

THE ROLE OF NATIVE HAWAIIAN SPIRITUAL PRACTICES IN SOCIAL
SYSTEMS AND ENVIRONMENTAL STEWARDSHIP

By

Christina Hornbaker

Advised by

Dr. Terry Jones

ANT 461, 462

Senior Project

Social Sciences Department

College of Liberal Arts

CALIFORNIA POLYTECHNIC STATE UNIVERSITY

SAN LUIS OBISPO

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Introduction

Every Indigenous community has a unique culture and worldview that has been adapted to suit their location. While many groups differ in their language, values, traditions, and customs, they all have important ties to the land. Native groups have survived for millennia by utilizing and adjusting to various aspects of their environment. There are many examples of Indigenous tribes attaching spiritual practices, myths, stories, and rituals to the land in order to reinforce and strengthen their terrestrial and in some cases, ancestral connections. The 2010 USDA Indigenous Stewardship Methods and NRCS Conservation Practices Guidebook explains that "indigenous cultures express and reinforce [their] relationship with the world through ceremonies and prayer." Moreover, many of these spiritual practices dictate other aspects of Native life, such as social systems, laws, art, and the local economy.

In North America, Swezey and Heizer (1977) outline the various spiritual and ceremonial practices applied by Indigenous tribes. For example, in Northern California, Native groups conduct seasonal fishing rituals to declare open season and increase fishing yields (Swezey and Heizer 1977). These "first-salmon" rituals served as conservation tools and ensured the continual spawning of salmon resources (Swezey and Heizer 1977). Other Indigenous populations utilize similar cultural rituals that are believed to produce desirable environmental conditions. Furthermore, across the Pacific Ocean, in Melanesia, Rappaport (1967) studied the Tsembaga Maring farming people of New Guinea. His research highlighted the importance of rituals and culture in resource management. While some scholars argue that rituals are "wasteful practices" (Rappaport 1967), I believe they are universal systems that help people connect to the natural world and feel safe in their environment.

The area of focus in this paper is the Hawaiian Islands. Hawaii is composed of eight main islands that lie within northern Polynesia. It is believed that Polynesians, specifically people from the Marquesas and Society Islands, migrated to Hawaii and created a new culture. These early residents created a community around the natural environment by establishing a spiritual connection and love for the land early on. Their belief in deities and ancestral spirits played a major role in their ceremonies, rules, social organization, and island culture. Similar to other Indigenous groups, Native Hawaiians viewed their environment as a familial being capable of expressing emotions and reciprocity, and therefore, was deserving of care and respect.

The purpose of this paper is to examine how Native Hawaiian spiritual practices played a role in social systems and stewardship practices. Lightfoot and colleagues (2013) suggest that more archaeological research is needed on traditional resources and environmental management practices. The authors point out that “landscape management practices... are subtle and not prone to leaving smoking guns in the archaeological record” (Lightfoot et al. 2013), which makes such sites difficult to document without ethnographic accounts. Due to this subtlety, I will mainly be pulling information from interviews or oral histories from Hawaiian descendants, early explorers and missionary accounts, ethnographers, and occasionally, archaeologists. I plan on outlining Hawaiian spiritual practices by discussing their deities, ceremonies, creation stories, and the idea of *mana*. I will then expand upon how those spiritual activities and beliefs are woven into social structures and environmental stewardship practices. Within social systems, I will summarize the ancient Hawaiian hierarchical structure and incorporate the layered restrictions imposed by the *kapu* system. As for stewardship practices, I will discuss how their everyday environmental operations—fishing, cultivating, and harvesting—revolved around sustainability and reciprocity. There were many systems in place that maintained the well-being

of the community and natural world, and I want to highlight those Hawaiian principles of love and respect for the land—*aloha 'āina*—throughout this paper.

Source Information

This paper utilizes a range of sources in order to correctly convey information about Hawaiian spiritual practices, social systems, and environmental stewardship. I will be citing a combination of books, articles, dissertations, documents, and one informal interview. The information presented throughout this paper falls into three categories: ethnographies, archaeological evidence, and early explorer and missionary accounts

Many of the sources utilized in this project will come from ethnographies. Seeing as this paper focuses on spiritual, social, and stewardship practices, the information detailing these activities will come from long-term residents or dedicated scholars who have spent their life's work understanding Hawaiian history through interviews and first-hand experience. Some notable anthropologists and authors whose work is featured in the project are Patrick Kirch, E.S. Craighill Handy, David Malo, and Martha Warren Beckwith. All of these people have spent considerable time in Hawaii and have constructed multiple publications on the various aspects of Hawaiian culture.

Moreover, the archaeological evidence presented throughout this paper will be minimal, but should not be overlooked. Archaeology presents important physical information about a group's material culture, however, the artifacts themselves give little insight into social organization or environmental management without additional understanding. Lightfoot (2013) admits the difficulty of studying resource and environmental management in archaeology but argues that archaeologists need to be more proactive in recognizing the role that landscape management practices played in prehistoric societies. Much of the archaeological information I

will be employing in this paper is outlined by Patrick Kirch, Mark McCoy, Julie Field, and Timothy Rieth, to name a few. These authors, and others, shed light on archaeological sites such as dwelling and temple remains, rock structures, faunal remains, fishing instruments, and more. As stated previously, this archaeological information will mainly be used to back up and provide physical evidence for oral and ethnographic accounts.

Early explorer and missionary accounts are important because they give historians insight into what life was like for Native populations at contact. Early visitors documented Hawaiian traditions, hierarchical systems, built environments, local plants and animals, and a host of other cultural markers. The sources I will be utilizing fall between 1778 with the arrival of Captain James Cook, through the 1820s with the appearance of Protestant missionaries. While early visitors took detailed notes of their time on the Hawaiian Islands, some early missionaries often spoke about Native Hawaiians in derogatory terms. For example, it was not uncommon for the local people to be referred to as "savages" or "heathens" (Ellis 1963). Moreover, their culture was oftentimes mocked for being dirty and degrading in the eyes of Europeans (Ellis 1963; Bingham 1969). Therefore, the vital information documented by explorers and missionaries must be taken with a grain of salt because their initial accounts are heavily laden with ethnocentrism.

Hawaiian Archaeology and Prehistory

Hawaii is the northernmost archipelago in Polynesia and is situated along the Tropic of Cancer. The Hawaiian Islands are 3800 kilometers away from the nearest continent and 1600 kilometers away from Midway—the next closest string of islands, making Hawaii one of the most isolated archipelagos in the world (Kirch 1985). These islands are a product of volcanic activity that occurred millions of years ago and gave way to the beautiful, ecologically rich islands we see today. The Hawaiian Islands consist of eight main islands; Hawaii, Maui, O'ahu, Kaua'i, Lana'i, Moloka'i, Kaho'olawe, and Ni'ihau, and at least a hundred other smaller islands, atolls, reefs, and sand cays (Kirch 1985). While the Hawaiian Islands formed millions of years ago, its human history only goes back a couple of millennia.

