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### Ruth Benedict, "Configurations of Culture in North America"

Abstract By Mario Castillo

In Configurations of Culture in North America, Ruth Benedict explains that cultural practices are based on core values that lay the foundation for social world views, and applies this insight to the American Southwest. Benedict utilizes Friedrich Nietzsche's philosophical definitions to explain the cultural dichotomy of the native people she encounters. The Pueblo are labeled as Apollonian because their worldview emphasizes social balance. In contrast, the surrounding *Dionysian* groups have worldviews that are indulgent. The contrasting difference between the two groups is shown in death rituals. The Pueblo emphasize rapid forgetting of the dead, while the Dionysian groups engage in more dynamic and prolonged behavior towards mourning their dead. Benedict adds depth to her theoretical framework by introducing realist and non-realist points of view which are also products of core values. The Dionysian Plains and Apollonian Pueblo have realist worldviews because their core values produce less superstitious causal connections to danger, which she defines as fear constructs. Therefore, Benedict's approach may provide insight into the collective psychology of society, as well as insight into the individual who "is not capitalized in his culture," which she labels as the deviant. Finally, Benedict admits that her framework lacks substantive connections to material culture because of insufficient archaeological evidence;

notwithstanding, her theoretical framework considers culture as being more than behavioral traits fashioned by diffusion.

### A.R. Radcliffe-Brown, "The Comparative Method in Social Anthropology"

Abstract By Omar Toledo

In the article, Radcliffe-Brown argues that anthropological work should examine social life in search of generalizable principles. He dismisses Boas' attempt to reconstruct a historical record from a culture's traits as unfruitful, because similar traits can be found among cultures where there was never meaningful historical contact. Radcliffe-Brown admits that Boas' goal of comparing traits across cultures is more beneficial.

To illustrate, Radcliffe-Brown presents the organizations of tribes in New South Wales, the American Northwest, and Australia. He explains that each society splits its members into two groups, each group is identified by either an eagle-hawk or a crow. Radcliffe-Brown adds that each society traces lineage through the mother, and marriageable partners must be found in the opposite group. Radcliffe-Brown argues that "imaginary history" cannot explain these similarities; a unifying principle is at work.

Radcliffe-Brown notes that all cases include animals thought to be oppositional in nature and/or legend. He provides tales of thieving crows, fire wielding hawks, and quarreling wombats in which the society has applied human ideas of friendship, antagonism, and obligation to these animals. Radcliffe-Brown concludes that in all cases where people seek partners outside of their own group, these groups will

associate the other with opposition. He argues that relation through opposition serves society in providing appropriate channels for behavior. Radcliffe-Brown provides the example of Marquesas tribes where the family of the bride symbolically steals from the family of the bridegroom, and the bride is taken in ritual retaliation.

Radcliffe-Brown insists that historical particularism cannot sufficiently provide generalizable conclusions about social institutions, and that more scientifically rigorous methods should be utilized.

### Pierre Bourdieu, "The Berber House of the World Reversed"

Abstract by Randall Victoria Parsons

Bourdieu describes the interior of the Kabyle house itself as a representation of the physical and social world. The house is organized according to a set of homologous oppositions that exist in the natural world as well as the home, such as fire to water, day to night, male to female, high to low.

Following this structure, the house is split into two parts of opposition. The larger part of the home is reserved for human use, and is the place of fire and its cultural materials, such as lamps and kitchen utensils, and the place of cooking and weaving. This is also the place of honor- the male point of honor, the protector of female honor, and the honoring of a guest. The darker, lower part of the house is reserved for animals, and moist, green, or raw items, such as jars of water and fodder. It is also the place of natural activities, such as sleep, sex, giving birth, and death.

Bourdieu explains that the physical layout of the house is an inverse reflection of the outside world. The dichotomy between the internal and external world is seen in the context of female to male. The house is defined from the outside view of the male as the place from which men exit. The internal house is always subordinate because it is a reverse reflection of the outside world, a view from the inside looking out. This is the realm of the female. "Man is the lamp of the outside and woman is the lamp of the inside."

Bourdieu's description of the Kabyle house is representative of the physical and social world of its inhabitants. The organization of the home according to natural oppositions is based on the natural world and is also largely represented by the male to female dichotomy.

