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Ethics in a Jaded Market: The Myanmar Jade Trade and Its Externalities

By: Lawrence J. Ramirez

The ways in which cultures value rare and precious mineral commodities impart symbolic meanings that confer onto these types of stones a special elite status. For centuries, the Chinese imperial court has sought after jade, specifically the pure mineral jadeite that is mined in northern Myanmar. Because of its symbolic significance in Chinese culture, jade continues to be in high demand in China. Moreover, through the influence of globalization this demand has spread to many other cultures and countries. Hence, the financial benefits that accrue to those who control the jade mines are substantial. Because Myanmar lacks clear systems of legitimate property ownership and lags in implementing occupational safety policies, the negative externalities upon the land and the people are considerable. The jade trade influences human lives and their cultural systems in numerous ways. From the perspective of elite art or gem collectors, the aesthetic beauty and mineral rarity of the green stones is something to be admired. From the viewpoint of the impoverished miners, dealing with exploitation and hazardous working conditions, the rough stones hewn from the “Valley of Death” in Kachin State are symbols of suffering and exploitation. From the “Stone of Heaven” to the “Green Eyed Monster,” the value and meaning of jade is a contested subject.

In 2001, reporters Levy and Scott-Clark undertook a journey into the heartland of jade mining: Hpakant in Myanmar’s Kachin state. Their journey describes the poverty, illness, addiction, and crime that were found in this forlorn place. Among the miners, the jade mines were called the “Valley of Death” (Levy & Scott-Clark, 2001). This sorrowful description of the site holds true in more recent articles, such as Beech and Nang’s article for *Time* magazine in 2017. Because of conflicts over land rights, the old hostilities between the Myanmar state, governed by the Burmese ethnic majority, and the local society, consisting of independence-minded ethnic Kachin minorities, have been rekindled. The pressures of globalization and access to international markets have

created great incentives for those with connections to the Myanmar military and government, mainly ethnic Burmese, to gain access and control over the lucrative jade industry. In response to this intensified intrusion into Kachin territories, local resistance fighters in the Kachin Independence Army have undertaken greater hostilities against the state sanctioned actors and those who work for them. Caught in the middle of this struggle are the desperate people who live in the area and who are the primary workers of the mines.

Because the jade industry is so profitable, taking in an estimated \$31 billion in 2014 (Beech & Nang, 2017), both sides of the conflict are invested in gaining control over the mines. In the opinion of some of the miners, the money earned through the jade trade fuels the conflict directly by providing the wealth needed to wage armed conflicts. Though the conflict has intensified in recent years, the struggle to possess the jade of the Kachin Hills has been going on for centuries. It is this aspect of control and desire which has come to characterize the history of jade.

History of the “Stone of Heaven”

In Chinese history, jade has long had a symbolic spiritual significance. It is referred to as the “stone of heaven” and is believed to confer mystical qualities of health and immortality (McArthur, 2005). It is highly regarded in both the Taoist and Confucian traditions and associated with the Chinese emperor. The mystically preservative powers of jade were so highly regarded during the Zhou (c.770-256 BCE) and Han (206 BCE-220 CE) dynasties that funerary objects were crafted out of jade, including body plugs that would be placed into the bodily orifices of the deceased (McArthur, 2005). In these early Chinese examples, the jade used was nephrite, a variant of jade that has a wide variety of possible colors, which is found in western China.

During the Qing dynasty (1644-1911), the discovery of brilliant green jadeite in northern Myanmar led to a cultural obsession with Burmese jade. Specifically, during the reign of Emperor Qianlong (1736-1795), the Chinese empire undertook a series of costly military adventures to try to gain control over the Kachin Hills jade mines, which resulted in vast numbers of casualties for the Chinese forces (Levy and Scott-Clark 2001). The Burmese kings of the Konbaung dynasty, who had so readily thwarted Chinese imperialist ambitions, were also

in no position to control the jade mines. Instead, the jade was under the control of the Kachin people, who were generally isolationist and uninterested in trade with either the Burmese or the Chinese. Moreover, they were fearsome warriors who used the hillsides and forests to good effect in defending their lands. Thus, even when peace was brokered between the Chinese and Burmese courts, the Burmese rulers, such as King Bodawpaya (r. 1782-1819) were unable to reliably fulfill their obligations to send jade to the Chinese court (Levy and Scott-Clark 2001).

Under British rule the ability to maintain control over this rough land and among the independent Kachin people was tenuous. However, superior arms and technologies, combined with the various resources available to hegemonic powers, eventually brought the Kachin territory under an uncertain British control. For example, the British Empire was able to claim possession of the mines in 1887. However, the British taxes on the jade trade brought in only five rupees a year, while requiring a garrison of 400 soldiers to do so (Levy and Scott-Clark). Moreover, resistance from the Kachin people was continuous and fierce, especially during the monsoon season, when the British garrison was cut off from resources and reinforcements from southern Myanmar. The British found themselves spending more resources holding the territory than they were able to derive from such control. Rather than bringing wealth to the British, the earnings from the jade trade were flowing through the black market. Because of the rough environment and resistant population, the smuggling of jade into China or Thailand was beyond British control.

However, the emergence of a unified nation-state of Burma, following the colonial period and the hardships of World War II, finally imposed a legitimate and centralized state with power to control the newly established Kachin State. Yet, national unity fell apart quickly and the minority peoples, including the Kachin, turned against the military domination by the Burmese forces. As Kramer (2015) discusses, the military rule that was established in 1962 harshly curtailed minority rights. Moreover, as Pay (2017) points out, the laws that guide land rights and access to mineral trade and extraction are over 100 years old, reflecting the British system of exploiting their colonies on the periphery to benefit the home state at the core. Only during the contemporary

period of market liberalization is the legal system being reexamined. Even this process is fraught with problems, as the Burmese majority has been hesitant to relinquish its hold over the lucrative jade trade.

During Myanmar's period of global isolation in the late 20th century, severe sanctions created trade barriers that restricted access to Myanmar jadeite. However, as Overton (2008) discusses, black markets had access to jade through smuggling. Moreover, there were various ways in which the jade could be "laundered" to be sold within the global market. For example, working the Myanmar jade in China or Thailand allowed the gems to bypass international trade sanctions (Overton 2008). Given these decades in which the Myanmar jade trade was almost exclusively conducted through smuggling, it is now difficult to regain control over the various actors involved in the jade trade.

Producing Jade: "Blood Jade"

As access to Myanmar's mining areas is becoming less difficult, due to the state's desire to open its markets to foreign investors, more reports are coming out about terrible conditions at the mines. Landslides are a common hazard for miners within the "Valley of Death." In Pardieu's (2014) description of his hunt for rare "Jedi" spinels from Myanmar mines, one can feel the enthusiasm that elite gemologists and gem collectors are experiencing over the liberalization of Myanmar's mineral resources. Pardieu's article rhapsodizes over the treasures that can be found in Myanmar. Pardieu (2014) describes the land in a highly romanticized manner, writing, "Imagine a group of beautiful green valleys dominated by jungle-covered mountains, many of them topped by pagodas. The twin cities of Mogok and Kyatpyin and the surrounding villages are still mainly comprised of wooden houses, giving them a quiet, romantic aspect" (Pardieu 2014, 50). This serene vision of a bucolic land does not fit with the journalistic reports of suffering and exploitation offered by Beech and Nang (2017). Gem enthusiasts and collectors like Pardieu have their focus on the beauty of the stone and not on the pain that occurs in its production.

Moreover, opening mining rights to foreign investors may cause further social disruptions in Myanmar. For example, Maung (1994) reports on how opening Mandalay up to Chinese investment resulted in mass

displacement of the impoverished residents of the city. Myanmar had no governmental protections for the populations impacted by this policy and it still does not (Pay 2017, 119). Consequently, the populations of mining regions, like Hpakant or Mogok, may be subject to the same pressures of economic displacement that occurred in Mandalay in the early 1990s. Given how dire the economic situation is for the residents of these regions, further displacement and social disruption is a recipe for even greater mass suffering.

Furthermore, the displacements caused by the Sino-Burmese trade alliance took place in areas that were firmly controlled and pacified by the ruling regime. The population was thoroughly subjugated by the military dictatorship. Such is not the case in many of the mining regions, especially in the Kachin Hills. There are many factions that have benefited from the economic disorder of the mining industry. For example, Chit (2009) describes how the jade smuggling networks among the Shan have placed this ethnic minority into a position of cultural brokers between the various peoples of northeastern Myanmar and the peoples of northern Thailand. Within this role, the Shan have become cultural bearers through whom various Buddhist ideals and practices have been spread, resulting in a blend of Myanmar and Thai Buddhist concepts. Likewise, Chang (2004) writes about the Yunnanese Chinese immigrants in both Myanmar and Thailand have formed complex illegal trade networks for jade between both countries. As mentioned previously, Overton (2008) describes how jade “finished” in Thailand bypasses trade sanctions on Myanmar jade. Therefore, both the Shan and the Yunnanese traders have a large stake in the current workings of the jade market and will likely put up more resistance to foreign investors than the oppressed residents of Mandalay.