It was previously thought that the initial colonization of the Hawaiian Islands occurred around A.D. 300-600 (Greene 1993; Kirch 1996; McGregor et al. 2003). However, new radiocarbon analysis from the early 2000s yielded that colonization most likely took place closer to A.D. 800–1200 (Mulrooney et al. 2014; Rieth et al. 2011; McCoy 2007; Carson 2006), and possibly as late as A.D. 1400 (Field et al. 2011; Kahn et al. 2014). Hiram Bingham (1969), an early Hawaiian missionary, believed that based on their dialect, region, and customs, Hawaiians were most closely related to the Marquesas, Society Islands, Samoa, Navigators, or the people of New Zealand. Archaeologists were able to back up this claim by comparing early Hawaiian fishhooks and stone adzes to those found on the Marquesas and Society Islands. Archaeologists found strong similarities between the artifacts, leading them to conclude that early Hawaiians most likely originated from those places (Kirch 1985; 1996).

Chronology

Hawaiian ethnographies dating back to the time of initial settlement do not exist, therefore, early Hawaiian prehistory is best understood through archaeological evidence. Hawaiian prehistory used to be broken up into four periods, as outlined by Patrick Kirch (1985), but since the re-examination of radiocarbon dates on the islands, new Hawaiian chronologies have been suggested. The new time sequence begins anywhere between A.D. 800 and 1400 depending upon the island and the author cited. In the following paragraphs, I will utilize Mark McCoy's (2007) revised temporal history, based on Kirch's (1985) original periods. McCoy reviewed 175 radiocarbon dates from Moloka'i Island, located in the middle of the Hawaiian archipelago, and produced the following periods: Foundational Period, Early Expansion Period, Late Expansion Period, Protohistoric Period, and the Historic Period (McCoy 2007). These periods were created based on radiocarbon dates, noticeable technological improvements, changes in artifact typologies, and an increase in lithic structures.

The first period, known as the Foundational Period, took place from A.D. 800-1200. This period used to be known as the Colonization or Developmental Period (Kirch 1985) and is considered the time of initial settlement. It is the least well-documented or understood phase because there is little evidence that goes that far back in time. Only four samples on Moloka'i Island were dated to this period, three pieces of charcoal and one shell fragment. Moreover, McCoy acknowledged that no artifacts or human activity were associated with these samples (McCoy 2007). In addition, about 18 radiocarbon dates on Kaua'i Island are associated with this initial period (Carson 2006). Carson (2006) states that these early dates prove that there was human activity at multiple locations on Kaua'i Island between A.D. 1000–1300 and that the

presence of charcoal suggests that they began altering their environment, most likely by forest clearing, starting in A.D. 1000–1200.

The next stage is the Early Expansion Period which occurred from A.D. 1200 to 1400. Around this time, McCoy notes that an established population begins to take hold. There is evidence of increased exploitation of marine resources, such as fish, turtles, and sea birds, as seen in the coastal middens (McCoy 2007; Field et al. 2011). The archaeological record also exhibits evidence of limited wetland or dryland cultivation. Although the Hawaiian Islands had a host of native flora, they lacked food crops, so many agricultural seeds and plants were brought over by the first Polynesians. The first plants introduced to Hawaii were taro, yams, bananas, sugarcane, and tree crops (Greene 1993; Handy et al. 1972; Kirch 1996) which quickly became staples in the Hawaiian diet. Lastly, during this time, the use of basalt quarries on the island appears to increase, pointing to an expansion in adze and tool manufacturing (McCoy 2007).

The third period, the Late Expansion Period, was recorded from A.D. 1400-1650. According to McCoy (2007), this period saw large simultaneous changes in population size, the economy, and societal divisions. It is estimated that the population of the Hawaiian Islands at this time was probably several hundred thousand people (Kirch 1996). Field and colleagues (2011) noted that from A.D. 1400-1650 there was a greater diversity and frequency in housing structures on the Big Island which indicates that residents began to spread out to previously uninhabited areas. Furthermore, as population numbers grew so did the need for agriculture and broader subsistence methods. The archaeological record demonstrates that a greater reliance was placed upon agricultural yields and domestic animals, as noted by the increased abundance of terrestrial ecofacts (McCoy 2007). Furthermore, the impressive Hawaiian stonewalled fishponds were constructed at this time which were efficient forms of fish harvesting (Kikuchi 1979). Lastly,

social groups and the power hierarchy became more distinct during this stage. This increase in social stratification is predicted to be responsible for the increased construction of ritual sites and temples during this period (McCoy 2007).

The last prehistoric period in McCoy's series is the Protohistoric Period which occurred from A.D. 1650 and lasted until A.D. 1795. This is the last period of Hawaiian prehistory before explorers, missionaries, and colonizers arrived in droves to Hawaii and introduced a written language system (Kirch 1996). The archaeological record shows that this period generated the most deposits on the Big Island and Moloka'i Island (Field et al. 2011; McCoy 2007). During this time, there was agricultural intensification, large and diverse architectural construction, and increased fishpond assembly. Essentially, this last period of Hawaiian prehistory had the qualities and scale of a state-level society. In McCoy's temporal sequence he also includes a Historic Period from 1795 to 1900, but artifacts from that time are more modern and begin to stray from traditional Hawaiian assemblages, so that period will not be referenced in this paper.

The Archaeological Record

The archaeological record is observable on all of the major Hawaiian Islands and has produced a host of artifacts, ecofacts, features, and rock art. The Hawaiian Islands lacked metals such as copper and iron but they had an abundance of volcanic rocks that were tough enough to be used as tools. Some of the most common stone tools recovered were stone adz, files, saws, rubbing stones, awls, drills, scrapers, and choppers (Kirch 1985). Stone was also an important construction material used for manufacturing buildings, temples, roads, walls, and fishponds. Many Hawaiian structures like those at Lapakahi State Historical Park, Pu'uhonua o hōnaunau National Historic Park, and Mo'okini Heiau in Hawaii, are still standing today because of their

durability and meticulous assembly. Archaeologists have unearthed hundreds of these platforms, temple structures, shrines, and ancient fishponds throughout the islands which showcase Hawaiian engineering and their reliance upon the naturally abundant basalt rocks.

Archaeologists have also found that Native Hawaiians used materials from the natural plant environment to construct canoes, carrying poles, wooden plows, coconut cups, bark cloth, and rope. Shellfish and bone were also important resources because they could be used to make jewelry and fishhooks. Fishhooks were an important tool in Hawaiian society because fishing was one of their greatest forms of subsistence. Archaeologists can identify how fishhooks varied in size and classification depending upon the location and type of marine animals that were being pursued. The last important kind of material was bones. A variety of faunal bones have been found on the islands, and while many simply point toward the kinds of animals that were consumed, some bones were repurposed into fishhooks, bead jewelry, awls, picks, and scrapers (Kirch 1985). The archaeological record in Hawaii is vast and encompasses a broad range of material cultural evidence. Unfortunately, I will not be able to cover all of the Hawaiian archaeology in this paper, but it will be used occasionally to support ethnographic accounts and information.

Spiritual Practices

Hawaiian spiritual practices made up the basis of prehistoric Hawaiian life and culture. Their beliefs and ceremonies played a role in their social, political, economic, and environmental systems. Their spiritual beliefs and rituals were not—and in some cases are still not—well understood or respected by western scholars and populations. For example, William Ellis, an early Hawaiian missionary, believed that “the whole nation was without any religion” because it did not align with his idea of religion (Ellis 1963). Moreover, early missionaries often regarded Hawaiian religion as superstitious and therefore not a religion at all (Ellis 1963). In actuality, Hawaiians have always had a type of religion, but they often refer to it as spiritual practices. Hawaiian beliefs, stories, and ceremonies often varied from island to island and family to family considering all information was passed down orally, but generally speaking, they believed in deities and familial spirits, along with the power and influence associated with those spirits. Their religion helped them establish a deep connection to the land as well as a set of societal laws and procedures that maintained order in the community.

