fragment near the site of Huaca Prieta and Paredones called Unit 22 that was dated 6775 - 6504 BP. The date is coeval with the earliest dates of maize macrofossil; these are cobs found at Guila Naquitz, Mexico, dated 6200 BP in accord with starch grains and maize phytoliths found in central Panama at ~7600 BP and also maize phytoliths in southwest Ecuador ~7000 BP[1]. Some of the dates that were produced were contaminated by clumps of phytoliths stuck together, or the absence of phytoliths on cobs (Moore 2014)[1].

Comparison of Maize

The ancient Peruvian maize races differ from the maize found at Guila Naquitz, Mexico. The ancient popcorn maize found at Huaca Prieta and Paredones is known as the Proto-Confite Morocho. It is no larger than 6cm long, and has eight rows of kernels with twelve kernels per row, with navicular cupules. Confite Chavinense is another ancient maize found at the site and is not so different from Proto-Confite Morocho, other than slightly larger floury kernels (see Fig. 3). This suggests that maize went through morphological evolution upon the migration from Mexico into South America. The Peruvian maize has no indurated and extended glumes, although it does have haired spikelets, double the number of rows, and is slightly longer and are polystichous. Ancient cultivators may have selected these characteristics to yield more seeds and make kernels easier to remove to convert into food (Moore 2014). Peruvian maize also

shows no traits of teosinte, unlike its Mexican maize counterpart which is heavily influenced by teosinte.

Social Complexity

The changing climate of the late Pleistocene led to more abundant resources on land and the coast of South America, which maritime hunter and gatherers exploited. Due to the rich marine ecosystem and small garden cultivation being practiced at Huaca Prieta, Paredones and other sites located on the Pacific Coast of South America, these sedentary societies often produced tools and technology, such as stone blades, cotton for textiles, fishnets, bottle gourds as containers, burial chambers, mound construction, and a mixed economy to thrive in their environment (Piperno 2009).

What makes Huaca Prieta and Paredones so special is that there is no antecedent in Andean archaeology. The complexity of Huaca Prieta and Paredones is seen through their mound building, room structures, the sunken circular court held up by retention walls, and berms within the mound, suggesting site planning like other Peruvian coastal sites like Sechin Bajo and Aspero (Piperno 2009). This indicates a large task force was needed to construct these features at Huaca Prieta. Some archaeologists believe that some sort of fermented maize drink called “chicha” was given to the large labor force in return for corvée labor, although no evidence of chicha residue has been found in bottle gourds or storage containers (Moore 2014).

The mound at Huaca Prieta was also used for funerary purposes. A large number of bodies were found within the mound, along with offerings. Archaeologists also think that the mound was used for feasting activities that are tied with funerary rituals. Before the addition of burial chambers, ramps and room structures were built during Phases IV and

V, and resemble other sites along the coast. The archaeological record recovered from Huaca Prieta and Paredones, dating to the early and middle Holocene period, reflects how diverse the coastal sites of South America were. Sites in southwestern Ecuador were a mixed economy of farming and foraging. Sites in the Andes of Peru and Bolivia to northern Chile and Argentina practiced camelid husbandry, and high altitude crops in the area date to 6000 BP (Piperno 2009). The sites along the Pacific Coast of South America display highly complex societies that eventually became sedentary with the practice of small-scale cultivation to supplement maritime resources.

Summary

The macrobotanical and microbotanical remains of maize found at the site of Huaca Prieta and Paredones are some of the earliest dated in South America. The dates are coeval with Guila Naquitz, Mexico, and give clues to the initial dispersal of maize into Central and South America. Although the maize from Mexico is different from the Peruvian races, it indicates that maize went through morphological evolution on the journey towards South America. Throughout the millennia, ancient cultivators chose certain traits from maize and saved seeds to keep the traits that were desirable (artificial selection). Over long periods of time, seeds adapted to the local environment. The maize remains from Huaca Prieta and Paredones show no sign of teosinte traits. The maize remains found in the stratigraphic layers at Huaca Prieta and Paredones suggests that maize was not a staple crop in their subsistence strategy.

The people of Huaca Prieta and Paredones had complex technology making stone tools, cotton twine for fishnets, along with bottle gourds as containers and floats for

fishing, reed mats and basketry. Not only did they have craft production, but they also built several mounds and structures. The largest mound at Huaca Prieta was deliberately built over ~3000-year period, which suggests site planning. The mound was gradually becoming larger as the inhabitants added more layers. The people began to build stone-walled rooms and ramps on the side of the mounds. The site also had a sunken circular court, most likely used for special religious purposes.

Conclusion

Although maize was found throughout the coast of Peru and Ecuador societies of South America, the inhabitants did not adopt agriculture during this development. However, agriculture was merely an integration of an already established subsistence strategy of maritime hunters and gatherers that practiced small-scale cultivation of domestic and wild plants. This suggests that the inhabitants were socially complex before relying on full-scale agriculture and ceramics. The two main races of maize found at Huaca Prieta and Paredones indicate that maize went through racial diversification by human intervention, although it was not a staple crop during the pre-ceramic to early-ceramic periods. The evidence for mound building suggests that the inhabitants of the Pacific Coast of South America had planned the modification of land. The recovered material remains at Huaca Prieta, Paredones and other sites on the Pacific Coast of South America (stone tools, fishnets, shells, fish scales and cultigens such as bottle gourds, chili peppers and even maize) suggest that the inhabitants were socially complex with technology and craft production. Human burials were discovered in many sites along the coast of Peru that were similar to the burials

found at Huaca Prieta. Often, offerings were placed with the dead, indicating social differentiation. More research in the future is required to shed light on the social complexity, environmental, and technological trajectories of the initial dispersion and development of maize from Mexico to South America.