However, the biggest resistance is coming from the Kachin independence forces. As Sadan (2015) writes, the fighting in Kachin State against the Myanmar central government is at a historically high level. Beech and Nang (2017) point out that the Kachin Independence Army is primarily funded by the “taxes” that it makes off the jade trade. Thus, for the Kachin, the ability to control jade is essential to their ability to resist political subjugation to the central Myanmar state. Consequently, the Kachin are fighting for control over the jade regions because the wealth that it brings allows for the possibility of political autonomy.

The Green of Globalization

In conclusion, Myanmar's rare jadeite resources are highly valued by collectors, especially in China. Yet, the area from which they are mined has long been a semi-lawless realm. The environment makes it difficult for policing and controlling. This was true for the Burmese kings, the British Empire, and the Myanmar military dictatorship. Because of the lack of social control, many factions have become invested in the jade trade. The recent liberalization of the Myanmar economy has begun to disrupt the complicated networks and social relations that have emerged through the unauthorized jade trade. As a result, hostilities have increased, specifically among the Kachin. The current state of exploitation and suffering among the miners is already intolerable. The pressures of the global market threaten to make it worse.

Is the beauty of a bright green stone worth such a toll of human misery? Campaigns have been waged against African "blood diamonds." The harm caused by the production of such luxury objects has been exposed to the consumers and collectors. Perhaps such a message ought to be propagated regarding Myanmar jade. With all the pain that its production causes, jade cannot truly be the "stone of heaven."

About Lawrence J. Ramirez:

As a double major in Anthropology and Art History, Lawrence Ramirez has a deep interest in cultural practices of displayed status, whether through exhibition of prestige objects, architectural design, and socially constructed ideologies of "place." Having graduated from CSU Dominguez Hills in the Spring of 2018, Lawrence Ramirez will be entering the doctoral program in Sociocultural Anthropology at the University of California, Riverside. This article explores the ethical issues underlying the creation of prestige objects. Because rare cultural commodities signify elite status, the global marketplace creates incentives to generate a sufficient supply. However, this process can be harmful to the local populations in the areas from which the commodity is extracted. Such interconnections between ethics, aesthetics, and the symbolic expression of cultural identity will be a guiding concept for Lawrence Ramirez as he continues in his graduate studies.

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A Hollistic Perspective on Post-Tsunami Recovery in Thailand

By: Jennifer Vaja

On December 26th, 2004, A thrust movement of the Indian plate, subducting underneath the Burmese plate was responsible for one of the largest tsunamis ever recorded. The plate movement caused a 9.0 magnitude earthquake and vertically displaced the water in the ocean. The tsunami spontaneously hit six provinces in Southern Thailand, where Phang Nga was hit the worst. Many of the affected victims were small scale fishing families and tourists. People lost family, houses, and means of livelihood. However, immigrants, people of low social status, and women were more vulnerable than others. This caused a greater loss and longer recovery process for vulnerable groups compared to others. The loss not only included material goods, but also a loss in social networks, that was essential for recovery. Failing to understand this aspect of Thai culture not only made the recovery process longer, but also led to an unequal distribution of resources. The tsunami killed around 230,000 people (Anawat Supassri 2006, 19-39). Many were displaced and others became homeless without resources. Some of the tsunami victims' bodies were never found. Thai people could not understand what had happened because they had never heard of such natural disaster. The people turned to religious rituals, ceremonies, monks, and temples as a way to gain psychological reassurance. This paper presents how natural disasters are experienced differently by the victims and non-victims. In such disasters, it is important that the governments, NGOs, organizations, and people in the medical field take into account the culture of the affected people in order to succeed in the recovery process. A holistic perspective is essential for a fast and long term recovery. This paper focuses on different elements of culture, such as: history, vulnerability, social capital, resilience process, and religion to present how culture elements interrelate with each other and why an emic perspective on such elements is important for the recovery.

Phang nga, was the most affected after the tsunami hit. Phang nga is located in southern Thailand, where tourism industry was a major form of economic capital for the island. Before the tourism industry, the coast remained a fishing village. The groups that lived in the village were Moken and Moklen group. Moken and Moklen were semi nomadic with a fishing subsistence strategy. In the 19th century, the tin mining industry attracted immigrants that were of Chinese origin and other parts of Asia. The tin mining industry development required the removal of mangroves or anything else that became an obstacle for the industry. This impacted the shore's natural protection against devastation. Not only were mangroves home to rich in ecosystems, they also served to protect from environmental stress, and wave destruction (Thia eng et. al 2005). The absence of mangroves led to vulnerability for the people living near them, because there would be less wave protection, and a reduction in biodiversity. In other words, waves could cause more erosion, or penetration of water in the homes of the people. Less biodiversity meant that there would be fewer resources for the people (2005). After many years of mining, much of the resources were exploited. Workers were left unemployed and without natural resources. Now, the tourism industry development in Phang Nga has attracted a lot of legal and illegal migrant workers from different parts of Thailand, like Myanmar and Burmese (Kuwata Yasuko 2011). When the tsunami hit, illegal immigrants, the lower social class, and women were the most vulnerable. Some not only lost their lives, but were also never identified because of lack of information due to their illegal status. In addition, many of the deceased family members failed to recognize the deceased because they were afraid of going to the temple where corpses were being recognized and deported (Falk 2015, 223). In addition, Thai fishers and women were more vulnerable because they were fishing near shore when the wave hit because of patriarchal norms. More women were killed than men because they searched for their children when the wave was approaching the shore. Women could not climb trees or run because of the type of clothing they were wearing. Also, a big percentage of the Thai people were never educated in such natural disaster. It was the underdeveloped and vulnerable communities that not only lost their lives, relatives, working equipment, and homes, but were also the ones to take the longest to recover (Gupta et. al 2006).

The tsunami struck when the macro economy was under pressure by a previous economic crisis in 2001. “This past crisis was driven by deteriorating domestic policy and political environment in the context of accumulated macroeconomic imbalances” (Athukorala et al. 2013, 1-28). Depressed global economic conditions led to lower exports, and adverse weather led to less agricultural work. Which then contrasted the economy by 1.5 percent (4). In 2004, the pressure of inflation led to foreign borrowing by the commercial banking. These loans allowed the country’s foreign private debt to increase. Although there was an increase in credit growth, the real interest rates turned negative. The economic growth rate reached to 5.4 percent by mid 2004 (5). However, when the tsunami hit, these economic issues were not eliminated. Instead, they played a negative part in the recovery process. After the tsunami, a lot of corruption took place. People were stealing resources from temples, resources were primarily distributed to others, some people receiving resources were not affected by the tsunami, etc. The death toll was estimated to be 36,000, and 800,000 people were displaced (Falk 2015, 10). The tsunami either damaged or completely destroyed beach hotels . In addition, 240 schools were also destroyed, and hospitals, railway network, temples, etc. were damaged (74). As mentioned earlier, the destruction caused by the tsunami was greater in certain areas. Issues with the economy were already causing tension for the people’s livelihood. The tsunami destructed the only resources the people depended on to survive, such as; fishing boats, nets, fishing tools etc.

The initial stages of recovery following the 2004 Thailand tsunami are the natural mechanisms, that is a natural phenomena. The chaotic period that takes place right after the tsunami, the immediate aftermath, policies in aid, and the environmental impact after the disaster (Pollnac and Kotowicz 2012, 67-80). Different levels of government distributed rehabilitations and redevelopment initiatives. The different levels of government include; private developers, Non-Governmental Organizations (NGOs), relief organizations, and the United Nations (Williams and Rankin 2015, 70-100). However, reports and field work suggested that lack of coordination in distribution organizations led to an uneven distribution of aid, where the local elites and resorts benefited only (90). Social capital was already an important aspect for livelihood before the disaster. However. the lack of aid after the disaster made social capital even more critical for the resilience period.