It is well documented that Hawaiians migrated to the Hawaiian Islands from Polynesia (Greene 1993; McGregor et al. 2003). These early voyagers brought aspects of their culture to the new islands— including their spiritual beliefs and practices. Therefore, Hawaiian spirituality and the laws surrounding it are an overlay of Marquesans, Tahitian, Samoan, and other Polynesian beliefs (Beckwith 1940). Having said that, Hawaiians adapted their beliefs over time and created a religious system that branched out from its southern Polynesian origins. They modified old stories to reflect the creation of the Hawaiian Islands and they renamed their gods to encompass their new land and language (Beckwith 1940). In the following sections, I will discuss the primary Hawaiian gods as well as popular creation stories that were shared

throughout the islands. Additionally, the idea of *mana* will be introduced and outlined as a kind of spiritual power that Hawaiians were believed to possess. *Mana* played a key role in Hawaiian spirituality and social systems as we will see later in the section.

Gods and Creation Stories

According to Hawaiian belief, the success of all human activities depended on maintaining the proper relations with the spirits, and the means for accomplishing this included shrines and temples, as well as rituals and prayers (Greene 1993). Many accounts of Hawaiian traditions, gods, and creation stories vary between family lineages, but the importance of spiritual connectedness was shared throughout Hawaii. Although there is much variability between prehistoric stories, most oral narratives can be tied back to how the Hawaiian Islands were formed and how the people came to be placed on the islands (Dudley 1990; Miike 2004). It is generally agreed upon that the Hawaiians had multiple kinds of gods that controlled different aspects of the natural world. According to Kepelino (1932), there are three different classes of gods; the great gods, guardian spirits, and things without a soul.

The great gods are those that are most commonly known and recognized in Hawaiian society: Kane, Kū, Kanaloa, and Lono (Kepelino and Beckwith 1932). These gods are termed *akua* (Flexner and McCoy 2016) and are each known for presiding over certain natural processes and often have temples and rituals dedicated to them. Kane is generally considered the highest ranking god (Kepelino and Beckwith 1932) and is known as the creator of nature, men, and life, and is associated with procreation (Greene 1993). In some accounts, Kane lived in darkness and then created light by dividing light and dark in half to make day and night— it was declared that there was nothing Kane couldn't do (Kepelino and Beckwith 1932). Following Kane is Kū, who

is commonly referred to as the god of war (Buck 1993). To a lesser extent, Kū is also known as the god of strenuous activities such as providing fruitfulness to the earth, overseeing politics, and providing power to the chiefs (Greene 1993). Next is the god Kanaloa who is associated with the ocean and death (Beckwith 1940; Green 1993). Not much is known about Kanaloa except that he is commonly linked with Kane. Legend says that Kane and Kanaloa represent the good and evil of mankind, with Kane being associated with heaven and Kanaloa representing the underworld (Beckwith 1940). The last god is Lono who is recognized as the god of peace, rain, agriculture, and fertility (Buck 1993; Greene 1993). Lono is especially important because he is associated with the annual Makahiki Festival in Hawaii (Beckwith 1940; Dudley 1990; Handy 1927). The Makahiki Festival is held during the rainy season, October to February, and is a period of religious celebration where Hawaiians partake in games and rituals to honor Lono (Beckwith 1940; Handy 1927). The legend of the Makahiki Festival is described in Beckwith's book, *Hawaiian Mythology* (1940):

Lono sends out two of his brothers as messengers to find him a wife on earth. They travel from island to island and finally in the Waipio Valley on Hawaii beside the falls of Hi'ilawe they find the beautiful Ka-iki-lani dwelling in a breadfruit grove companioned by birds. Lono descends on a rainbow and makes her his wife and she becomes a goddess under the name of Ka-iki-Tani-ali'i-o-Puna. They live at Ke-ala-ke-akua and delight in the sport of surfing. A chief of earth makes love to her and Lono hears him singing a wooing song. He is angry and beats her to death, but not before she has assured him of her innocence and her love for him. Lono then institutes the Makahiki games in her honor and travels about the island like a madman challenging every man he meets to a wrestling match. He builds a canoe such as mortal eyes have never seen since, with a mast of ohia

wood and a sail woven of Ni‘ihau matting and cordage twisted from the coconuts of Keauhou. The people bring heaps of provisions and pile them up before him. Forty men bear the canoe to the launching place, but Lono sails forth alone. His words of promise to the people are that he will return to them, not by canoe but on an island shaded by trees, covered over by coconuts, swarming with fowl and swine.

It is important to note that Lono was highly regarded for his agricultural contributions as well as his role in the Makahiki season. Beckwith's (1940) excerpt also sheds light on why Native Hawaiians may have thought that Captain James Cook was Lono when he first arrived on the islands— seeing as Lono promised to return to the Hawaiian people. However, this assumption has been recently contested between Hawaiian historians and Native residents so I will leave that interpretation up to the reader.

Returning to Kepelino's (1932) classes of gods, the next type of deities are guardian spirits, also called *‘aumākua*. These types of gods are familial spirits who have passed on and are often connected to individual families or natural objects (Dudley 1990; Flexner and McCoy 2016; Greene 1993; Kepelino and Beckwith 1932). It is common for families to have multiple *aumākua* and for them to set up temples in their honor or to provide offerings to certain plants or animals that they believe to be deceased ancestors. For example, if a Hawaiian family is known for being great fishermen then their *‘aumākua* will likely take the shape of a shark, turtle, eel, or porpoise (Greene 1993). Therefore, they will provide offerings to those animals in order to ensure a successful fishing trip or season.

The last category of gods is things without a soul (Kepelino and Beckwith 1932). Occasionally, some spirits did not possess another life form on Earth, instead, they retired to a

place referred to as *Po* (Dudley 1990; Kepelino and Beckwith 1932). When William Ellis visited Hawaii in the 1850s he noted that “some said that all the souls of the departed went to the *Po*, (place of night), and were annihilated, or eaten by the gods...” (Ellis 1963). The word *Po* means dark, night, or unknown in English translation, but its spiritual meaning is oftentimes difficult to discern (Dudley 1990). The word *Po* also relates to the beginning of the Hawaiian people because many creation stories start in darkness and throughout time or as a result of some higher power, light is created, and night and day are designed (Kepelino and Beckwith 1932).

As stated previously, the creation stories and chants of prehistoric Hawaii often vary depending upon the storyteller. The gods and spirits mentioned above were worshipped because of their contributions to the Hawaiian Islands and people. However, not all stories are alike and Hawaiian scholars frequently observe differences in how the gods are portrayed as well as how they participated in creating Hawaii and the Hawaiian race. When discussing their history, Hawaiians typically use the word *mo'olelo* (Beckwith 1940). A *mo'olelo* is an oral narrative about a true historical figure or event that is passed down through family lineages (Beckwith 1940; De Silva and Hunter 2021; Miike 2004). A *mo'olelo* can also take the form of an anecdote, local legend, or family story, but most often they are stories told about the gods and Hawaii's creation (De Silva and Hunter 2021).