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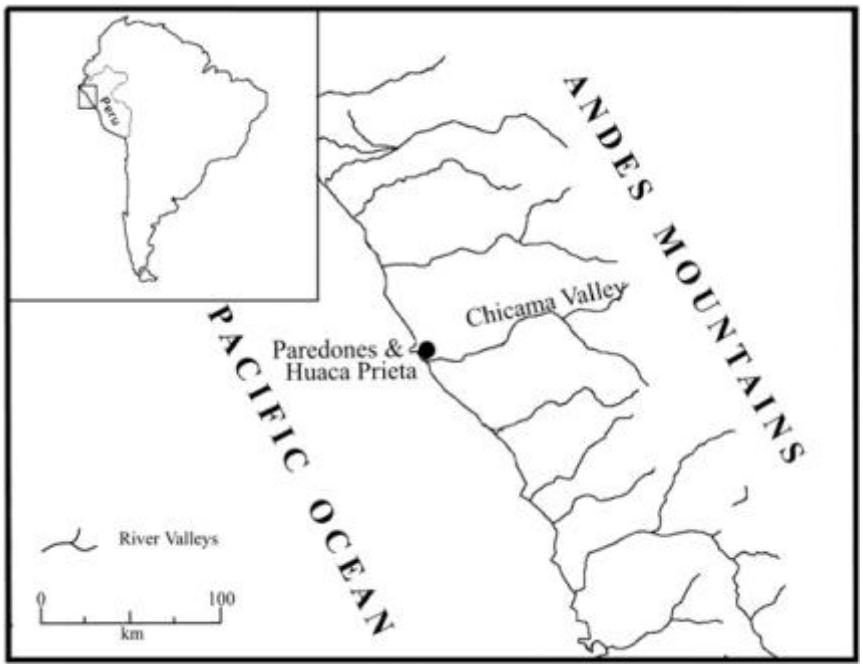

Fig. 1. Location map of Paredones and Huaca Prieta, Peru (Reproduced from Dillehay et al. 2012. Fig.1 p.1756)

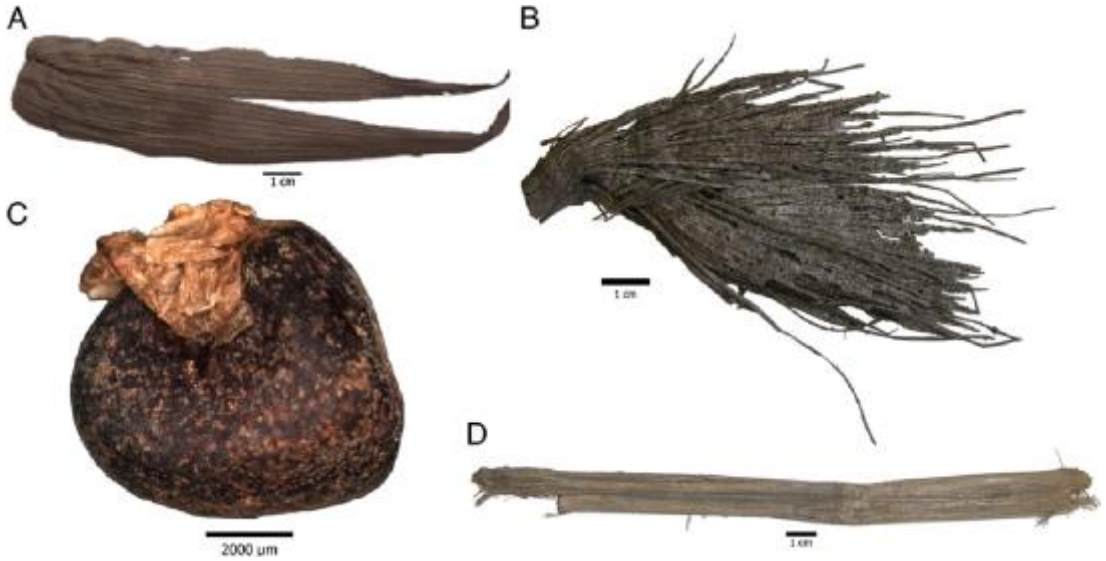

Fig. 2. Various preceramic maize elements from the Paredones site. (A) Husk with high venation index. (B) Tassel showing no condensation, unlike tassels from most Mexican maize. (C) Popcorn grain. (D) Stalk internode from a slender plant, probably no taller than ~1.5 m (Reproduced from Dillehay et al. 2012. Fig.2 p.1758)