Resilience is a process that links a set of adaptive capacities to a positive trajectory of functioning and adapting after a displacement (Norris et. al 2007). Applying community resilience to the 2004 tsunami also presents the linking networks that served to adapt after the disaster. Norris et al discuss the resilience process by presenting a resilience model that encompass contemporary theories of stress. The model begins with resistance that is present when resources are sufficient and robust. However, total resistance is rare and a surprising event (i.e. natural disaster) that can break the resistance and cause a dysfunction because there is an imbalance in resources. Resilience then occurs when resources are back to normal to counteract the effects of the stressor, following an adaptation to the altered environments (131). However, factors, such as vulnerability can affect the resilience process. When the resilience model was applied to the Thailand tsunami, resilience was projected although the economic growth had paused, and debt grew exponentially as mentioned earlier. Resistance was also projected by the economic stability in the coastal villages. The people were fishing as a source of economic income. Others were employed at tourist sites, such as hotels, and shops. After the tsunami struck the area, all source of income was diminished. The people became unstable by not having jobs, homes, family, etc. People relied on social ties for resources, and on religion for psychological reassurance.

Social capital networks provide access to resources after disasters. Resources include; information, aid, financial resources, child care and even emotional and psychological reassurance (Aldrich and Meyer 2014, 256). The issue came when the disaster management or political aid failed to see social capital as a critical component for the recovery. Social capital is divided into three main types: bonding, bridging, and linking. Each signifies different relationship strengths, network compositions, and different results for the people or communities (258). Bonding social capital refers to connections between individuals that are emotionally close. For example, family, and friends that form strong ties between each other. These ties provide social support and personal assistance when needed after displacement. Bridging social capital refers to loosely connected social groups. For example, ties that are formed by people of the same social class, or ethnicity, religious groups, and organizations. The connections provide resources to assist members of the society, such as employment. Furthermore, linking social capital is a network that connects people with others high in power.

For example, victims in coastal villages had only met the collector that connected the people to the disaster aid. However, they never met any representative of their government (259). The transition that takes place between the victims, connector, and means of aid is linking social capital. Before the 2004 tsunami disaster, bonding social capital was already present. Social networking was an important factor for the Thai people. The problem was that many vulnerable individuals lost kin and extended family that provided bridging social capital. Others were migrants from other places and had built ties where they migrated from. Therefore, many people became helpless and desperate because they had no way to attain social capital at all. They were only able to seek religion for support.

Religion was an important factor for the resilience process and for people that have had experienced past trauma. However, religion could also be obstructive to recovery (Ha 2015, 1315). In the Thailand tsunami, religion affected the people in both ways. After the disaster, many Buddhist Thai people converted to christianity. Missionaries played a big role in convincing the people that if they converted, resources would be distributed to them (Falk 2016, 181). After, converted people were not able to continue building social ties with Buddhist friends and relatives. On the other hand, the temple played a role in all different stages of the disaster: response, reconstruction, recovery, and mitigation (Falk 2010, 182). Before the tsunami, people gathered at the temple for daily activity and other religious motives. After the disaster, the temple was the place where corpses were identified. It was important for the victims to find their loved ones because of their practices. In addition, once the body was present, death of the person was confirmed and people would be able to mourn the loss of their loved ones without doubting if they were still alive. In Buddhist practices, *dukkah*, *paticcasamuppada*, and *kamma* make up parts of the Buddhist worldview. *Dukkah* is a part of life that consists of suffering throughout one's life. *Patitcasamuppada* is responsible for all natural occurrences in life, such as the tsunami. *Kamma* refers to moral actions that determine future states of being (182). In addition, it is a cultural norm to keep the corpse at the home before cremation rituals. However, in the 2004 tsunami, victims were afraid of malevolent ghosts of the dead and did not want to have the body at their homes. In buddhist practices, it is believed that as soon as one leaves the world, one enters the liminal stage: a dangerous stage. and then moves

on to the reborn stage. However, in this case families of the deceased were afraid because violent deaths, such as those caused by the tsunami can create dangerous spirits. These spirits could take over another person's body, and need merit to go on with rebirth (183). Monks played an important role in transmitting merit from family to the deceased. Temples provided the rituals and temporary shelter for the victims. Many suffered from Post-traumatic stress disorder and needed psychological assistance.

In The monograph *Post-Tsunami recovery in Thailand*, Monica Falk discusses the management and lack of national control in tackling catastrophes. This emerged into unequal distribution, exclusion of some communities for government aid or extensive aid for others. As mentioned earlier, the temple served as a forensic site, and shelter for the victims. The victims were expected to live there for a short period of time. However, housing took a very long time because there was a shortage in funding, the size of the houses were too small, or because some people wanted to reconstruct the house in the same place for fishing (Falk 2015, 98). By February 2005, there were 60,000 people displaced. Six months after that, 7,000 of the people were still living in temporary shelters. In September 2005, the Thai government had only built 2,700 houses but had received 3,350 applications (141). The issue was that many victims were illegal immigrants and lacked documentation, or were afraid of applying for resources because of their illegal status. Others did not know about the aid programs at all. In addition, a lot of the financial distribution was concentrated in places with huge economic importance of the lucrative tourist industry, such as Phuket (133). Instead of helping vulnerable people that needed more aid, others were put first. In addition, there was a lot of corruption when it came to the distribution of resources. People that had not been affected by the tsunami were coming to the temple to request resources and others were stealing (85). When the monks denied the request to people that were taking advantage of the situation, rumors spread. Monks were criticized for giving resources to specific people only. Falk interviews an informant that says, "I see many people who used to be poor and after the tsunami they have everything. Those people have not bought all the things that they have, they have received them as donations even if they were not affected at all. I think the those providing relief aid must improve how they distribute donations" (143).

Before the tsunami hit, Phang nga village only had two Christian churches. After two years, there were more than 20. An informant described that some Christian organizations came to provide aid. However, they had offered him money and material aid if he converted. One priest even said he would provide a monthly payment for the people that converted. Two years after the tsunami, 10 percent of victims converted (146). Those who converted were no longer allowed to listen to the Buddhist monks nor participate in Buddhist ceremonies. Falk states, “The conversion had created a division within the village and lack of trust between villages” (146). This means that communities that once worked together no longer did, and instead argued over donations. This resulted in conflict and selfish behavior.

A quick and effective relief was beyond what any government or organization could accomplish. Many skills and resources from different groups, relief agencies, and networks was essential for recovery (147). In other words, each organization, government, medical field volunteer, NGOs, etc. had to understand the culture of the victims in need of aid. For example, the lack of history knowledge from the Thai people, and immigration status led the government to build less houses than were actually needed. This delayed the housing process for the people. Groups responsible for distributing resources or constructing the homes should have been informed that there were victims that were not registered, and should have kept a different way for victims to sign up. Instead, people ended up staying at temporary shelters for a year, or some for more. After the tsunami, many of the victims suffered from post traumatic stress. Foreigners were not the only people that needed psychological therapy, Thai people needed psychological assistance as well. However, Thai people needed religious psychological reassurance. The government or other aid distributors should have considered the Thai people’s perspective on death to highlight the code of conduct. For instance, merit transmission and death rituals were important for the Thai people. It was important to find the body, but because many bodies became unrecognizable at decomposition stage, forensic teams began cutting the hands of the corpses for fingerprints. This was devastating for the Thai people and in addition broke one of the code of conducts that states “in our information, publicity and advertising activities, we shall recognize disaster victims as dignified humans, not hopeless objects” (147). Furthermore, the social capital should have also been highlighted to others that were

donating or providing aid to the victims such as christian missionaries. Christian missionaries purposely went to the most affected villages like Phang Nga and offered to provide monthly payments to the people if they converted. After the tsunami, 10 percent of the people converted to Christianity. The problem was that they did not realize the new transition from one religion to another would affect the community long term. People worked as a community before, but after converting, the bonding diminished due to different religious restrictions. The aid the christian missionaries provided would only be short term. The government should have prohibited this type of aid offers from religious institutions to ensure successful long term recovery, and avoid the division between communities.

A long term and fast recovery is important for all the victims of a natural disaster. Not only are the lives of the victim disturbed by losing loved ones, but also losing the means of their livelihood. In order to succeed in the recovery, a holistic perspective has to be present. In this case, aid distributors such as the government, NGOs, Organizations and Forensic teams have to understand how the culture of the people they are working with interconnect with one another. In other words, how one element of culture such a religious beliefs influences or connects to another element. This would not only give a better understanding of what is important to the people, but would also highlight the necessities. For example, the fishers needed homes to be rebuilt near the ocean to make it easier to go fishing. In this case, because the housing organizations failed to understand this aspect of culture, fishers' homes were rebuilt far from the sea. Fishers were unhappy with the house, and requested for a different house, prolonging the recovery process even more.