### Pierre Bourdieu, "The Berber House of the World Reversed"

Abstract by William Lucas

Pierre Bourdieu advocated that culture is the interplay between a system of rules, individual actions, and the historical circumstances and traditions that shape them.

Additionally, culture functions on *habitus*, the schemes generated by history, and *doxa*, the experience where the natural world and social realms correspond; both of which exist through *practice*, which is the application and functioning of practical knowledge.

The Kabyle house, which is divided and rests on a hillside, expresses a series of oppositions and associations. For instance, the lower part of the house is associated with the natural world—like water, childbirth, and livestock. Conversely, the upper part of

the house is associated with the cultural realm—like fire, light, and the large weaving loom (which is the women's work inside of the house). Bourdieu suggests that the Kabyle, without coincidence, extrapolate similar associations to the public world (the full light of day), associated with men, and the domestic realm (the secrecy of night), associated with women. The house essentially represents the opposing nature of the universe. Additionally, the interior of the house mirrors the external world. For example, the East is the direction most favored and looked towards, since that is the direction in which the sun rises. However, because the ascending sun shines on the West wall in the house, the western wall is called "the wall of light." Such inverses make it possible for the Kabyle to exit "on the right foot," regardless of where they exit.

Bourdieu argues that the relationships between men and women (*habitus*), and naturalistic associations with them (*doxa*) exist through practice. Ultimately, men and women create all their culture through practice.

### Pierre Bourdieu, "The Berber House of the World Reversed"

Abstract by Gregory Altounian

Pierre Bourdieu's *The Berber House of the World Reversed*, argues that the Kabyle house is a representation of both the physical and social world. The Kabyle house is rectangular in shape divided in two different sections by a small latticework half wall. Of the two halves, the larger one is for human use and the smaller section is reserved for animals. Above the smaller section is a loft where the women and children sleep. The threshold faces east allowing the sun to enter directly into the home. On the

wall opposite to the threshold stands the weaving-loom or wall of light. The weavingloom section is the cultural area of the home. Bourdieu associates the weaving-loom as the honored wall. The wall opposite to the weaving-loom, nearest to the door, is called the wall of darkness, a place of lesser status associated with sickness or death. If an individual is received in a poor manner or has behaved badly, he or she will be made to sit in front of the wall of darkness. Bourdieu claims these relationships of opposition are "expressed through a whole set of convergent signs which establish the relationships at the same time as receiving their meaning from them." Bourdieu argues the house is organized by "homologues oppositions: cooked:raw; high:low; day:night; male:female and culture:nature." Bourdieu argues that oppositions that exist within the home also mirror the rest of universe. The external world, which is described as being predominately masculine, consists of public life and agricultural work. For women, their universe consists of the worlds of their house, intimacy, and privacy. Bourdieu describes the house as a reflection of the external world, a reflection uncover-able only when social organization, history, and personal action is accounted for.

### "Symbols as Manifestations of Human Thought"

Essay by Jessica Williams

Anthropology is the most humanistic of the sciences and the most scientific of the humanities.

Alfred Kroeber

The field of anthropology faces challenges within its own discipline as a result of the division of analytical approaches employed by anthropologists. Methodologies have divided theorists between those who insist that anthropology should be studied as a natural science, and those who assert that anthropology should be practiced as one of the humanities. Some anthropologists, who argue for the natural science method, apply law-like conditions to draw generalized conclusions. Others assert that anthropology be practiced as one of the humanities, employing cultural relativism while taking historical information into account. There also exists those "in between," whose theories and approaches fall between the natural science methods and the humanities methods.

Determining which approach best explains social and cultural phenomena necessitates an analysis of the three theoretical approaches in question reflecting the conflicting positions. In examining the work of Claude Levi-Strauss, who takes a scientific approach, Victor Turner, whose theoretical approach is most closely aligned with the humanities, and Sherry B. Ortner, whose methodology falls in between. In analyzing their methodologies, I will assess which theory is best applicable in understanding the methods by which different cultures categorize symbols.

Claude Levi-Strauss, the structuralist, maintains that anthropological study be conducted as a natural science. Structural anthropology, as defined by Levi-Strauss, is

the study of "institutions considered as systems of representation," drawing on the "unconscious nature of collective phenomena."

In his work *The Structural Study of Myth*, Levi-Strauss addresses the innate nature of the human mind to organize information similarly throughout the world through myths. He states that approaches employed by his predecessors were on the right track because they were psychologically oriented, but their works were no longer substantial because their research was outdated and were no longer contemporary. He contends that in the past, different methodologies have reduced the study of myth to "an idol play or to a coarse kind of speculation."