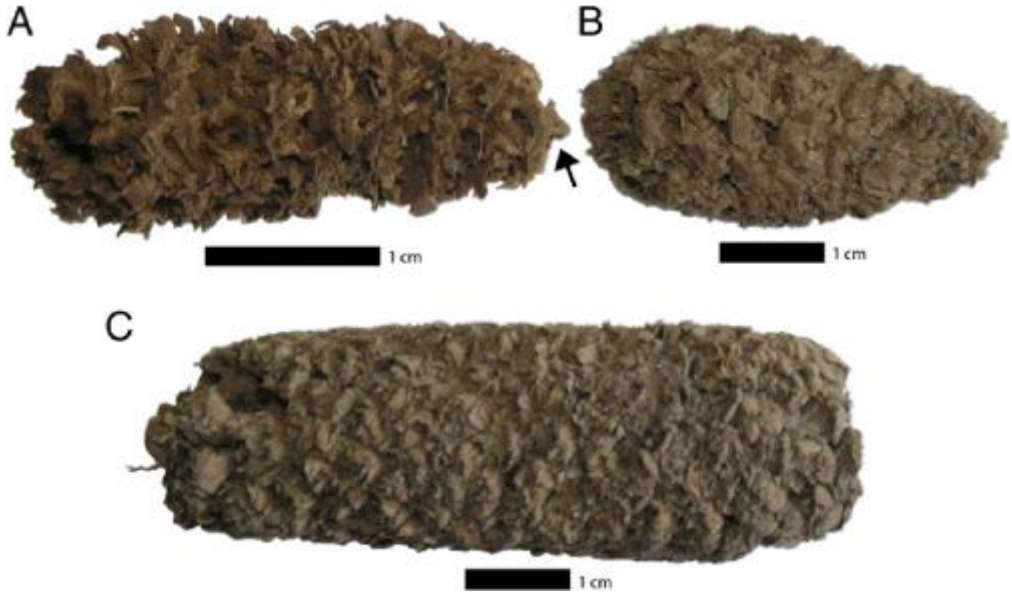

Fig. 3. Races of preceramic maize cobs from Paredones and Huaca Prieta. (A) Proto-Confite Morocho cob with large soft glumes; the extreme lower right tip of the cob shows the remainder of a partially charred shank fragment (arrow), a portion of which with its attached husk fragment was removed and dated to 6775–6504 BP.
(B) Confite Chavinense cob exhibiting fasciation and cupules underlying very small kernels. (C) Proto-Alazan cob (Reproduced from Dillehay et al. 2012. Fig.3 p. 1758)

The Chernobyl Nuclear Power Plant: Illness, Politics, and Society

By: Bobbie Benavidez

Introduction

The modern world became acquainted with nuclear activity in the past few decades due to advancements in military weaponry and technology. However, no one could have anticipated the devastating event that occurred on April 26th, 1986. The once thriving city of Chernobyl, Ukraine, was left in ruins after a nuclear power plant exploded, resulting in thousands of deaths and illnesses due to pollutants released into the surrounding atmosphere. According to Ron Adams (1996), a test was conducted to prove the nuclear reactor had sufficient energy to cool water during an emergency shutdown while the generators were inoperable (par. 4). However, miscalculations and lack of rigid protocol guidelines appear to be the underlying cause of the explosion. Petryna argues in the monograph *Life Exposed: Biological Citizens after Chernobyl*, that "Chernobyl was arguably history's worst peacetime nuclear disaster" (xxii). This provides insight into the destruction that changed countless lives. All over the world, studies continue to be conducted on the Chernobyl explosion. However, records following the incident tend to be ambiguous, as skeptics argue that the Soviet Union attempted to conceal the truth. For this reason, the nuclear blast continues to be relevant today. Although the Soviet Union claims they took initiatives to ensure the wellbeing of citizens affected by the Chernobyl power plant explosion, the misinformation released to the general public, and lack of healthcare programs proves

this was not the case. The government failed to appropriately respond during a time of crisis, and individuals in the Northern hemisphere continue to suffer the significant health effects today.

In addition to the errors leading up to the nuclear reactor explosion, the cleanup process only worsened the problem. In an attempt to diminish the pollution after the disaster, the initial response helicopter dropped a combination of sediments over the nuclear reactor, which actually increased temperatures and further spread the radioactive debris over a large portion of the Northern Hemisphere (Petryna 2003, 1). Chernobyl was the world's first nuclear accident, and I t became clear there were no preparations made for an emergency. Granted, this was a time when nuclear developments were not fully understood. Furthermore, natural causes such as irregular rainfall and wind patterns only further spread radioactive materials throughout several countries, extending as far as Africa and the U.S. (Hatch et al. 2005, 56). As a result, millions of people were now exposed to different levels of radiation. In other countries the damage was reversible; however, Ukraine would never be the same.

The Soviet Union had "distributed nonradioactive iodine pills within the first week of the disaster," and they maintained that the situation was in their control (Petryna 2013, 2). Yet, General Secretary Mikhail Gorbachev notified Ukraine eighteen days after the incident occurred, a time frame when radiation levels were astronomical (1). The hesitation and delay in informing citizens cost many lives due to high radiation exposure. Because this was the time when the Soviet Union government controlled what people knew, citizens were unaware of how serious the situation really was.