One of the main creation stories in Hawaiian history is about Wākea and Papa. Their story has been shared, adapted, and added to for centuries and is considered one of the most popular legends on the islands. Their tale relates to the origins of Native Hawaiians and also the ruling class of chiefs. During his residence on the Hawaiian Islands, Hiram Bingham wrote down many Hawaiian accounts and learned about Wākea and Papa's story. His version provides background on Wākea and Papa's relationship as well as where they came from (Bingham 1969):

The two original occupants, Kahiko (the ancient) and his wife, Kupulanakahau, and the first two immigrants Kukalaniehu, and his wife Kahakauakoko. Wākea, The son of the former, and Papa, the daughter of the latter, became the progenitors of the Hawaiian race. Papa was considered as a goddess, and it was said of her that she brought forth the islands, and that an offspring from her head, became a god.

Wākea and Papa were considered early gods of the Hawaiian people. The pair were brother and sister as well as husband and wife. It was common practice in Native Hawaiian life to maintain one's status by keeping the power in the family, usually by means of incest. The story of Wākea and Papa continues after the birth of their daughter Ho'ohōkūkalani as shared by Martha Beckwith (1940):

Papa is the wife of Wākea. She bears a daughter Ho'ohōkūkalani who grows to be a beautiful girl. Wākea desires her but finds no way to gratify his desire without arousing Papa's jealousy. His *kahuna komoawa* (priest) suggests that he arrange tapu nights when husband and wife shall separate, and tell Papa that this is done at the command of the [gods]. Papa is unsuspecting and consents to the tapus. On the second of the tapu nights when he takes Ho'ohōkūkalani, he unluckily oversleeps, although the kahuna chants the awakening song, and Papa discovers the trick.

Wākea is attracted to his daughter and ultimately devises a plan, with the help of his priest and counsel, to wed her. As a result, Wākea issues a "tapu" (modernly called a *kapu*) to sneak away from his wife at night and lay with his daughter, Ho'ohōkūkalani. In most versions,

Papa catches Wākea and becomes very angry. The ending to the story has many different versions but Beckwith (1940) shares one version that explains the outcome of Wākea's actions:

Ho‘ohōkūkalani's first child by her father Wākea is born in the form not of a human being but of a root, and is thrown away at the east corner of the house. Not long after a taro plant grows from the spot and afterwards, when a real child is born to them, Wākea names it from the stalk (ha) and the length (loa).

In many Hawaiian tales, Ho‘ohōkūkalani's first child is either stillborn or delivered deformed and so she buries the child near her home. As she weeps over her deceased infant it sprouts into a taro plant. As will be discussed later, the taro root is one of the first plants cultivated in Hawaii and is a vital staple crop in Hawaiian agriculture. Subsequently, Ho‘ohōkūkalani's second child, the son that survived, was the man that was placed upon the Hawaiian Islands. Hāloa is considered the direct link between Hawaiian gods and men (Beckwith 1940; Bringham 1969; Ellis 1963). This creation story highlights the importance of the taro root as well as the sacred human relationships to the land and the rest of the natural world. It also showcases the significance of Hawaiian creation stories and how they have the power to shape beliefs and societal views. I will touch more on how these stories affect aspects of Hawaiian social structure and environmental stewardship in later sections.

Mana

The term *mana* was used predominantly throughout Oceania and has origins as well as regional variations that predate the occupation of the Hawaiian Islands (Tomlinson and Tengan 2016). In the Hawaiian language, *mana* is commonly defined as power, more specifically;

supernatural power, divine power, worship power, and a spiritual essence (Buck 1993; Flexner and McCoy 2016; Tomlinson and Tengan 2016). The term *mana* was central to traditional religious practices in Hawaii and was based on a reciprocal relationship with the gods, the original source of *mana*. The idea of *mana* was deeply tied to Polynesian religion, economies, and politics. *Mana* could be contained within objects, natural features, and people. The idea of *mana* within individuals was associated with sacredness and was primarily held by the ruling class of chiefs (Handy 1927). It was considered a life force that came directly from the gods, therefore, the greatest concentration of *mana* was placed in those who were genealogically linked to the gods; the chiefs or *ali'i*. Buck (1993) defines *mana* as:

The positive manifestation of spirituality and power— power that emanated from the gods and was channeled through the *ali'i*, power that was embodied in the force of nature, in human knowledge and skills, in procreation and fertility, in cycles of birth and death; and power that was evident in the social well-being of the community.

The idea of *mana* was fluid and could be obtained or lost through various means. As previously stated, chiefs held the greatest amount of *mana*, but so did the people they affiliated with such as priests, high-ranking warriors, and spouses. Chiefs possessed a lot of *mana*, but they could lose *mana* if they fraternized with lower-ranking people (Green 1993). For instance, it was a widely held belief that if the chief's body, personal items, or clothes were touched by commoners then his *mana* would be contaminated (Buck 1993; Green 1993). Moreover, the commoner responsible for this seemingly harmless act would likely be put to death to maintain a universal balance (Greene 1993). In contrast, working class individuals and peasants had

relatively little *mana* but could amass more if they engaged in activities that boosted power such as fighting in war or marrying up in social class.

Since the *ali'i* class was believed to possess the most power, the ruling class established a system of laws that protected them from losing their *mana*, referred to as *kapu*. *Mana* was the central concept that underlined the *kapu* system. The *kapu* system secured and protected the spiritual power of high chiefs by enacting strict laws that often involved the separation of classes and genders (Greene 1993; McGregor and MacKenzie 2015). *Mana* played an integral role in the *kapu* system as well as the Hawaiian social and political order, but both will be discussed further in the following sections.

Social Systems

The social layout of Hawaiian society has grown and adapted just like many other places around the world. Hawaii is currently a democratic state under the United States of America, but for most of its history, Hawaii was a hierarchically stratified society known as a chiefdom (Buck 1993; Dudley 1990; Ellis 1963; Handy et al. 1972; MacKenzie 1991). In this system, there was a chief or *ali'i* who presided over large areas of land as well as the people who resided and worked on that land. These ancient Hawaiians were divided up and placed into classes based on their genealogy, skills, level of *mana*, and loyalty. As much as there were class divisions there were also gender divisions that separated males and females from engaging in certain activities or occupying certain areas. Therefore, Hawaiian social systems relied heavily upon order, religion, and respect in order to maintain a societal balance.

Many explorers and modern scholars have compared prehistoric Hawaiian social organization to European feudalism (Buck 1993; Handy et al. 1972). It is similar in the sense that power was concentrated in the chiefs who held large island plots and allocated land out to families. The people and workers who resided on the land were expected to steward the land, maintain its fruitfulness, and pay tribute to the gods or chiefs by offering some of their harvests. However, unlike feudalism, Hawaiians were not bound to any one ruler or plot of land and were free to leave and occupy a different area if they felt that they were being treated unfairly by a chief (Handy et al. 1972). Although Hawaiians were free in a sense, they were still expected to follow religious and societal laws that ensured order throughout the community. These laws were referred to as the *kapu* system and will be discussed in the following section.