This topic is relevant to anthropology because it contributes to a development in anthropological research on how the environment, culture, and religion impact the recovery process when natural disaster occurs. It demonstrated why culture is important when studying environmental impact after a natural event. This project interests me because it reflects a case scenario for the concept of holism in anthropology, and the importance of a present emic perspective (insider's perspective). In the future, I plan to keep researching on tsunami mitigation in Thailand. That includes; education and better land usage of the people. Education focuses

on educating all people, regardless of gender, social class, religion, age, etc. about tsunami signs, tsunami alerts, and tsunami safe zones. Land usage on the other hand, focuses on building homes at a less dangerous and vulnerable zone. That is, not too close to the coast. Overall, the focus of this paper was to bring an insight of the victim's perspective and explain why it is important to understand their perspective.

About Jennifer Vaja

Jennifer Vaja is an Anthropology major with a concentration in Applied Anthropology, graduating in the Fall of 2018. After graduation, Jennifer plans to pursue a career in behavioral counseling.

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Food Deserts: Social Environmental Impact

By: Lindsay Rabas

The purpose of this study is to understand how food deserts have shaped the environment people live in. Food deserts are communities that lack fresh produce and healthy wholesome foods, typically found in areas of poverty. This occurs due to the lack of providers in a given community, including grocery stores, farmers' markets, and healthy food providers. This study will demonstrate how people's lives and health change due to the available resources within their community. Within communities, people are given food options that will vary depending on economic status and where they live. This has not only created environmental issues, but also economic concerns. Within this study I have focused my research on food deserts specifically within the Los Angeles area and expand this knowledge on information and statistics that we are able to build from communities throughout the United States who are unable to access fresh food resources. Due to previous research, it is evident that a majority of food deserts are located within the South. I have taken the research data gathered from these regions and implicated them into our local communities within the Los Angeles area. Within this study I focused on the impact food deserts have on individuals starting at adolescence. The research conducted has helped me obtain an understanding on childhood obesity and cardiovascular diseases that arise due to obesity. It has also helped me understand various health disparities due to environmental racism and the resources available to individuals. The initial purpose of this study is to not only focus on the health concerns, but the causation of these problems including the industrialization of food marketing. In areas of poverty, we are finding that there is more access to food alternatives, rather than grocery stores with fresh produce. The alternative provided include fast food options that claim to be more affordable and

acceptive of food stamps. Within these areas, you will not be able to find grocery stores within a mile of each other. Whereas the fast food industry has progressively evolved, leading a number of concerns like obesity and pollution. This industry advertises food claiming to be affordable to lower income individuals, although, fast food is expensive and shows no benefits to consumers. Americans are allowing these industries to create profit steamed from environmental racism and discrimination.

The monograph that I will use for this research paper is, *Desert in the Springs: Ethnography of a Food Desert*, by Margeaux Alana Chavez. I selected this monograph because it shares a collective and holistic view of how food deserts are affecting people throughout the United States. I also was interested in this monograph because it fills in anthropological gaps that you will see lacking in other writings. Margeaux Alana Chavez focuses on social aspects of food deserts by conducting ethnographic research within neighborhoods to understand the lack of urban agriculture. This monograph also provides alternative ways people can avoid junk food. Chavez runs a series of GIS and communal store surveys to prove that urbanized agriculture has potential and can increase accessibility and availability that will positively influence local neighborhoods. This monograph helps me understand the GSI data that was previously collected and how it influences urban agriculture. I want to understand how GSI data relates back to the people who have been affected by food deserts (Chavez 2013). In Chavez's monograph she provides ethnographic field work creating a better understanding of food deserts. This is great because this is generally an unpopular topic within ethnographic work. In *Desert in the Springs: Ethnography of a Food Desert* Chavez states, "'food desert' is a pervasive concept that has gained increasing credibility in popular media, public policy, and among academics, because the core assumptions underlying this concept strongly leave to conventional wisdom and can be stated using popular American adages such as, 'there are haves and have-nots,' and 'location, location, location.' There is no question that food desert studies shed light on social inequalities, resource inequalities, and health disparities" (Chavez 2013, 7). This shows that food deserts are a political approach, and ultimately leads to environmental racism. Some of the main focuses Chavez represents in this monograph is that, "This 'new' ecological

anthropology considers political economy, ethnoecological clashes, neocolonialism, and environmental racism” (Chavez 2013, 11). She provides an understanding of urban agricultures and the effects it has on the people within urbanized communities. Additionally, she also provides studies she finds while conducting a series of GIS and communal surveys. Within this book, Chavez states that with the epidemic of food deserts we are able to see a list of concerns that are interlinked with one another including social inequalities, resource inequalities, and health disparities. This book helped me understand the measure of access of food within communities, and the data on what is considered a food desert and the disadvantages that come with it (Chavez 2013). I want to focus on not only environmental racism, but health disparities and food culture. Chavez conducts her work within Sulphur Springs, this environment over the past 50 years has changed due to desegregation, gentrification, development, and the degradation of local infrastructure. This shows an example of how ecological and environmental anthropologists are studying how environmental racism and the roles of non-profits are shaping local environments emphasizing food deserts (Chavez 2013).

Another source similar to Chavez includes the journal article, “Food Deserts: Governing Obesity in the Neoliberal City” by Jerry Shannon. Here we can see how in areas where food deserts are present, it makes it hard for individuals to have access to healthy fresh produce (Shannon 2014). This is reflecting on the general population showing social disadvantages, including health disparities. This article indicates the ecological stress seen with communities who suffer from food insecurities. This includes health disparities like diabetes. This is perfect for my study because I can take the contextual information on the health threat of diabetes within these communities. The author provided recent data from proposals and laws placed by the Obama administration. Shannon also discusses gentrification and social determinates within poor and rural areas (Shannon 2014). This can work for my own studies when talking about environmental racism and social injustices. When conducting further research, I came across the information that Los Angeles is not alone in having food deserts. This is shown in the quote: “Overall, geographic areas with a high proportion of low-income or African American residents were underserved by food retailers. The average distance to supermarkets was farther for low-income

areas and areas with a high proportion of African Americans. Lastly, these same areas had more convenience stores. These trends illustrate that food deserts are not just a local issue, but nationwide one" ("Food Deserts in Los Angeles" 2017). Looking at further evidence, we are able to see that in the article, "Foodways of the Urban Poor" by Alkon et al., supply-side approaches that have been adopted by progressives in working on policies that raise attention to health disparities using a universal approach in low-income communities (Alkon et al. 2013). This article expresses the effects of food consumption using the term, "foodways." Foodways is in reference to "the cultural and social practices that affect food consumption, including how and what communities eat, where and how they shop and what motivates their food preferences"(Alkon et al. 2013). The data collected within this article shows how there are three unifying trends in food consumption within low-income communities. These three trends of food consumption include: "they evidenced significant knowledge about healthy food and understood food and eating as a cultural practice, proximity to a supermarket was deemed helpful, but most of those we studied left their "food desert" neighborhoods to shop at supermarkets because they prioritized price over convenience, and they placed high value on the quality of food rather than simply the quantity they could obtain" (Alkon et al. 2013, 127). This represents that individuals use coping strategies that are found in food deserts. This is important because we are then able to create policies that ensure individuals living in these communities are not affected by food insecurities (Alkon et al. 2013).

Looking at the overall topic of food deserts was particularly interesting to me because it lacks extensive research. The research available helps formulate the understanding of the effects of food deserts and how they have affected the individuals in our own local community. I want to try to take the knowledge we have about food deserts and apply it on a local level. By seeing the roots and causation of food deserts, it helps us understand ways we can create resources that are affordable for those who are unable to access or afford grocery store produce. I am also interested in this because I think it will broaden research and knowledge regarding how to "fix" health epidemics that correlates with food deserts. Often seen within health practices, we blame the victim of social and environmental issues, instead of the cause of the problem. The information

gathered during this research will plan for future studies in presenting ways food deserts have affected humans and the environment. I will also later present projects that will allow people to access food locally and provide knowledge on the issues that cause food deserts. One alternative method that I have investigated for local produce within areas of food insecurity is local gardens. In these areas we can create a plan on producing areas that will be run by the local community to provide fresh fruits and vegetables that are affordable. In the article, “Connecting Food Environments and Health through the Relational Nature of Aesthetics: Gaining Insight through the Community Gardening Experience,” James Hale is able to give data on gardening. Additionally, this article focuses on the environment and health challenges that are present in society. This article encourages gardening by providing data showing the health benefits not only with physical health advantages, but also mental advantages. The evidence provided encourages ways to engage a community with gardening to provide access to healthier food through a community garden. I can use this article to look at food systems and benefits of alternative methods to obtain produce that is healthy and not overly priced. This article will also help with fighting obesity within low-income communities and overcoming urban issues (Hale et al. 2011).