Methods

I selected a variety of sources because it is important to incorporate several different perspectives. Furthermore, because there is no definite statistical evidence, I looked for scientific journals written by health professionals. There is variability between individuals experiencing negative health consequences and their distance from the initial explosion; therefore, sources from all over the world would be important to include in the analysis. The millions of individuals impacted by the disaster were organized into corresponding categories: the “liquidators” (or “clean-up crew”), the individuals that were evacuated or relocated, and the individuals that continued to live in Belarus, Russia or Ukraine (Cardis et al. 2006, 129). I will address health effects and government responses in each of these categories. The Liquidators were the first responders to the incident, and their goal was to isolate the explosion as quickly as possible. Due to the lack of scientific studies on the health consequences of radiation, I relied on the analysis conducted by small sample sizes. It is known that thousands of people were relocated, resulting in economic decline. High wages were an incentive for most of the Liquidators to take on the task (Petryna 2013, 2). Unfortunately, the health risk would end up costing them more than the money was worth. Government pressure to clean up the contaminated area as quickly as possible contradicted the time-consuming safety regulations required working in the zone. This same negligence is what caused the disaster in the first place. Workers were supposed to be under constant surveillance, equipped with protective gear, and rotated in and out frequently (Petryna 2013, xvii). None of these regulations were followed consistently, and the government paid no attention. According to the data I found, the distribution of

resources to ensure proper handling of the contaminated area were not a priority over making the situation disappear.

In an attempt to remedy the situation between the state and ill citizens, they categorized individuals by their radiation levels. The more affected you were by the radiation, the more monetary help you would receive. However, because the radiation was only shown through physical symptoms, people began to exploit their bodies. The social implications were disastrous, and Petryna introduces the idea of a “biological citizen” (6). Self-identification had changed in Ukraine, and how an individual perceived their inner self would alter society. Thus, the label of a “sufferer” or “disabled” person resulting from radiation exposure emerged, and determined the compensation one would be given for their medical issues (xvii). Suffering is associated with psychological issues, which would be regarded as the responsibility of the individual. On the other hand, disabilities were seen as a physiological occurrence, and there was more financial aid given. If neither of these were an option for someone, illnesses would be dismissed so they can work. A method of categorization came in the form of Dosimetric passports, which quantified radiation levels in an individual, and–depending on the dosage-granted access to free public services, paid expenses, and other forms of government aid (Petryna 2013, 83). Society changed; class structure was no longer based on opportunity, education, or career choice, but by their biology. Furthermore, many people were turned away because they were told they did not meet the requirements for compensation; essentially, it was just a matter of limited resources (192). To be rejected from government funding and denied the ability to work to support a family would destroy anyone’s spirit. As argued by Olga Kuchinskaya (2016), the

infrastructures had completely collapsed, and the individuals that either relocated or stayed in the danger zone felt as if they had no options (34). The government could not control the situation, and eventually lost the trust of the people. Living in a radiation zone became a norm for the people of Ukraine; this was something they had little understanding of. Feelings of betrayal towards the government came, as expected, and "by blaming the Soviet system in a public sphere, ontological insecurity was transformed into a cultural trauma" (Zhukova, 2016). Citizens were somehow able to cope with their shattered lives by turning their attention towards their manipulative government.

The collaboration of this information supports my thesis and provides additional information. Sociologists, anthropologists, doctors, researchers and victims all experienced different realities as to what happened in Chernobyl. Therefore, I felt it was imperative to incorporate all these key ideas into one paper that would develop my opinion.

Case Study

The monograph *Life Exposed: Biological Citizens after Chernobyl* written by Medical Anthropologist Adriana Petryna, encompassed several points I would like to make. Petryna writes a compelling story, and combines several aspects of anthropology to create an ethnography that is both descriptive and informative. She advocates for continued research in Chernobyl, emphasizing the medical elements. The novel is clear and easy to follow, which is crucial to constructing a well-organized paper. Her methods of research include open-ended interviews and direct observations that can be visualized through detailed accounts. The ethnography justifies the need to recognize

the events that took place in Ukraine, as people continue to suffer and live in the aftermath decades later. Petryna dedicated years of work to gather the scattered bits and pieces of information regarding the Chernobyl explosion into her monograph. Petryna wrote extensively about the importance of trust in a government during a time of a national crisis, and about the consequences when that trust is betrayed. She is passionate about providing factual information to the best of her abilities, and it is reflected in her work.. She argues that “you do not need this book to tell you how people took all sorts of drastic measures, in the days and months after the disaster, to mitigate the consequences” (xv). Although she tries to be as neutral as possible while conducting fieldwork, it is undeniable that Petryna is a woman for the people. For this reason, I was drawn to learn more about the nuclear power plant explosion, and the effects that the government had on the situation. Furthermore, Petryna questions other sources and accounts of the incident. Many report that there is insufficient evidence to formulate a conclusion, which I had also read in several articles while researching this topic. She states that “such invocations can be taken as indexes to how far off the scientific community is from understanding and predicting the health consequences of Chernobyl” (xv). Petryna does an excellent job of bringing forth misinformation regarding the disaster and the neglect of research and efforts in understanding the side effects.

Findings

Although many of the surrounding countries detected levels of radiation exposure to some degree, studies I will focus on generalize findings from Russia, Ukraine, and Belarus. The correlation between radiation exposure and health problems highlights the

importance of studying the amount of radiation in the atmosphere. Many chemicals and radioactive particles were spread during those initial days of the explosion. The two most recognized particles were Iodine-131 and Caesium-137 (Bennett et al. 2006, 6). Research regarding the aftermath of the explosion speculates that a higher concentration of radioactive debris is largely responsible for cancers, illnesses, and chronic diseases (Hatch et al., 2005). Studies show that among on-site workers, a majority had suffered from radiation sickness, which causes tissue damage. Additionally, “the rate of leukemia had approximately doubled among those who first worked in 1986” (58). Furthermore, it does not account for the long-term cancers that emerged later in life. Yablokov (2009) states that “radioactive contamination [is] the leading cause of morbidity and death for individuals who worked as liquidators” (58). It is difficult to determine a cause of death because of the varying degrees in each individual’s health, age, diet, and changes in environment. Therefore, statistical evidence is often inconclusive or altogether absent. Most of the liquidators suffered problems from external radiation, or Caesium-137, although instances of Iodine-131 and thyroid issues occurred as well (Yablokov et al., 2009). Other widespread consequences of high radiation doses were incurable, and changed everyday life for Ukrainians. Symptoms included brain damage, blood disorders and physical disabilities (Yablokov et al., 2009). Over time, general health of the exposed seemed to decline. If the cleanup process did not contribute to rising death tolls, workers were often diagnosed with short-term or lifelong illnesses.