Social Order

When early Polynesians first settled on the Hawaiian Islands, they brought their chiefly hierarchy with them. Although a basic hierarchy was in place, their social organization was primarily based on communal stewardship and reciprocity between all community members. As time went on, however, the gap between chiefs and commoners grew larger and an obvious class division between chiefs and citizens began to take hold. Around A.D. 1400–1650 there was an obvious emergence of high chiefs and priests who sought to control more parts of the islands (McGregor et al. 2003; Buck 1993; Kirch 1996). This rise to power is demonstrated by an increase in temple structures, shrines, and religious images (Flexner and McCoy 2016). As a result, communities began to grow larger, more battles occurred over landholdings, and subsistence methods and technology expanded.

During the peak of Hawaii's chiefdom, the ruling structure was divided up into four classes according to Handy and colleagues (1972): chiefs (*ali'i*) and nobles (*konohiki*), priests (*kahuna*), commoners (*maka'āinana*), and outcastes or slaves (*kauwa*). Each of these classes had a specific role in society as well as specific rules they were forced to follow. Within each class, there were also subdivisions that resulted in some chiefs or families being ranked above others in society. I will expand upon each class in the following paragraphs and discuss how the *kapu* system played a role in reinforcing these societal divisions.

The first class of chiefs and nobles were the most powerful because they were believed to be direct descendants of the gods (Beckwith 1951; Buck 1993; MacKenzie 1991; Malo 1903; Miike 2004). There were different levels of chief status that correlated to their genealogy, spiritual power, and overall landholdings. For example, higher-ranking chiefs, called *ali'i 'ai moku* or *ali'i nui* (Buck 1993; MacKenzie 1991) were endowed with more *mana* than anyone

else because of their family history and marital union. As explained by David Malo (1903), “a suitable partner for a chief of the highest rank was his own sister, begotten by the same father and mother as himself.” Malo continues by revealing that if a sibling was not available for marriage, then another suitable partner was a half-sibling. Inter-marriage between brothers and sisters kept power in the family and also ensured that their sacred genealogy would be preserved. This practice was referred to as *moe pio*, "sleeping in an arch" (Beckwith 1940), and the more power that was concentrated in high chiefs, the more land and authority they held (Buck 1993).

Comparably, there were other chiefs ranked under high chiefs, who managed the land and the people within a district (Kapelino and Beckwith 1932). These lower-ranked chiefs were still believed to be descended from the gods but oftentimes married someone of a lesser rank and therefore did not hold as much *mana* as higher chiefs. These individuals were more likely to be responsible for smaller strips or sections of land, whereas high chiefs controlled multiple sections of land or even entire islands. Remains from figures of authority are marked in the archaeological record because they tend to be buried under sacred sites and temples and are sometimes found in association with tongue-shaped necklace ornaments which were only worn by chiefs (Kirch 1996).

Within the first class, there were also nobles or stewards who were seen as the second hand to the chiefs. Nobles or *konohiki* were considered chief stewards of the land and were responsible for ensuring the well-being of the commoners as well as the environment (McGregor and MacKenzie 2015). *Konohiki* were expected to enforce environmental *kapu* laws when necessary and also served as the tax collector during the Makahiki Festival (Handy et al. 1972; Steele 2015). Their position was usually rewarded to them as a result of their loyalty to the chief.

The second class in the Hawaiian hierarchical system was the priests (*kahuna*). Similar to chiefs, priests were considered men of high birth in society and were believed to possess more *mana* than the average person (Handy et al. 1972). Their job involved correctly memorizing and reciting prayers for various rituals because any mistakes could result in terrible consequences. Priests were required to receive training that made them superior and knowledgeable about ritualistic chants and prayers. Furthermore, they were known to be spiritual experts and as such, they had designated temples for prayer and ceremony. Priests often prayed to either Kū or Lono and conducted ceremonies to ward off evil spirits or bring about a desired result (Ellis 1963).

The largest group out of the four classes was the commoners. The commoners—also referred to as the *maka'ainana*—or the "people of the land," were those who worked and resided under the chief (MacKenzie 1991). These individuals were the fishermen, healers, craftsmen, and planters of the community. Commoners were responsible for completing day-to-day tasks that kept the community productive by ensuring all people were fed, protected, and healthy. As discussed previously, commoners could reside on the land as long as they were loyal to the chief and provided the necessary taxes during seasonal ceremonies. If they were unsatisfied with the chief's ruling they could move to a different district or island, but they would be giving up their land and water rights in the process (Handy et al. 1972).

The last class of people on the Hawaiian Islands were known as *kauwa* or slaves (Handy et al. 1972; Kepelino and Beckwith 1932). This class of Hawaiian people was considered landless servants who were confined to small reservations on the island. Outcasts were segregated from other commoners or chiefs and were forbidden to mix with others through intermarriage. Additionally, when a human sacrifice was required for a ritual or ceremony, slaves were usually offered to the gods first, assuming no criminals or captives were at hand (Beckwith

1940). These social lines were strictly drawn and if a slave stepped out of line they were usually killed. For example, if a chief slept with a female *kauwa* and did not know it, but found out later, that child would be put to death (Malo 1903). With that said, this class was easily recognized because they were usually marked with a tattoo between their eyes (Malo 1903; Handy et al. 1972).

In ancient Hawaii, people were placed in classes based on their lineage and power, but they were also separated by gender. In general, women were seen as unclean and thought to hold less *mana* than men (Handy et al. 1972; Kepelino and Beckwith 1932; Malo 1903). Therefore, males and females completed independent chores and were required to follow specific gendered laws. These ideas revert back to the story of Wākea and Papa because it is believed that men came from Wākea, the Sky Father who represents light; whereas women were associated with Papa, the Earth Mother who represents Earth and darkness (Buck 1993). This long-held belief led to the separation of men and women in many spheres of life, and most of the time unfairly placed the restrictions on the women. The laws enacted upon women, as well as society more broadly, will be discussed in the following section.

Kapu System

The *kapu* system was a set of sacred Hawaiian laws that separated things that were believed to be inferior from the things which were believed to be superior (Greene 1993). This system created specific rules and prohibitions around daily life that kept *mana* and the universe in balance. *Kapu* essentially reinforced societal rules, the power hierarchy, and protected *mana* from contamination. In E.S. Craighill Handy's book, *Polynesian Religion*, he offers the following

definition for the word *kapu*. It's important to note that in early explorer accounts and Hawaiian books, the term *kapu* is also written as "tapu," "tabu," or "taboo."

In its fundamental meaning tapu as a word was used primarily as an adjective and as such signified that which was physically dangerous, hence restricted, forbidden, set apart, to be avoided, because: (a) divine, therefore requiring isolation for its own sake from both the common and the corrupt; (b) corrupt, hence dangerous to the common and the divine, therefore requiring isolation from both for their sakes.

Handy goes on to express the importance of the *kapu* system in his book and notes that it was "the basis of social stratification of the strictest sort" and that many people were killed as a result of breaches in *kapu* laws (Handy 1927).