Food deserts are relevant to anthropology because we are able to touch upon a vast collection of different topics including agriculture, industrialization, urban environment, human ecology, political economics, and environmental racism. These topics all relate back to the relationships between humans and their environment. Major issues that I will be addressing are political ecology, agriculture, marketing culture, and environmental racism. I want to focus on these topics because I feel like collectively it will provide a broad perspective on subsections of what causes food deserts, and why it has affected individuals so drastically. Many of these issues are not thought of daily; allowing people to adapt to an environmental culture that creates a serious epidemic.

While looking at other resources, we can look at the politics behind food. Specifically, how they are marketing food, disadvantaging consumers. The book, *Food Politics: How the Food Industry Influences*

Nutrition and Health, by Marion Nestle, explores how we are advising people to eat incorrectly. We are encouraging people to eat more food, creating people who overeat. We are also trying to eat less meat, but should be encouraging people to eat less red meats. Americans are misguided into how to keep a balanced diet that is healthy and affordable (Nestle 2013). Nestle clarifies how this misguidance is rather political than scientific. Additionally, this book provides information to what foods are essentially best for human biologically, yet for this nation to earn money we seek out marketing trends that guide people into indulging in poorer choices. For instance, we are more likely to eat fries, over a salad due to marketing. Fast food industries show that these food alternatives are cheaper, yet it is not only more expensive, but unhealthy.

Reflecting on this issue, *Food Fight: the inside story of the food industry, America's obesity crisis, and what we can do about it* by Kelly Brownell and Katherine Horgen, demonstrates the health concerns that the food industry is providing to humans and the environment. This book reflects the toxicity of our environment, showing how the results of human behavior is causing pollution to our environment. This book provides advice and knowledge on ways the environment and urbanized culture is reflective of each other, and how we can fix these problems with a universal perspective (Brownell and Horgen 2003). This also shows ways to overcome obesity; this could be helpful inducing ways to reverse the effects of food deserts within low-income communities. For many in America, obesity starts at adolescence, we can track the studies of individuals we are able to see that within areas of food insecurity, the relationship of obesity climbs within children. In the article, "The Relationship Between Childhood Obesity and Food Insecurity: A Nonparametric Analysis", Oluyemisi Kuku et al., discuss the food epidemic occurring in the United States. This article shows data sets that connect childhood obesity and food insecurity. This research focuses on low-income areas, and the relevance of how children are affected by the lack of food resources. Kuku et al. explain a series of data points like Child Development Supplement (CDS) and the Panel Study of Income Dynamics (PSID) (Kuku, Garasky, and Gundersen 2012). Looking at this data not only shows probability of obesity rates in children, but the policies that are implicated. This is important to my research because I am focusing on health disparities and its effects

on young children. On the other hand, we are able to see within the article, “Food Marketing with Movie Character Toys: Effects on Young Children’s Preferences for Unhealthy and Healthier Fast Food Meals”, case studies that show evidence to how kids are marketed into the fast food industry. In this article, Dixon explains how children’s movie characters can persuade children’s meal choices. Dixon conducts research on how children are manipulated and marketed into buying and wanting food choices due to advertising their favorite shows and characters. This article also pushes for the need to make fast food meals healthier for children. This article runs through a list of data points collected by testing children to see which meals look more appealing solely based on appearance and marketing strategies. Although within this study we are able to see negative effects, these effects could be reversed by selling healthier food options in the same way. This is important to my study because I am focusing on how marketing of particular items is not only inexpensive, but accessible. This being said it makes individuals vulnerable and can put harm on the health of a community (Dixon et al. 2017).

Another study that exemplifies how children are directly affected by marketing strategies is through the article, “Association between Food Marketing Exposure and Adolescents’ Food Choices and Eating Behavior” by Maree Scully. Here we can see how the exposure of food marketing impacts the food choices of young individuals. Scully did a case study on individuals between the age of 12-17 in Australia. The individuals that watched more television or who had more exposure to these fast food commercials were seen to make poorer decisions about the food they consumed. Within this study we are also able to see policy changes within media and advertisements. These restrictions will propose media outlets to have a tighter restriction on advertisements. This is to steer young adults away from obesity and other health complications due to systematic failures. This shows the reality of obesity with adolescence by using the data provided showing the children with more television viewing more than 2 hours a day were more likely to have a higher consumption of fast food items (Scully et al. 2012). I will also use this study to create options that could be placed for ecologically, environmentally, and health cautions. This can refer to the study: “Foodways for the Urban Poor”. Seeing how

vulnerable adolescents are within our society, we need to push programs that educate them at a young age to make healthier decisions and how it will positively affect them long term. As seen in Santa Ana we can see how this low-income community works with Latino Health Access. We can use their Promotora Model as a prime example of how we should communicate with individuals in these communities. The Latino Health Access uses individuals, promotores, to talk to others and support them, and provide access to better health. The promotores are people who come from these communities, creating relationships and trust within their communities to overcome health disparities, like diabetes and obesity (“The Promotora Model | Latino Health Access” n.d.). They provide access to better health care by creating community spaces and one-on-one support to discuss health conditions within the community. Similarly, we can create programs within other urban areas throughout Los Angeles. This will create a community that will work on not only educating individuals on food deserts, but obesity and access to health, affordable food.

In order to cover environmental racism and understand why we are not able to simply just provide resources to these communities, I found *Enough: why the world's poorest starve in an age of plenty*. I hope to find reasoning in why we exclude areas of poverty from knowledge and resources that will help keep them and the environment satiable (Thurow 2010). Thurow walks the readers through examples in Africa to show how the rich agriculture is failing individuals. This is showing how aside from having all these resources, the government is deciding where the money and resources are placed. Referring to my own study, we can observe how people interact with agriculture and cultural, political decisions in how food and other resources are not being divided equally. “Rethinking Environmental Racism: White Privilege and Urban Development in Southern California,” is primary about environmental racism. I picked this article written by Laura Pulido because she focuses on Southern California. This article explains environmental racism as something that is thought about often, rarely discussed or fixed. Pulido also uses references of white privilege and social determinates based on our race, gender, and social classification. We can then look at Los Angeles as a case study to understand not only the segregation of races based on home ownership and zip code, but also the

gentrification of cities in Los Angeles. Gentrification includes the changing of the landscape and businesses within the local areas that are typically of low-income households (Pulido 2000). Meaning it will push out individuals from their location because they can no longer to afford expenses. This is significant because within Los Angeles we can see an increase of white individuals moving into and creating resources that are not reasonable for individuals who cannot afford it. They are changing the environment in which people live in ultimately pushing them out of these cities. Individuals are placed into communities due to environmental racism, but as we can dive into the topic of gentrification we are able to connect how we are able to stop gentrification and keep local individuals within their neighbors. Jarrett Thibodeaux, in the article “City Racial Composition as a Predictor of African American Food Deserts,” connects food deserts to resource disparities. This article focuses heavily on environmental racism. Thibodeaux, focuses his research on African American Communities and the available supermarkets that are available to these communities (Thibodeaux 2016). This article exemplifies the relationship between the number of supermarkets that are placed within specific area codes. We can connect this based on average income. This is environmental racism in its prime. With this research, I will be able to connect this back to health disparities and gentrification. This topic is heavily discussed in this article, including cardiovascular diseases and obesity. Lydia Zepeda, in “Overcoming Challenges to Effectiveness of Mobile Markets in US Food Deserts”, we are able to see her research on mobile food markets. This resource is studying how mobile food markets have the potential to alter individuals’ attitudes on their choice of food. Within Zepeda’s research, we are able to see that individuals who are actively using mobile markets are eating significantly more produce that is health friendly than those who are not. This is highly important research, because it could fill in gaps in the marketing system that is not only having the ability to improve health but is affordable. This gives a perspective on ways to improve people’s health based on a market system that provides access to food items that are not currently attainable (Zepeda, Reznickova, and Lohr 2014). This could help with my ideas of creating programs, and resources for the communities living in food deserts.