Additionally, those who were relocated or evacuated after the explosion could not escape the aftermath of radiation exposure. People of all ages suffered, but children in

Chernobyl had the highest rates of thyroid cancer because their organs were still developing. Data suggests that young adults born in the years directly after the fallout demonstrated an increasing rate of thyroid cancer that continues to rise today (Tronko et al.,1999). A determining factor in the growing number of cases is the cancer emerging over the lifespan of a child to an adult. Petryna (2013) had visited a neonatal intensive care unit in Ukraine and discovered “life was obstructed, and the forms of that obstruction lay bare” (8). She refers to the overwhelming evidence of deformities in the babies of Chernobyl survivors, describing the walk through the unit and witnessing infants with extra fingers, missing organs, and guts hanging outside of the body (8). The qualitative data records the firsthand account of long-term side effects in Chernobyl victims.

Furthermore, children also experienced unusual levels of Iodine-131 due to the contaminated water and food products they consumed, specifically cow’s milk (Drodz et al., 2015). The surrounding areas were contaminated with radiation, and it would be almost impossible to clean the several countries that were affected. According to Kuchinskaya (2016), food grown in contaminated areas was offered as free lunch to children (32). Although studies show ingesting contaminated food sources are the primary cause of thyroid cancer in children, uninformed parents encouraged their children to eat the free meals for economic purposes. Again, we see more reasons people can justify their resentment towards the government. At this point in time, it is well-known that poverty in Ukraine has made families desperate, and the government exploits this even today. The Chernobyl explosion did more than damage the physical aspects of human life; it damaged the future of children.

Relevance and suggested further research

The Chernobyl power plant explosion is as important today as it was in 1986. As argued by Conn Hallinan (2016), “after disappearing from the radar for several decades, nukes are back, and the decision to modernize the U.S. arsenal will almost certainly kick off a nuclear arms race with Russia and China” (par. 33). Within recent months, increasing tension between the U.S. and North Korea has shown this theory has been set into motion. The significance is that the likelihood of another accident like Chernobyl-or an intentional chemical explosion-could happen on a larger scale. Petryna (2013) argued this, and brought attention to another attempt by government officials to downplay a nuclear disaster: the Fukushima Daichii plant, which exploded twenty-five years after Chernobyl (xxii). It is evident that the incident cannot be ignored and can happen in any country experimenting with nuclear technology. In the world we live in today, an incident like Chernobyl will always be relevant, because the chain of events it had triggered. It was more than a nuclear accident; it was the decline of a nation, and a reason for mass migration. More importantly, the response of the Soviet Union during this time period led to poverty throughout Ukraine, Belarus and Russia; some argue it was the reason for the fall of the government. The Chernobyl incident should have been a main topic of study to every researcher, data analyst, and social scientist because of the global consequences (xx). However, it was disregarded as an isolated incident, and many people died, taking their stories with them.

Chernobyl was a global crisis, and in this interdependent world, we are all affected. On a quantitative level, radioactive debris was found in several continents around the world; therefore the continued research of radiation and its effects are

important to take into consideration. There should be an initiative to gather as much information as possible while it is still available. The children growing up in contamination zones are only beginning to show the symptoms of how one incident can affect generations of individuals. The food supply is difficult to recover; detecting the levels of radioactive materials change as often as the weather. For this reason, a measure to monitor the food supply should be a priority. Lastly, there should be incentives for individuals to be monitored regularly for radiation symptoms. This type of health care program would encourage people to participate, and would possibly lead to studies with accurate data. The Chernobyl nuclear power plant explosion resulted in millions of people suffering from health issues, and ultimately ended in a broken government. The importance of educating individuals about their health and giving them the option to make a difference in their everyday lives is crucial.

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Overcoming Adversity: Refugee Resettlement in the United States

By: Serina Quintero

Abstract

Refugee Resettlement is a global and current affair. Although refugee resettlement is a global concern, it entails an experience that most find unfamiliar. The purpose of the research was to analyze the logistics of refugee resettlement into the United States, more importantly, to further comprehend the adversity faced by refugees during and after their resettlement. The research draws upon ethnographic works and data obtained from the U.S. government and organizations such as the UNHCR, which both play an important role in the process of resettlement for refugees. This research is focused on the experience of refugee populations from Africa, such as the Nuer, as well as areas in South Sudan and the Somali Bantu, who have resettled in the United States. Due to active political conflict refugees are forced to leave their families, land, and familiarity of home before resettling into the U.S. Although the U.S. government, UNHCR and other organizations aid in the resettlement of refugees, refugees still face much economic, social, and cultural adversity as readjustments are made. The results of the study highlight the cultural differences between refugee populations and provide an increased understanding of the adverse experiences refugees face when forced to resettle to an unknown land.