Wanting to transition away from the deceptive false dilemma of understanding myth as either "platitude or as sophism," Levi-Strauss disputes scholars who argue all of mankind express common feelings through mythology, or use myth to address unexplainable phenomena. He argues that the shift in analytical strategies from observing myths as explanations of the "natural or cosmological" towards a sociological and psychological analysis, is riddled with contradictions.

Levi-Strauss proposes that the inquiry of myth be approached similarly to the study of linguistics. Common elements found in cultural myths hold specific meaning and purpose for the culture that has constructed them. In this case, as with language, commonality results from a hardwired template for construction of socio-cultural universe. Levi-Strauss argues that the human brain is inherently predisposed to organize information, compartmentalizing perceivable phenomena into segments of space and time. The organization and categorization of kinships and myths are not constrained by the laws of nature, in spite of this, similarities are found all over the

world. Levi-Strauss attributes these similarities to the human brain's natural inclination to group phenomena in opposition.

In contrast to the application of scientific law-like approaches, Victor Turner explains cultural phenomena from the perspective of the humanities. He argues that symbols are tools used to communicate important social and religious values.

Describing symbols as "objects, activities, words, relationships, events, gestures or spatial units," Turner interprets symbols as "originating in and sustaining processes involving temporal changes in social relations, and not as timeless entities." He states that symbols are the smallest unit of a ritual, which contains condensed ritual information; representing its specific components. He defines ritual as "prescribed formal behavior for occasions not given to technological routine, having reference to beliefs in mystical beings and powers." Asserting that religious behavior, ritual, and symbols are interrelated, Turner regards ritual as a mode for storing symbols that convey authoritative information and that express the desired religious and social action.

The methodology that appears to fall in between the sciences and humanities is employed by Sherry B. Ortner. In analyzing significant symbols, Ortner argues that key symbols are "the symbolic units which formulate meaning." Analyzing and interpreting relevant symbols, Ortner contends, is a vital tool for understanding cultures. Symbolic systems provide the framework for successful and appropriate action in response to problems of the human condition.

Ortner argues that social organizations are constructed on symbols that communicate specific values and ideals which help maintain social coherence and

order. These are key symbols. She describes two ways to distinguish which symbols are key. One way is by analyzing a figure or image within a culture and deciphering its underlying elements, cognitive distinctions, and value orientations. The second way is by determining if the object 'X' meets one or more of the criteria proposed by Ortner. Ortner's "indicator" criteria are: the natives tell you 'X' is important, 'X' evokes a positive or negative response, 'X' appears in more than one context, there is greater cultural emphasis around 'X', and the existence of rules and sanctions governing the use of 'X'. Ortner distinguishes between the types of key symbols by categorizing them as either summarizing symbols (symbols which sum up complex systems of ideas) or elaborating symbols (symbols which help make distinctions). She explains that elaborating symbols can have conceptual power, which provides a means of ordering the world, or action elaborating power, that provides the framework for successful social action. Elaborating symbols have two subsets: root metaphors (the synthesis of complex system of ideas which conceptualize power) and key scenarios (models for ideal behavior). She contends that in better understanding cultures, key symbols are implicit in conceptualizing human social action, though the interpretation of these symbols varies by culture. Ortner argues that symbols are universally found in every society, making her theory a testable thesis which can be a cross-cultural method of analysis. Interpreting key symbols while applying systematic laws in the analysis of cultures, aligns Ortner's theory with both the humanities and science.

Each of the methodologies proposed by the aforementioned theorists are valid in their arguments. However, not all the methodologies are applicable in every instance. I personally find Levi-Strauss's theory to be too abstract for practical use. I do find

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Turner's method to be useful and insightful, however, Ortner's approach of analyzing cultures through the symbolic interpretation while systematically applying rules is a more applicable and holistic approach. Ortner's methods allow the researcher to maintain objectivity while still applying critical thought processes in anthropologic inquiry, which permits researchers to critically interpret information to better understand cultures within context. Symbols convey important values and help maintain societal order and cohesion. Understanding why and how cultures categorize symbols helps researchers gain greater holistic insight into varying cultures and societies. Symbols are a crucial tool in academia's appreciation of cultures.