Like previously stated, one of my main focuses on working to solve the food deserts within Los Angeles is to education and become engaged in the community. We are seeing more cities creating local gardens. This is important because we can provide food to the local communities and create awareness about food deserts and the effects of them. Because this is such a new topic of interest, I need to further explore more information and create resources that will provide proper care for those effected by food deserts, including health access. Food deserts are linked with health disparities, and individuals who are not able to access proper health care. This can include doctor visits and classes that educate individuals on food deserts. This will ultimately increase local gardens and push out fast food industries that have been attacking and surviving off these communities. In conclusion, I feel like this topic needs more extensive research. I plan on continuing this study. I want to go into different communities in the Los Angeles area and study gentrification. I also want to look to see how gardening within local cities is helping feed communities. Within my further research, I plan on also studying local farmers markets. I want to understand what areas have farmers markets and the pro and cons of them.

About Lindsay Rabas

Lindsay Rabas is Anthropology major with a concentration in Biological Anthropology, graduating in the Spring of 2019. After graduation, she plans to pursue a career working as a Forensic Anthropologist. She wishes to focus on recovering victims of immigration trauma along the Mexico-United States border.

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Cambodia: Under the Grip of a Strongman

By: Andrew Yinn

On July 10, 2016, Kem Ley, a prominent political activist and government critic in Cambodia, was shot dead in a coffee shop as he was having his morning coffee. Many who admired and loved him were shocked by the murder. The death of Kem Ley has left many Cambodians asking, why did this happen, and is the government behind this killing? What is really going on in Cambodia? Many in Cambodia suspect the government and the prime minister are involved in this assassination. Currently, Cambodia's government is ruled by the Cambodian People's Party, led by the prime minister Hun Sen. In his book, *30 years of Hun Sen*, Brad Adams notes that Hun Sen has stayed in power for over thirty years and he remains in power through his strongman tactics of political motivated violence, control of security forces, manipulated elections, and massive corruption. Moreover, Hun Sen and his party are known for intimidating the opposition with imprisonment or, most of the time, death (Adams 2015, 2). Furthermore, journalist Abby Seiff quotes a Cambodian factory worker saying, "sometimes we cannot talk about what we think about the government. We close our mouth and discuss with our close friends and family" (Seiff, 2016). To understand the current situation of Cambodia, one must look to its historical past of Hun Sen's early life, his role during the Khmer Rouge takeover of Cambodia, and how he obtained and maintained his position of political power over Cambodia. Ultimately, it is by exploring his historical past and his political achievements, and only then can we understand the present and move to a better future.

To understand the current situation in Cambodia, one must first look to the historical past of Hun Sen's early life and examine the events that occurred during his early days that shaped him to become who he is today. Hun Sen was born August 5, 1952 in Peam Koh Sna Village (Mehta 1999, 14). His family were farmers

who grew mostly rice on their land. However, over the years, Hun's family became very poor due to land erosion. At the age of 13, Hun's Parents set him to study in Phnom Penh, where he lived at Wat Neakvoan. While living in Phnom Penh, Hun Sen had relatives in elite government positions from the armed forces to top political positions in government, but he was greatly influenced by the writings of a communist teacher Tiv Ol (Adams 2015, 6). Hun Sen admired the ideology of communism because he loved the fact that in communism there is no social class, everyone is equal. Later on, during his time in Phnom Penh, according to Adams he notes that Hun Sen was shocked to have witnessed Prince Sihanouk's publicized execution of alleged traitors. Towards Sihanouk's last years in power before he got ousted, there were a lot of anti-Sihanouk activists. These activists held demonstrations and spoke against Sihanouk's way of running the government. Furthermore, it was a fragile situation for Cambodia because of the War between the United States and Vietnam, which borders Cambodia. Sihanouk, during the mid 60s was trying to juggle multiple issues in his country; one he was trying to maintain a neutral state in his country in the midst of the Vietnam War, and trying to deal with the dissatisfied attitudes of the people (Adams 2015, 8). In 1969, many of the anti-Sihanouk activists started to emerge at Wat Neakavoan where Hun Sen lived and one of whom was his cousin who got arrested in front of Hun Sen. Hun Sen gave up on his studies and left the pagoda one year before his graduation because he feared he might also be detained. By that time, Hun Sen's father, Hun Neang, had moved to Kampong Cham province's Me Mut district which bordered, Vietnam, and where Hun Sen's father was farming hectares of orchards at Chnkar Thmei in Me Mong Commune. So, Hun Sen lived at Me Mut from 1969-1971.

Furthermore, by looking into Hun Sen's role in the Khmer Rouge regime, it will help one to understand the current political climate of Cambodia. On March 18 1970, the national assembly voted prince Sihanouk out of his position as chief of state. General Lon Nol became the national leader after Sihanouk's deposition. After taking power, General Lon Nol made a vow to the country that he will expel the communist Vietnamese army out of Cambodia. In those days, the communist Vietnamese had established military strongholds in Cambodia near the border of Cambodia and Vietnam (Adams 2015, 17). In doing this, Lon Nol ordered his army, the

Khmer National Arm Forces to attack and drive out communist Vietnamese along the border area of Cambodia. In response to Lon Nol's approach to rid the country of communist Vietnamese, the Vietnamese army launched a general attack on Lon Nol's regime with the help of the Khmer Rouge who were trained militarily by the Vietnamese. During that time, prince Sihanouk was exiled from Cambodia and living in China. He was very disappointed about losing his power over the country to Lon Nol, so he turned to the Khmer Rouge for help, hoping that they could return him back to his position as national leader of Cambodia. The Khmer Rouge was more than willing to help because they knew that people in rural areas of Cambodia still saw Sihanouk as a god king and had great respect for him. Therefore, the Khmer Rouge used Sihanouk as a symbol of their revolution to win victory over the Lon Nol Regime. Sihanouk made a speech over the radio and it was broadcast all over Cambodia. Sihanouk's speech over the radio was a call to arms and he was directing his message to people living in rural areas and along the countryside to join the Khmer Rouge. While living in Me Mute, Hun Sen heard the call of Sihanouk on the radio. Hun Sen was so captivated by Sihanouk's speech that he went to join the Khmer Rouge and fought against Lon Nol's army (Mehta 1999, 11). From there, Hun Sen rose through the ranks and became a squad leader, then battalion commander in the Khmer Rouge regime. While serving for the Khmer Rouge, Hun Sen helped the war effort by winning battles and capturing villages one after another. Unfortunately, for Lon Nol's Army, they could not stand against the battled hardened Vietnamese and the Khmer Rouge. Lon Nol's Khmer National Arm Forces finally succumbed to the onslaught of the Khmer Rouge and was defeated.

On April 17 1975, Cambodia fell to the Khmer Rouge, who entered the capital city Phnom Penh and evacuated the whole population to the countryside. Pol Pot, who was the leader of the regime, had a nationalistic vision for his country. He wanted Cambodia to return back to its formal glory of the great Khmer empire. In doing this, Pol Pot wanted to eliminate anything in his country that had ties to western culture such as people working in industrial or manufacturing plants, city life, and especially those who had western education. Essentially, some of the country's smartest people such as lawyers, doctors, professors, military

officials, artists, dancers, and musicians were murdered for possessing knowledge of any kind (Dy 2007, 1-3). As the murders went on, Hun Sen fled to Vietnam on June 1977. At first, the Vietnamese treated him like a prisoner of war but later Hun Sen won the favor of the Vietnamese by providing them with vital information about Cambodian troop movements and cross-border attacks. He also took the Vietnamese name Hai Phuc as a gesture of solidarity with the Vietnamese (Strango 2014, 65). Moreover, Strango notes that Hun Sen, during his time in Vietnam, forged a close relationship with General Le Du Anh who will eventually go on to lead the Vietnamese military effort in Cambodia throughout the 1980s (Strango 2014, 67). In 1978, Vietnam launched an invasion into Cambodia occupying the whole country. Hun Sen was given a prominent position in the front that invaded Cambodia with the Vietnamese army (Strango 2014, 67).

By looking into the early life of Hun Sen and his role in the Khmer Rouge, as well as examining how he obtained and maintained his power, one can better understand the current political climate of Cambodia. Shortly after the invasion of Cambodia on December 25, 1978, Vietnam installed a new government. This government was a mixture of Vietnamese trained communists and former members of the Khmer Rouge serving as officers to run the newly formed government. This government was called the People's Republic of Kampuchea (PRK) (Adams 2015, 25). During that time, Hun Sen was serving as foreign minister for the people's Republic of Kampuchea. Pen Sovann was the prime minister at the time, but was later arrested by the Vietnamese government because of the conflicts he had with the Vietnamese on views of running the government. After the Vietnamese government stripped Pen Sovann of his position as prime minister and arrested him, they replaced him with Chan Si as new prime minister of PRK. However, on December 1984, Chan Si died in office and the Vietnamese were looking for someone not only to replace Chan Si as prime minister, but someone they could trust. In other words, the Vietnamese government was looking for someone that would act as a puppet to their newly formed government. On January 14, 1984, Vietnam found their trust in Hun Sen, because he had proved his loyalty to Vietnam throughout the past years. Thus, the government of Vietnam promoted him as the new prime minister of Cambodia (Adams 2015, 25).