Introduction

According to the United Nations Refugee Agency (UNHCR), at of the end of 2015, there was an estimated 21.3 million refugees worldwide. Refugees, which make up only a portion of the globally displaced population, have continued to increase within the past years due to conflicts in various countries around the world including Syria, South Sudan, Afghanistan, Somalia, Yemen, Burundi, Ukraine, Central African Republic, and countries in Central America (UNHCR). As stated by the United States Refugee Processing Center, a refugee is anyone who "is unable or unwilling to return [to their country] … [due to] well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion" (Bureau of Population, Refugees and Migration). Therefore, it is evident that the essence of the refugee experience revolves around hardship and trials. The United States has aided in the refugee crisis by resettling a significant amount of refugees within the past year and according to the Bureau of Population, Migration and Refugee, the U.S. plans to continue to incorporate 110,000 more refugees to the United States in the 2017 fiscal year. Although the U.S. government, UNHCR and other organizations in the U.S. seek to aid in the resettlement process of refugees, refugees still face a great deal of adversity regarding the economic, social and cultural adjustments that they must make upon their resettlement into the United States.

Methods

Jon D. Holtzman's ethnographic work,which focused on Nuer refugees who have resettled in the U.S. state of Minnesota, aided my research in understanding the adversarial process and experience refugees must confront when resettling in the

United States. The supporting sources in this research paper focused on refugee populations from Africa and the Middle East such as the Sudanese Nuer, Somali Bantu and Iraqis. The UNHCR website was an important and prominent source in my research since they have overwhelming authority over the status and placement of refugees coming into the United States. Therefore, the statistical data in the research comes from the UNHCR website along with U.S government websites which both aided in understanding the current context of refugee admission in the United States and the legal process of resettlement.

Case Study

The monograph, *Nuer Journeys Nuer lives; Sudanese Refugees in Minnesota,* by Jon D. Holtzman voices the Nuer refugees' experience in transitioning from Africa to America. Due to political conflict and civil war in Sudan, which, fueled by deep historical, cultural and religious differences between the North and South, escalated in the 1980's. As a result, many Sudanese and Nuer were displaced and forced to relocate to other regions and various refugee camps in Africa, before finally getting a chance to resettle in the United States in the early and mid-90s (Holtzman 2014). This ethnographic work done by Anthropologist Holtzman was important to my research because it provided qualitative data and demonstrated the evident differences between Nuer and American culture while bringing to light many of the challenges that these Nuer refugees have had to face regarding their resettlement and adaptation to the political, cultural and economic landscape of American society.

Findings

Refugees have faced a great deal of adversity before getting a chance to resettle in the United States. Although the U.S. government and organizations aid in the resettlement process, there are still evident obstacles that refugees must overcome. Some of these obstacles include adjusting to the cultural environment, becoming economically self-sufficient, and becoming socially accustomed and integrated. Often times a refugee's' decision to seek refuge is brought about by political or economic instability that may include: the threat of war, famine, discrimination, or fear of safety in their way of life, because of their religious or political affiliations. Many of the Nuer refugees from South Sudan who have resettled into the United States came from refugee camps in other countries. These countries often include Ethiopia and Kenya because of their displacement from Sudan, which was caused by long term political turmoil and civil war. It was through these refugee camps that the Nuer heard about opportunities for resettlement into the United States and elsewhere (Holtzman 2015, 9). Before resettling, many Nuers faced great strife in Sudan brought about by long-held religious and political differences between the Islamic government controlled North, and the Christian and Indigenous South. Conflict in Sudan escalated in the 1980s when rebel groups, such as the Sudanese People Liberation Army, gained military control over certain regions (Holtzman 2015,7,8). The results of ongoing civil war are devastating for the any country's' population because it creates long term instability, violence, unrest and displacement. One Nuer man who has resettled into the U.S. recalls that his family was forced to leave their home due to fear of government forces.

He explains that his father was the chief of a village and often aided rebel forces with food and resources. However, when word about his father's aid for rebel forces reached the Sudanese government, the government sent soldiers after his father which created chaos within the village and forced his family to seek refuge at a camp in Ethiopia (Holtzman 2015, 13). His father, who had decided to leave the camp and eventually go back to the village, was found again by government forces. Once arrested the father faced negligence and deprivation which ultimately led to his death (Holtzman 2015, 14). As Holtzman states when analyzing the conflict in Sudan, "even if you seek to be neutral one side will assume that your loyalty lies with whichever forces are dominant in your area" (Holtzman 2015,17). This is the stark reality of the experience faced by not only Sudanese refugees but refugees from around the world who have lost family, land, security and their livelihood due to political instability. When referring to the southern Sudanese people, Holtzman states that:

"It is the southerners who have suffered most directly. It is their homes that have become the battlefields, their fields that have been burned, and their herds which have been looted to feed their opposing armies, their relatively quiet way of life … has been irrevocably, torn apart by civil war" (Holtzman 2015, 16).

Political conflicts between government forces and militia groups within a country cause harm to the existing population through the initiation of violence against those who are seen as being part of the "enemy group". They are then subject to killings, rape, torture, famine and displacement. Therefore, the refugees have no choice and seek to avoid conflict; such is found in refugee camps, that often provide the only available option for many people who seek protection for their families. The devastating

results of war is felt by the refugee population worldwide where violence, famine, and displacement is a common experience. Hardship is a continuous way of life and for many refugees the process of resettlement into another country is another lengthy, stressful, and uncertain experience.