The origins of the *kapu* system can be traced back, once again, to the story of Wākea and Papa. It is said that *kapu* began when Wākea tried to cover up his infidelity from Papa by enacting a law that prevented them from sleeping together. Later when Papa discovers the truth she berates her husband, but he becomes angry and enacts a law prohibiting her from eating certain kinds of foods (Bingham 1969). Hence, traditional stories credit Wākea for starting the *kapu* system which remained in effect until 1819 (Buck 1993; Greene 1993; Malo 1903).

The *kapu* system encompassed many laws that varied in length and severity. Due to its spiritual origins *kapu* could only be enacted by sacred individuals such as chiefs and priests (Ellis 1963; Greene 1993). *Kapu* applied to all community members but in some cases was directed at specific groups of individuals or classes. According to Linda Greene (1993), the *kapu* system can be grouped into 3 categories: laws that applied to women, rules related to inherent rank and nobility, and governmental edicts that applied to all individuals.

Kapu restrictions that applied to women were permanent and affected their daily lives in multiple ways. For example, men and women were separated during meal times and were not allowed to prepare, cook, or serve each other food for risk of contamination (Greene 1993; Handy 1927). This law was so pervasive that most households had two ovens in order to keep their food separate, one oven for the males and the other for the females (Malo 1903). Furthermore, women were restricted from eating any food that was deemed sacred, such as pork, bananas, coconuts, and certain fish (Ellis 1963; Greene 1993; Malo 1903; Kepelino and Beckwith 1932). Women were also confined to specific buildings (*hale pea*) during their monthly periods or during child labor. A women's ability to reproduce was considered a source of pollution and was viewed as a dirty, yet sacred process. Therefore, they sequestered the women to *hale pea* during this time because they did not want to contaminate other dwellings that were not intended for those purposes (Buck 1993; Maikui 2021; Malo 1903; Handy 1927).

The next group of *kapu* rules was enacted to protect inherent rank and nobility. These regulations were permanent throughout society and were strictly enforced for the protection of the chiefs. As discussed previously, high-ranking officials had more *mana* than commoners because of their genealogical link to the gods; therefore, the *kapu* system was created to protect their spiritual power from coming into contact with common things such as the working class (Greene 1993). That being the case, chiefs were not allowed to be touched by other individuals nor were their possessions, such as their clothes, food, bathwater, or living area (Greene 1993; Buck 1993; Kepelino and Beckwith 1932). Due to these laws, chiefs and priests had dedicated eating and praying areas, they rarely walked through common places to minimize the risk of contamination, and they had strict marital requirements that maintained or elevated their sacred status (Greene 1993; Valeri 1985).

The last category of laws encompassed governmental decrees that applied to all community members. These rules were often imposed to regulate or preserve a resource, *konohiki kapu* laws, or denote an important occasion such as a birth, death, marriage, war, or festival (Handy 1927; Greene 1993; Steele 2015). These *kapu* laws ranged in duration from days to years and also had varying degrees of severity. Temporary *kapu* areas were usually marked by a white cloth or bamboo leaves, meaning that an area or item was restricted (Greene 1993; Ellis 1963). During these periods, no noise was allowed of any kind, no fires or lights were to be lit, and only certain foods could be eaten (Handy 1927). *Kapu* was also ingrained in everyday activities such as building, farming, and fishing. In this way, *kapu* regulations presented specific instructions on how to complete certain activities, what material would be used, the people who were allowed to work on the project, and any rituals that were needed before, during, or after the completion of the project (Buck 1993).

The *kapu* system was Hawaii's strictest and most sacred form of social law, but not all people followed them. Individuals who broke *kapu* were subject to harsh punishment and were either required to pay a fine, seek refuge, or could be punished by death (McCoy 2016). The most common punishment was death, which was often sought out in order to maintain a spiritual balance (Ellis 1963; Bingham 1969). However, individuals could seek out places of refuge (*pu'uhonua*) to avoid the death penalty. Places of refuge were very sacred areas that were oftentimes enclosed within large stone walls. After staying at the place of refuge for several days, a rule-breaker could emerge freely and dissolved of his or her wrongdoings by the gods. The largest *pu'uhonua* in Hawaii is located at Honaunau Bay on the Big Island and was built around 1450 (Kirch 1996).

Overall, social and political power was organized into a hierarchical system that was legitimized by genealogy and protected by *kapu*. Furthermore, *kapu* was derived from religious beliefs and authority which influenced social order by dictating appropriate public behavior within society. In prehistoric Hawaii, church and state were virtually one and the same, so these belief systems permeated all aspects of social life. As we dive into the next section, you will see that Hawaiian spiritual practices and social systems were also ingrained in their environmental stewardship practices and management techniques.

Environmental Stewardship Practices

Environmental stewardship is a popular topic of discussion in today's world. As climate change worsens and our planet's resources dwindle, we are forced to adopt conservation methods that go against our business as usual model. This need for change has caused researchers to look for more sustainable practices and solutions, which has led them to indigenous environmental stewardship practices. There are numerous examples of indigenous communities that have survived for millennia by using a system of environmental stewardship (Anderson 2005; Coddling and Bird 2013; Rappaport 1967; Swezey and Heizer 1977). Environmental stewardship practices are observed around the world but such practices have a noticeable presence in the lives of indigenous communities that incorporate nature into their culture. Many native groups consider themselves stewards of the land and have taken on the physical and spiritual responsibility of caring for their given environment.

Native Hawaiians have ancient principles relating to environmental stewardship, whereby they attach spiritual practices, myths, stories, and rituals to the land to reinforce and strengthen their connections to place. These practices were done to obtain harmony and universal balance, referred to as *lokahi*. *Lokahi* is an important concept that can be defined as the balance between nature, humankind, and the gods (McCubbin and Marsella 2009). Moreover, Hawaiians have a stewardship system setup within *kapu* called the *konohiki* system (Steele 2015). The *konohiki* system falls under the *kapu* category of governmental edicts, and it enforces sustainable methods of environmental conservation and preservation. This system regulated religious periods for planting, harvesting, fishing, and gathering resources from anywhere on land or sea. Not only did Native Hawaiians conserve resources to ensure the nourishment and success of future generations but they did it because they whole-heartedly believed that if they took care of the

Earth, it would provide for them. Hence, one of the largest guiding principles adopted by Native Hawaiians was to "treat all of nature's embodiments with respect" (Anderson-Fung and Maly 2002: 18). The Hawaiian outlook differs from industrialized societies in that they don't view humans as separate from nature, but directly related to it. Seeing as they viewed the natural world as family, it is only appropriate that they cared for it like it was their own flesh and blood.

Johan Enqvist and colleagues define environmental stewardship as "the wise or responsible use of natural resources... centered around care, knowledge and agency" (Enqvist et al. 2018). This definition highlights the words care, knowledge, and agency, which are all observable dimensions of Native Hawaiian stewardship practices. The care aspect refers to the feeling of attachment and responsibility to the environment, including personal values and societal beliefs that underpin stewardship. Care is an important facet because Hawaiians believed that as long as they took care of the land, the land would take care of them (McGregor et al. 2003). The knowledge dimension involves a deeper understanding of the species, resources, technology, or ecological systems that are being stewarded, as well as the ability to respond to and learn from them (Enqvist et al. 2018). The knowledge dimension often goes hand-in-hand with traditional ecological knowledge and indigenous knowledge systems that have been acquired and added to for generations. Lastly, agency refers to the abilities of individuals to collaboratively engage in stewardship action in ways that alter the local environment. An example of agency in Hawaiian prehistory is the communally followed conservation laws enacted by the chiefs and manifested in the kapu system. These three keywords make up the guiding principles of Hawaiian environmental stewardship practices which will be elaborated on in the following sections.