After his promotion as Prime Minister, Hun Sen used his power to repress his opponents or the opposition that might undermine his authority. Adams quotes Hun Sen saying, “I not only weaken the opposition, I’m going to make them dead and if anyone is strong enough to try to hold a demonstration, I will beat all those dogs and put them in a cage” (Adams 2015, 5). With the power he had obtained as prime minister of Cambodia, he gained full control of the PRK’s armed forces, police and other security units. Hun Sen used his power to silence or repress his rivals which are the Khmer Rouge led by Pol Pot, The National United Front for Independent, Peaceful and Cooperative Cambodia (FUNCINPEC) led by prince Sihanouk and the Khmer Peoples National Liberation Front (KPNLF) led by Son Sann (Adams 2015, 30). Hun Sen, having power over the armed forces and other security units, used them to conduct secret missions in capturing and intimidating his rivals. In doing this, there was a systematic violation of human rights in the form of, as Adam points out, “prolonged arbitrary detention without charge or trial; unfair trials; routine torture and other cruel, inhuman or degrading treatment of detainees; and extra-judicial killings” (Adams 2015, 36). Throughout the 1980s, Hun Sen has used these tactics of human right violation to maintain his position of power and some of these practices still continue today.

Currently, Cambodia is under a corrupt government led by prime minister, Hun Sen. He came into power in 1985 and has held that power since. His government party, CPP is notorious for rigging elections. That is why he has remained in power for many years. In recent news reported by Aljazeera on July 10, 2016, Kem Ley a prominent political activist and government critic, was shot dead at a café shop next to a gas station. Abby Seiff reported that this tragedy comes at a time of heightened tension between CPP and the opposition, not to mention one year before the election starts (Seiff, 2016). Kem Ley was known for his criticism of both parties, but the bulk of his main critique was towards the ruling party and the Prime Minister Hun Sen. According to Aljazeera, the news reported the killer was caught and had confessed to the killing of Kem Ley over an unpaid debt that Mr. Ley owed him. Nonetheless, many in Cambodia still believe that the government is behind the killing (Seiff, 2016). One cannot blame the Khmer people for feeling the way they do towards the

government because as Seiff notes in her reporting, “Cambodia has a history of rights and labor advocates being murdered with killers rarely brought to justice” (Seiff, 2016). To this day, many Cambodians still live in fear of the current government for what they can do and get away with. Although the current situation in Cambodia looks grim, there is still hope. After the death of Kem Ley, many in Cambodia especially the younger generation took to social media sharing what was happening and many started to condemn the government and the prime minister for not only the killing of Kem Ley, but also for the rampant corruption going on. As the older generation, those who survived the horror of Pol Pot’s regime, is passing away, a new generation of Cambodians is rising. Today in Cambodia there are more mobile phones than there are people. Not only that, the CPP system of “patronage and control, effective for so many years, began to break down. Ordinary people began standing up to demand higher wages and social justice from their government” (Strangio 2014, 36). The Cambodian people demand the government be more transparent in how they operate. In recent years, there has been a trend within the younger generation in Cambodia, who is more educated and more well versed in modern technology, to stand up for social justice and social reform in the country.

Ultimately, one can better understand the current political climate of Cambodia by examining the person of Hun Sen, how he was influenced politically and militarily at an early age due to the events that were going on around him. Not only that, but one can also understand the political climate of Cambodia by exploring the events of the Khmer Rouge takeover, and his role in it because the events of the Khmer rouge set the stage for him to rise to power. Finally, by examining the process of how he obtained and maintained power, one can see what is currently going on in Cambodia, because the tactics he used in the past are still being practiced today.

About Andrew Yinn

Andrew Yinn graduated in the Spring of 2018 with a major in general Anthropology. He plans to hopefully continue his education in the future by attending UCLA to study ethnomusicology with a focus in Cambodian traditional music.

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Traditional Knowledge in Tropical Forests

By: Lilibeth Tome

Traditional agroforestry systems are the key to preserving tropical forests, the Guarani of Paraguay provides us with a great ecological model of sustainability. The Guarani of Paraguay and Brazil have lived in the largest subtropical forest of South America for centuries. Richard Reed states in his book, *Forest Dwellers, Forest Protectors: Indigenous Models For International Development*, “In the last 20 years, new kind of productions have moved into the forest of eastern Paraguay” (Reed 2015, 87). Tropical forest areas are among the most diverse ecosystems. Deforestation along with monocrop agriculture and cattle ranching, are changing tropical forest ecosystems along with the Guarani traditional way of life. This paper will focus on the Guarani contemporary struggles, as well as their agroforestry system.

Historically, Paraguay’s main source of economic revenue has been agriculture. Agriculture accounts for 21.2 % (“Employment in Agriculture” n.d.) of the nation’s employment. In the early 1970s and 1980s the industry grew rapidly due to agricultural colonization. Most of the small farmer’s crops were produced for the local level and their own consumption. Now 98% of crop production is intended for export. Land tenure in the area works differently from the rest of South America. In the past, 49% of farmers occupied the land but did not own it (“Paraguay Land Tenure” n.d.). With agriculture colonization, the land was divided unequally; large landholdings own 79% of the land. With the rapid growing industry of cattle ranching and agriculture, not only did small farmers lose their rights to land tenure, but it also caused habitat loss. In the span of two years in 2010, “at least 1.2 million acres were bulldozed in the Chaco area” (Romero 2012). Cattle ranchers clear ten percent of the Choco forest to expand beef exports. Experts in the area believe that if deforestation persists at the same rate, the Chocó’s forest could be destroyed within thirty years (Romero 2012, 20).

In the Amazon, “frontier development is inextricably linked to the evolution of cattle ranching” (Pacheco and Pocard-Chapuis 2012). Cattle ranching is one of the leading factors that is driving a change in the landscape. Soybean production has a tremendous impact on the landscape, however cattle ranching destroys the forest beyond repair. Cattle ranching forces the removal of forest pasture, along with clearing large plots of land to make way for the cattle.

The “deforestation can also promote the expansion of some species.” (Campos-Krauer and Wisely 2011, 207). The capybara rodent lives throughout most of South America, and they have been restricted to live near standing water. However, with deforestation due to cattle ranching, in the past few years they have migrated to different areas. As a result, indigenous people are now being exposed to new pathogens. Along with the expansion of the capybara rodent, deforestation has also created a loss in biodiversity.

According to Emilio Bruna, “habitat loss and Fragmentation remain the greatest threats to the world’s biodiversity” (Bruna 1999, 139). Biodiversity loss is very common, and by adding the pressure from agricultural expansion and cattle ranching, it has accelerated the process (Fehlenberg et al. 2017). The deforestation of tropical forests has also caused major carbon emissions. The ecosystem has also taken a toll since mono-agriculture causes soil degradation. Soil degradation has caused the plants in the ecosystem to lose nutrients, as a result, the health of indigenous people has been negatively effected.

As previously mentioned, the destruction of the forest is causing loss of biodiversity. According to Simon Romero, scientists fear that the expansion of cattle ranching will prevent the discovery of new species. 25 % of all western medicine comes from the rainforest (Haenn, Wilk, and Harnish 2016). Species of animals such as the peccary and guanacos are also at risk of losing their natural habitat.

“Tropical forest are the biologically richest ecosystem on Earth” (Laurance et al. 2012, 290). With deforestation advancing quickly there has been a push from bio conservation groups to protect certain areas. Reserves have been created and indigenous people are being pushed into them. Furthermore, habitat

destruction, reduced hunting, and environmental changes have put the health of the people living in these reserves at risk.

Along with deforestation, indigenous people like the Guarani have experienced conflict over shared water resources (Hussein 2018). Four countries share the Aquifer System: Brazil, Argentina, Paraguay, and Uruguay. A few years ago, experts realized that the Guarani groundwater resources were a part of the aquifer system. This caused a legal battle between the government and the Guarani.

Additionally, the Guaranis were not only facing problems with the government, but were also experiencing problems with religious settlers in the area. According to Julia Sarreal, “for over a century Jesuit missionaries among the Guarani Indians of South America tried to Europeanize missions inhabitants” (Sarreal 2013, 101). Jesuits believed that for the Guarani to become civilized, they must practice mono-agriculture. Studies done in the missions have shown that the Jesuits imposed a rigid work schedule on the indigenous people. The indigenous people have also been forced to rely on domesticated cattle rather than hunting. Missions, deforestation, biodiversity loss, and the concepts of other groups of what it means to be sustainable, such as domesticating cattle rather than hunting, has affected the Guarani traditional way of life. Biodiversity conservation and deforestation is an international issue.