Every year the United States takes in a marginalized amount of refugees. The process of gaining permission for resettlement for refugees includes the collaboration of many government departments. It is a long process in which refugee applicants must go through multiple extensive interviews, background checks, and medical examinations. According to the U.S. Department of State Bureau of Population, Refugees and Migration, the process of resettlement can take one to two years. The process begins when the UNHCR, other non-governmental organizations, or a U.S Embassy refers an individual to the U.S. Refugee Admission Program. Refugees must first be granted the title “refugee” which is gained through a series of interviews. Presence of inconsistencies in interview answers can keep refugees from gaining the status which essentially destroys any hope of resettlement (Holtzman 2015, 26). The Resettlement Support Center then prepares a case for the refugee by collecting information, setting up interviews and security checks for each refugee. The information then is presented to the U.S. Department of Homeland Security who then sets up its own interviews with the refugee. Permission for resettlement is then determined by the United States Citizenship and Immigration Services; once permission for resettlement is obtained refugees must start their process of medical examinations. Medical exams are a crucial part of the resettlement eligibility and can be used to keep refugees from resettlement. Infections such as AIDS and H.I.V. are no longer used as a category of ineligibility, but

have been used in the past to keep refugees from resettling in the United States. One Nuer Woman reported that her husband was not allowed admission because of his contraction of the AIDs virus and therefore was not allowed to resettle in the United States with her and their children (Holtzman 2015, 27).

Upon arrival to the United States, refugees get assistance from the U.S. government in which the U.S. State Department assigns refugees to one of the nine National Resettlement Agencies. They are then assigned a local Refugee Resettlement Organization (Darrow 2015,82). According to the Bureau of Population, Refugee and Immigration, agencies participating in the U.S. Reception and Placement Program are responsible for providing housing, furnishing, food, clothes, orientation; as well as assistance with access to social, medical and employment services during the first 30-90 days. Refugees are "granted permanent visas with the freedom to move around in the U.S., obtain employment legally, and receive social assistance such as Medicare and social security" (Savage 2014,29). The Office of Refugee Resettlement Program within the Department of Health and Human Services provides aid in cash and medical assistance for refugees for up to 8 months after their arrival, while the Refugee Social Services program distributes funds to assist refugees who have been in the U.S for less than 60 months (Lepore 2015, 12). The purpose of these refugee resettlement organizations is to help refugees become economically self-sufficient and acquainted with the tasks of everyday life within months of their arrival. The task of becoming economically self-sufficient while becoming socially and culturally adjusted is a hard task. The workers who aid refugees and the refugees themselves face a perplexing tax. The refugees- who may lack English language proficiency, education, and are

sometimes refused credential transfer in the United States- are unfamiliar with the cultural and social landscape of American society which makes the transition more difficult.

One of the essential needs of refugees is having an affordable place to live. Obtaining an affordable house is no easy task for workers and not always the most comfortable experience for resettled refugees. Refugee Resettlement organizations are the ones that implement the Reception and Placement Program. This means it is the organization staff's job to find an affordable and fit house for each refugee family who is to resettle. A minimum of one month's rent is to be paid for the refugee client by the Refugee Resettlement organization (Darrow 2015,105). Since most refugees do not have the experience or qualifications to acquire a well-paid job, caseworkers face a certain struggle when attempting to find a home that will be affordable and sustainable in the long run. The housing staffs job consists of finding an affordable place often through well-maintained connections with various landlords. Of course there are problems when refugees have limited economic stability. A common theme found within housing workers, through observation and interviews, was that workers are forced to find cheap houses for refugees, where the homes often contain problems like leaks, bed bug infestations and others. Such conditions provide an unfavorable experience for the arriving refugee (Darrow 2015,112).

The purpose of the resettlement programs is to help refugees become economically stable and decrease their reliance on governmental aid. Upon arrival to the United States refugees do not automatically become citizens, instead they maintain refugee status for 12 months, are given work permits, and are entitled to services

dedicated to helping them achieve economic stability (U.S. department of Population, Refugee and Migration; Darrow 2015,78). Programs such as the Early Employment Program funds local agencies and their employment specialists, who help refugees through various activities such as practice job applications, resume help and job related field trips (Darrow 2015,83). Although agencies and organizations seek to help refugees achieve economic self-sufficiency, many refugees continue to face economic struggles, like finding and maintaining a job because of the lack of educational opportunities in their country or at refugee camps which then affects their ability to find a decent paying jobs after their resettlement. Case workers struggle to find employment for refugees who often have limited experience, education, and limited language proficiency. It was observed that caseworkers were forced to give refugee clients low paying, unfavorable labor jobs. One caseworker explains his frustration with the long process associated with finding refugees employment in companies that are known to provide horrible pay and treatment but are given to refugees because they do not require much English proficiency. The caseworker states "One guy, he asked to be placed there [Industrial Cleaners, Inc.] because he had friends there. I was like, ‘are you sure?’ So he went, he got hired, and he liked it! One night he gets locked in [...] when he was cleaning and he gets freaked out and pulled and pushed and kicked and broke the door, and he was fired. I mean they will fire anyone. And, it takes six weeks to actually get to work between paperwork, interviews, badging and security" (Darrow 2015,103).