Ahupua'a

The main management system in Hawaii was the *ahupua'a* which was a land division system as well as a system of socio-economic organization. *Ahupua'a* were pie-shaped tracts of land that extended from the mountains down to the ocean (MacKenzie 1991; Steele 2015). They were set up this way to ensure that all communities had equal access to the mountains, oceans, and everything in between. Generally, the land was divided based on environmental zones. Kirch (1985) outlines how the top of the *ahupua'a*, near the mountain base, was a forested area where trees or other natural resources were cut down and harvested; the middle section was primarily for agriculture and usually contained fields of taro, sweet potatoes, and other crucial crops; lastly, the coastal zone was considered the living area where residential buildings, coconut groves, and canoe shelters were located.

The lesser chiefs and *konohiki* nobles were responsible for overseeing the *ahupua'a* while the commoners were in charge of cultivating the land and ensuring its productivity. Chiefs often used the *kapu* system to impose restrictions on the extraction of certain natural resources within the *ahupua'a* during designated times. Any excess resources that came from the land would be traded, used for ceremonial gifts, or offered up as tribute to the chiefs or gods (Jokiel et al. 2010). Overall, the *ahupua'a* land distribution system functioned as a resource allocation system that reinforced environmental conservation practices as well as socio-economic structures. Kaneshiro and colleagues (2005) sum it up by stating, "the ahupua'a system oriented Hawaiians in their relationships to others and local resources. Exchange of goods and services... developed interdependence, self-sufficiency, and a sense of place associated with deep environmental knowledge."

Subsistence, Stewardship, and Ceremony

Native Hawaiians utilized a host of subsistence activities thanks to the island's natural resource base and sub-tropical location. The Hawaiian Islands are home to thousands of endemic species of insects, birds, mollusks, ferns, seed plants, and trees (Anderson-Fung and Maly 2002; Kirch 1985), many of which can be used as building resources or potentially as food. Moreover, the island's tropical climate and location allow for coral reefs and atolls to thrive, which attracts a diverse array of aquatic mammals and resources. Not to mention, volcanic soils are well known for being rich in nutrients, making the Hawaiian archipelago a desirable place to grow food. All of these factors contribute to the range of daily nourishment practices observed on the islands. Native Hawaiians were primarily known as fishermen, but they also constructed fishponds, cultivated fields, and domesticated animals for food. These everyday tasks were associated with environmental stewardship practices because of the way these activities were completed—sustainably with care, knowledge, and agency.

All resource use was related to a specific ritual or ceremony that had to be carried out before, during, or after the resource extraction. Some of those spiritual practices will be explored later in this section, but generally speaking, all subsistence activities followed universal principles and procedures. Dudley (1990) outlines the general set of environmental ethics that were followed in ancient Hawaii. One of their most common rules was never take anything without asking. You always asked the gods for permission when harvesting a natural resource, even if it was a small task such as picking a flower. If you failed to ask then you would displease the spirits and could bring bad luck upon yourself or jeopardize the future yields of that resource. After asking and carefully extracting an item, it was common practice to leave something of value in return such as a food product or handmade artifact. These procedures ensured the

conservation of resources and instilled a spiritual connection to the environment. The following sections will look at the environmental stewardship of marine and land resources through the lens of spiritual practices and social systems. These practices illustrate how Hawaiians interacted with their environment depending upon the activity being completed and the resource being harvested.

Marine Resources. From the beginning Native Hawaiians understood the importance of water and water resources. Freshwater (*wai*) from mountain streams was considered a lifeline, while ocean water (*kai*) was considered a cleansing entity that refreshed the mind, body, and soul (Maikui 2021). Water was considered a life-giving resource that needed proper management and protection. Steele (2015) described water as "the perpetual life force that continuously flowed and connected the *‘āina* with the rest of the environment and all living things." It was this animistic belief and familial connection to natural resources that promoted environmental stewardship across the Hawaiian Islands. To paraphrase the words of Hawaiian Native, Dane Maikui (2021), regions can't live without water, just as humans can't live without blood pumping through their veins.

The main method of subsistence on the Hawaiian Islands was fishing. Archaeologists have found multiple fish bones, shell fragments, and fishing equipment associated with massive fishing operations at multiple sites on each island (Kirch 1985). Considering that the Hawaiian Islands are surrounded by water, it makes sense that the archaeological record showcases a vast collection of fishing artifacts and clear advancements in fishing technology. Not only did fishhook typology change over time, but Hawaiians also utilized different fishing methods and pieces of equipment based on the prey they were hunting. For example, fishhooks, nets, spears, trolling gear, and octopus lures were commonly used for offshore canoe fishing, while nets,

snare, and traps could be used on and offshore (Kirch 1985). Bingham (1969) observed Native Hawaiians diving off of their canoes to sport fish and cast fishing nets. Similarly, Ellis (1963) noticed that hand nets were the most common fishing instrument, followed by hook and line, and occasionally spears. Most often, the men exploited deeper reef regions and partook in offshore fishing while the women collected shellfish and seaweed in the bays (Kirch 1985; Steele 2015).

Any time a natural resource was captured or harvested, it was expected that a ritual or sacrifice was offered before, during, or after the specified task. In regards to fishing, most Hawaiian villages had a fishing shrine or a rock shrine known as a *kū'ula*. These shrines have been found on most of the Hawaiian islands (Kirch 1996) and it's where fish sacrifices were placed. The *kū'ula* stone is said to hold the fishing god, Kū'ula, and it was believed that this deity controlled all the fish in the sea and strongly influenced fishing yields (Maikui 2021). Therefore, the *ku'ula* rock was used as a sacrificial platform for the fishing god and the first fish of the season would be placed upon this stone; in return, the community would receive an abundance of fish that year (Maikui 2021). Additionally, some aquatic animals were seen as sacred and therefore could not be consumed. For example, sharks, turtles, and porpoises were considered the physical embodiment of personal gods (*'aumākua*), and therefore, were protected. Sharks were the most universally worshiped and some fishermen would feed them to hopefully boost their fishing endeavors (Greene 1993; Handy 1927). These fishing practices reinforced the idea that all organisms were treated respectfully and that most fishing ventures were not undertaken unless they received permission from the appropriate gods or put forth an offering to show their appreciation.

Another subsistence practice that relates to fishing is the construction and use of stone-walled fishponds. Hawaiian fishponds and aquaculture were common forms of fish

harvesting on the Hawaiian Islands. These ponds were built by erecting seawalls, known as *kuapā*, around the bay through smartly interlocking lava rocks on top of one another. Most fishponds contained a channel with a sliding gate, which allowed certain fish to pass in and out of the pond depending upon their size. Kirch notes that over 400 of these fishponds were constructed during the prehistoric era and most were found on Kaua'i, O'ahu, Moloka'i, and Hawaii (Kirch 1985). Fishponds were particularly handy because they could provide fish, crustaceans, and seaweed year-round and could do so efficiently. While the building of fishponds was laborious work, the engineering that went into them made it a successful resource harvesting tool.