“Biodiversity conservation is a societal value not always shared by others” (Morrison 2016.) Take the Guarani for example, they use the slash-and-burn technique to make the soil richer for their crops. However, there is criticism surrounding this technique, because it is believed to be destructive. This among other reasons is why the Guarani face so many challenges, like being put into reservations and being forced to change their horticulture system.

“Since the early 1980s several approaches towards forest management, which include active participation of local communities, have been tried in tropical regions” (Wiersum 1997,1). The result of these approaches resulted in recognition of indigenous community models of forest management. A notable example

could be taken from the Guarani agroforestry system.

This report focuses on the Guarani of Paraguay, who have lost their territory over the past two decades. As cattle ranchers and industrial agriculture move into their territory, they have been forced into reserves as I have previously mentioned. I believe that the monograph written by Richard Reed, *Forest Dwellers, Forest Protectors*, does a wonderful job portraying not only their day to day struggles, but also at explaining in detail their approach to conservation.

First, I would like to try to help dissolve many stereotypes about indigenous people. Over the decades, some have created an image of indigenous people as ecological Indians. Second, the Guarani is not a “lost tribe,” they have been in contact with western culture since the time of Spanish conquistadors, and they have been trading goods for hundreds of years. They have traded items such as, timber, skins, plant oils, and tea. With their profits they usually purchase machetes and salt (Reed 2015).

The Guarani did not assimilate to western cultures. They remained independent by hunting and gathering in the forest. Nevertheless, due to outside pressures such as cattle ranching they have been forced into reservations. They do not have enough space for hunting, gathering, and shifting agriculture (Reed 2015). As a result, the Guarani is losing their traditional practices. They have also experienced a loss and shift of power to larger societies by being pushed into reserves.

The Guarani of Paraguay has over 300 communities. Their communities vary from small settlements, consisting of three to four houses, and large villages consisting of hundreds of families. Since 1976, the Paraguayan government has been trying to secure land for the Guarani. Nevertheless, their efforts have been fruitless, because the Guarani are losing their traditional way of life as others move into their territories.

“The Guarani can teach us better ways of using the forest” (Reed 2009). Over the years, the Guarani have earned a profit using their natural resources all while protecting the forest. The monograph that I have used in this paper describes the Guarani systems, as well as alternative models for using the forest. Using these

alternative models for conservation could prevent soil degradation, deforestation and in return carbon emissions. As Reed points out, protecting the forest not only protects the people who live in it, it also allows for economic development (Reed 2015).

“Indigenous people in the lowland South America have developed highly organized system to exploit the forest resources” (Reed 2015). The Guarani exploit their resources without compromising the integrity of their tropical ecosystem. The Guarani developed a production system around their ecosystem.

Guarani agroforestry does not replace the ecosystem around them, but it builds around it to mimic the structure and the process of the tropical forest. The diversity of the forest allows its residents to exploit certain niches. Their agroforestry is composed of three general activities, horticulture, hunting, and fishing. These activities are integrated to ensure that they have sufficient food throughout the year.

Guarani production requires two resources: human labor and physical resources. The integration of activities such as horticulture and hunting requires for the Guarani to allocate their resources carefully. The Guarani does not allow for one physical resource to conflict with another, “for example, they do not cut down the high canopy that protects the thin, tropical soil” (Reed 2015).

The Guarani plant their gardens in their back yards. Corn, beans, and manioc are the most important crops to the Guarani. They supplement their diet with peanuts, bananas, sweet potatoes, and sugar cane. Most of their crops are seasonal, although they plant enough manioc plant to have a sufficient supply throughout the year. Manioc is another term for cassava, it is a tuberous root and a major source of carbohydrates. Manioc provides the Guarani families with starch, however, it is low in nutrients, and therefore it must be supplemented with other foods.

Guarani gardening is sometimes called horticulture or shifting agriculture. Nevertheless, it differs from conventional agriculture because crops are hardly planted in the same soil twice. New plots are periodically cut throughout the forest. The Guarani usually begin clearing plots for gardening in July. Their gardening cycle

follow the wet and dry season. When a location is chosen, the forest is cleared with machetes and axes. The Farmers clear the forest in the dry season which usually starts in July through September, before the first rains, which start in October. The small trees are cut down, and the larger trees are left standing. The bark of the large trees is stripped near the base, killing the tree.

Clearing the plots is the men's responsibility and women are responsible for harvesting the products. The work is heavy, and since it is done in the dry season, it is hot as well. Clearing the plots becomes a family affair; families join forces and clear each other's plots in a rotation. Moreover, the Guarani also practice slash-and-burn techniques. After the trees are cut down, the Guarani set fire to the plots. This technique is effective because it releases nutrients into the soil, which is needed to have a successful season.

After the first rains arrive, the Guarani families head over to the plots and start planting. They plant their seeds with a simple sharpened pole in a shallow hole in the ground. After the seeds are planted, ash is spread and left on top of the soil, which acts as a fertilizer. "The Guarani mimic the forest's own process of recycling nutrients among plant populations in a closed system" (Reed 2015).

The Guarani's annual gardening cycle ends in August (Reed 2015), most of the harvest is depleted and families are forced to look for food elsewhere. By September, all that is left in the gardens are manioc and sweet potato. It is a challenging task for the Guarani to store food since animals such as deer eat what is left on the gardens, and insects attack the food that is stored in the houses. By the end of the gardening cycle, the forest reclaims the plots quickly. The Guarani communities have to move every couple of years because the soil near their gardens are depleted from nutrients after a certain amount of years.

The Guarani people obtain all the nutrients they need from the forest. To supplement the food from the gardens, which lack protein, they also hunt and fish by using traps to hunt their prey. They usually set traps near their gardens, because the crops in the gardens attract a lot of prey, such as deer and armadillos. The Guarani build their traps with local materials (Reed 2015), the traps are then suspended over a bed of corn or fruit to act

as bait.

In the past, hunters usually hunted with a bow and arrow, today only families with low-income use them. At least one family in the community owns a shotgun while other families borrow them and in exchange, they are generous with their meat (Reed 2015). The Guarani usually hunt at night by making camp on the top of trees and waiting for their prey.

The Guarani also like to fish, and their preferred method for fishing is to use poison. They use the bark of a tree called timbo (*E.timbouba*), and crush and pour it into the stream of water. Just like hunting, they also fish at night. Some men prefer to fish with hook and nylon simply because this method is quicker, and they can catch specific fish. The men usually fish with other men and relatives, the time is spent gossiping and telling stories. The fishing season starts in December, and they usually fish in the floodplains of the lowlands. By February, they start fishing in the lagoons.

Although the Guarani fish and hunt at night, they are reluctant to spend the entire night out. They believe that there are too many dangers roaming the night, such as animals, bad spirits, and other humans.

The Guarani agroforestry is shaped to their ecosystem. There are two aspects to their mode of production, first, nothing goes wasted, and second, they use the forest for a small amount of time allowing the forest to regenerate. The Guarani people exploit every niche in their tropical environment. Their gardening makes use of the dense flora. By burning the extra underbrush, they make fertilizer. Their horticulture is different from modern agriculture. They interplant many species, allowing them to use all the nutrients in the tropical soil. When flying over the area, Reed mentions, “25 years ago, I saw vast dark forest; the region appeared to be covered by a matting of thick green wool” (2015). However, as previously mentioned this has changed due to cattle ranching and monocropping.

As Reed explains in his monograph, it is not easy to answer why indigenous communities are under attack and losing their territories. The Guarani people have been in contact with European settlers for hundreds of

years. They have traded commodities from the forest with their neighbors. For the first time in centuries, the Guarani people are facing new threats. Deforestation in the Paraguay forest has as much to do with politics as with economics. Modern technology and fertilizers are contributing to the deforestation as well.

In conclusion, the Guarani traditional mode of production uses the best of resources in the tropical forest. It is hard to conclude if the Guarani will be able to overcome their current struggles. What could be said is that, the Jesuits were not able to force them to change their mode of production. It can also be said that they are still fighting for their rights, to keep their land and water.

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Lilibeth Tome is an Anthropology major concentrating in Biological Anthropology, graduating in the Spring of 2019. After graduation, Lilibeth plans to obtain her masters degree in Anthropology and work in the field of Archaeology.

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