Even refugees who have been educated, have limited opportunities for growth and employment. These are impeded because their credentials are not always recognized here in the U.S. in addition the cost of paying for education is high. One Iraqi

man explained that he had worked as a veterinarian in his country but was not licensed in the U.S, so he was unable to work until he got licensed. He stated " I need first practice and pass the test it cost more than 30,000 dollars and no one can help me" (Mikal 2015,1324). An employment case worker explains that "Somali women are really hard to place – single mothers, low English, and a lot of employers are uncomfortable with their dress and hijab, unfortunately" (104). Therefore, low English proficiency, education, lack of social or kinship support and different cultural customs have all served as a basis for the increased difficulty faced by refugees who seek to obtain or maintain a job that would allow them to become economically self-sufficient. Language proficiency is a big stress for arriving refugees and plays a crucial role not only in employment but also in a refugee's ability to perform the functions of everyday life. Five Sudanese woman who were interviewed and asked about their experience with the health care in the U.S. agreed that although they were content with the treatment and care received from medical professionals, they also showed a uniform frustration for scheduling appointments, where it was evident that low language proficiency increased the difficulty of interaction between the patients and the Doctor (Thomson 2015).

While finding employment and housing are some of the first essentials transitions that refugees must make, there are also social and cultural adjustments that must be made by refugees who seek to integrate into the American society. Anthropologist Chet Savage, who has done research on refugees from Iraq, Rwanda, Democratic Republic of the Congo, Burma, and Burundi who have resettled into the U.S, states that "while the process of resettlement may be completed at this point, the process of acculturation is just the beginning" (Savage 2014, 20). For refugee populations such as the

Sudanese Nuer, arrival to the United States required major cultural adjustments. One of the aspects of American culture that contrasts greatly from Nuer culture is America's dependence on transportation, cash, and time. Unlike the American economic landscape which is dependent on the cash economy, Nuer villages are primarily based on a subsistence economy which relies on cultivation and the breeding and raising of farm animals (Holtzman 2014, 2,4). Nuer men who had taken up jobs when they lived in Sudan used cash to purchase non-essentials and luxury items; therefore, "[wage labor] work was not essential to their survival"(Holtzman 2015,57). In contrast, in America, essential items cost money, so having a steady income is necessary to pay for monthly expenses. The Nuer, when speaking about Africa, state that "It is very cheap to live there" and "there is nothing like rent" (56). Earning a continuous income was something new for the Nuer refugees and required them to make a great shift in the way that they lived and maintained themselves economically. Along with the Nuer, Somali Bantu expressed the same discontent on how cash dependent life is in America. This explains that when family from abroad asks for money they assume that all Americans have much more money but do not understand that everything is also more expensive. Another contrast between American and Nuer society is that in America, day to day life revolves around time. Holtzman states that "In Sudan, as in much of Africa and other rural areas around the world, time is structured in flexible ways, governed not by rigid schedules but by the time requirements of particular tasks - the care of livestock, the cultivation of land, and the need to hold meeting to discuss community issues" (Holzman 2015,54). The Nuer population is primarily dependant on subsistence agriculture, and as a result, life did not revolve around the concept of time. It is a stark

contrast to the way individuals in America schedules, experiences and views each day. Another crucial adaptation that the Nuer faced was becoming dependent on transportation. Many Nuers have found that transportation is essential for everyday life, yet it has become a significant barrier. Owning a car costs a large sum of money, which is another expense that many have a hard time producing. In turn, not owning a car can impede one's ability to get to work on time and work long late shifts; public transportation is unavailable at later times. One Nuer exclaims that before arriving to the United States his friends had told him what America was like. He recalls that they would tell him "You can get a good job, get a car man!" (Holtzman 2015,63). Another Nuer stated that "A car is a bad cow"(64) equating the importance of cars in America to the importance of cattle in Nuer villages while also implying that cars are often troublesome. Dependency on transportation, time, and money is part of the ordinary aspects of everyday life for most Americans; but for those who come from a culturally, socially, and economically different environments- such as the Sudanese Nuer- these aspects of society demand that some crucial adjustments be made in order for them to successfully integrate into American society. From the time that refugees become endangered and displaced, up until their resettlement into the United States, they must overcome many obstacles while adapting to the social, economic, and cultural landscape of their new home.

Conclusion

The results of the study not only highlights the cultural differences between refugee populations, they also provide an increased understanding of the experiences and adversity faced by those who have been displaced and forced to resettle in an

unknown land. Refugees who have been driven to move from their homeland must seek resettlement in other countries; a change that often involves learning to adjust to a new culture-which is why many anthropologists such as Jon D. Holtzman, Chet Savage, and others have taken interest in these individuals, and have sought to document and analyze the process of refugee resettlement. Refugees often face great tribulation before resettlement; this is usually the drive behind the decision to apply for asylum. However, the adversity does not end at time of resettlement. Upon resettlement refugees must make cultural, economic, and social adjustments. Families that are forced to leave members behind in exchange for the opportunity to resettle lack kin, and therefore they may not have much social support when they first arrive. An absence of education in refugee camps, or in their previous country, in addition to being denied the acceptance of their credentials, act as a hindrance for economic growth once resettled. In addition, cultural adjustments (being dependent on transportation, time and cash) may seem like universally common aspects of every society, but the reality is that it is not universal. Therefore, it is important for academics and non-academics alike to understand the experiential adversity refugees face when adjusting and resettling into the United States. Only well informed populations will be able to provide aid and create progressive change to the current refugee crisis in context to the extensive resettlement process in the United States.

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