There were many spiritual practices related to the construction phase, as well as the harvesting time. Some people were tasked with looking over and cleaning the ponds, while others were responsible for performing rituals to please the gods and increase fishpond yields (Kikuchi 1979). Hawaiians held spiritual relationships with their fishponds and just like with fishing, they believed that the fish within them were physical manifestations of *'aumakua* (Steele 2015). Therefore, *konohiki kapu* was often placed on fishponds, especially during spawning season, to prevent the overexploitation of marine resources (Steele 2015). Many of the sacred ceremonies associated with the fishponds were similar to previously discussed fishing ceremonies thereby the first fish caught was oftentimes offered to the gods instead of consumed (Steele 2015). In other instances, the chief would eat the eyeballs of the first fish to strengthen the connection with the fishing god (Dudley 1990). It is through such construction projects and spiritual rites that Native Hawaiians were able to sustainably maintain their marine resources and population numbers into historic times.

Land Resources. Hawaiians had strong ties to the land and appreciated its giving nature. All natural resources were thought to originate from the gods, so it was believed that people, plants, and animals were all placed on Earth to care for each other and Mother Earth. The land was essentially part of their family or *'ohana*. This love and affection for the land was termed *aloha 'āina* and Native Hawaiians tried to emulate this outlook by partaking in conservation practices as well as abiding by strict environmental *kapu*.

On their own, the Hawaiian Islands are teeming with life, but in general, they tend to lack enough edible plant foods to sustain a large human population. Therefore, many of the notable food crops that we think of today were actually introduced to the island by southern Polynesians at the time of settlement (Handy et al. 1972; Kirch 1996). These plants include taro, sweet potato, yam, banana, sugarcane, breadfruit, coconut, melons, gourd, bamboo, and arrowroot (Handy et al. 1972; Kepelino and Beckwith 1932; Kirch 1996). Archaeologists have noted that many of these crops were grown in the middle of the *ahupua'a* along flat, nutrient-rich areas. Depending on the nature of the site, some plant remains have been recovered from archaeological matrices, but often the only thing preserved is charcoal (Kirch 1985).

Many crop foods were associated with specific gods so they could be occasionally restricted or conserved under *konohiki kapu* (Handy et al. 1972; Malo 1903; Valeri 1985). Moreover, sacred crops, like taro were seen as extended family so they were planted and treated with care (Handy et al. 1972). Thinking back to the story of Wākea and Papa, their daughter's firstborn child was buried and later sprouted into a taro plant (Beckwith 1940). This story led to the sacred practice of burying a women's umbilical cord and placenta immediately after childbirth and then planting a taro root on top (Maikui 2021). This spiritual act was seen as a symbol of the Hawaiian's connection to the Earth. In a 2021 interview with Dane Maikui, he

explained that humans are connected to all aspects of the environment like a child who was once connected to its mother by an umbilical cord. This was how Hawaiians historically viewed their world and why they had such strong ties to the land. To further emphasize this point, the Hawaiian word for family, *'ohana* actually comes from the word *'oha*, which means the root of the taro (McGregor et al. 2003). Thus, Hawaiian families are similar to taro in that they come from the same root.

Not all plants were associated with gods, but they were believed to share a familial connection. Therefore, all agricultural operations demonstrated a deep respect for the land and obeyed strict stewardship practices. Generally speaking, rituals were conducted before each field was cultivated. This involved asking the gods for permission before entering the area or disturbing the soil (Anderson-Fung and Maly 2002). This act was seen as a common courtesy, just as you would not barge into somebody's house without permission, you would not enter natural areas without permission. Furthermore, Native Hawaiians believed that spoken word was the highest form of cultural expression and created a spiritual link between place and deities; thus, many Natives recited chants to the Earth as a way of strengthening that spiritual link. Once a resource had been planted it was then harvested sustainably—meaning you only take what you need—and an offering was usually left behind as a sign of gratitude (Dudley 1990).

These agricultural and aquatic ceremonies described above incorporate Hawaiian spirituality and beliefs, *kapu* procedures, and traditional stewardship practices. For an Island society such as Hawaii, it is important to maintain natural resources in order to ensure future productivity and the success of ensuing generations. Most people around the world today understand the importance of the natural environment but Native Hawaiians went a step above in protecting it, caring for it, and securing its fertility. Their stewardship methods showcase the

importance of indigenous knowledge systems as well as what can be achieved when the Earth is viewed as more than a commodity. The Indigenous Stewardship Methods and NRCS Conservation Practices Guidebook defines indigenous stewardship methods as

The physical, spiritual, mental, emotional, and intuitive relationship of indigenous peoples with all aspects and elements of their environment. These relationships include, but are not limited to, a combination of knowledge, experience, tradition, places, locality, all living and nonliving things, skills, practices, theories, social strategies, moments, spirituality, history, heritage, and more...” (USDA 2010: 13).

Native Hawaiians beautifully showcase their care, knowledge, and agency through subsistence methods, spiritual beliefs, reciprocal relationships with the land, and their survival into the present day. Their subsistence methods and conservation measures are a testament to their traditional knowledge and widespread cooperation. While many Hawaiians have lost touch with their environmental and ceremonial practices they continue to care for the Earth and uphold the principle of *aloha ‘āina*.

Conclusion

Native groups have survived for thousands of years by tending to various aspects of their environment, mainly through means of religion and stewardship. To quote the USDA Guidebook (2010), "this existential relationship between man and his environment has been going on ever since man was made a steward over the environment." There are many examples of indigenous groups attaching spiritual practices, stories, and ceremonies to the land in order to reinforce the social hierarchy and strengthen their terrestrial connections (Anderson 2005; Codding and Bird 2013; Rappaport 1967; Swezey and Heizer 1977). These practices have been widely documented across cultures, but few have given native populations the credit and respect that their culture deserves.

Hawaiian spiritual practices historically interacted with social systems and environmental stewardship practices to create a culture of care, respect, and conservation. Spiritual practices were the pinnacle of ancient Hawaiian society and influenced how Native Hawaiians viewed the world. Hawaiians were deeply connected to their environment in a way that can only be described as familial or spiritual. Thus, all living creatures were appreciated because they were said to be related to or made from the gods, and therefore, deserving of respect. This closeness to deities determined the sacredness of certain organisms as well as the social order in Hawaiian society. Chiefs possessed more *mana* so they had the authority to enact *kapu* laws that dictated society and spiritual practices. These sacred laws maintained order and preserved natural resources within communities. It is through these decrees and acts of conservation that stewardship practices were able to develop alongside care, agency, and knowledge.

There have been many Hawaiian practices and topics discussed in this paper, but the overarching message relates to the importance of spiritual practices and how they can influence

and shape society, specifically in terms of social organization and environmental stewardship. In this way, the Hawaiian Islands are not unique when compared to other Indigenous groups around the world. However, they differ in terms of what they believed in and how they chose to incorporate their religion into their culture. I agree with Lightfoot (2013) and believe that more studies should look into prehistoric landscape management practices, as well as the religious beliefs and ceremonies that support those activities. Western scholars need to acknowledge the accomplishments of Indigenous societies and honor their traditional knowledge by incorporating it into modern literature. I think that if more countries integrated principles of *aloha ʻāina* into their culture, the world would be a better and more connected place.

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