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### "Determining Factors of Social Change: Science or Humanities?"

Essay by Eileen Pérez

The question of whether anthropology is more of a science or one of the humanities has sparked an ongoing and controversial debate. There are those, like Marvin Harris, who claim that anthropology is more scientific and is based on infrastructure of modes of production and reproduction that determines the organization of a culture. There are others, like Sherry B. Ortner, who believe anthropology to be more of a humanities, based on the belief that a set of core values determines the order of a culture. Others, such as Clifford Geertz, however, form anthropological theories that have characteristics from both the humanities and scientific perspective. The work of Marvin Harris, Sherry B. Ortner, and Clifford Geertz focuses on determining social change. This paper will examine theories of social change that determine whether anthropology is a science, one of the humanities, or if it falls somewhere in between.

Heavily influenced by the works of Karl Marx, Marvin Harris exemplifies his scientific approach towards anthropology through the analysis of infrastructure that explains social patterns. Harris argues that the collapse of the the Soviet Union is due to ineffective modes of production and reproduction. Harris acknowledges the need for infrastructure (modes of production and reproduction), structure (domestic and political economies), and superstructure (ideologies), and recognizes that these three structures unequally influence sociocultural changes.

The main reason for the breakdown of infrastructure was caused by the demand to adapt to the control of "command economy." Separatism (dissociation of republics) within the Soviet Union was caused by uneven distribution of resources. Acknowledging the primacy of infrastructure as being compatible with Marxist philosophy, Harris concludes that cultural materialism does not demand a decrease of freedom or the removal of human agency.

In her article, *On Key Symbols*, Sherry B. Ortner argues that all cultures contain symbols that represent society and are used to order social life. Key symbols indicate what informants of that culture identify as important. These symbols can be positive or negative factors of their culture, reoccurring elements within varying contexts, or the elaboration and restrictions of different cultural aspects. Root metaphors and key scenarios are a set of distinctions that Ortner makes. Root metaphors help participants make sense of their surroundings. Key scenarios are represented through a set of actions that provide participants with a successful way of living within a culture. Ortner uses the American notion that in order to be successful, one must work hard and be persistent.

The significance of key symbols determines the stability of a society. Social change can derive from the placement of new meanings to symbols. Social relationships change as new configurations manifest and people try "to find meaning where one did not find it before." Furthermore, Ortner argues that it is not just a matter of the irrelevancy of the meaning but rather the understanding of people's reaction and ability to cope with new social phenomena. In order for people to

explain certain aspects of their lives, Ortner states that key scenarios "give...a society its distinctiveness and coherence."

Written in an article in the American Anthropological Association journal, Clifford Geertz argues that functionalist explanation of social change is inadequate due to the lack of correlation between social structure and cultural meanings, and its failure to incorporate historical data. He defines culture as the system of meaning and symbols, and social structure as the way people are organized based upon their relationships. Geertz asserts that it is the discontinuities between cultural and social integration systems that are causes of social change. The difference between culture and social structure is the variation between "logico-meaningful integration" (unification of style, reasoning and value), which is associated with culture, and "causal-functional integration" (interrelated parts of a whole), which is linked to social organization.

According to Geertz, distinctions in political and religious beliefs emphasized the division within social structure. The rise of nationalism, Marxism, and Islam weakened the traditional peasant social relations because these movements rejected traditional peasant customs. In the town of Modjokuto, the funerary ritual of a ten year old Javanese boy becomes disastrous when the religious practitioner refuses to perform the traditional burial because of the different ideologies within the town of Modjokuto. The refusal of the Masjumi to perform the funerary ritual to the ten year old boy further emphasized the conflict between the sociopolitical ideologies.

Both the failures of the social structure and symbolic rituals of the Masjumi demonstrate the combination of scientific and humanistic collapse. The separation into different political parties created tension among the Masjumi in which new beliefs and traditions were created. Also the religious system among the Masjumi shifted, indicating the birth of new core values. The failure of social structure (science) and the dramatic change in core values (humanities) form the combination of the main points of Marvin Harris and Sherry B. Ortner.

After having thoroughly analyzed the distinctions between the anthropological approaches of Marvin Harris, Sherry B. Ortner and Clifford Geertz, I conclude that social change is effected by both a scientific perception and a humanities point of view. Harris makes the point that without the stability of infrastructure a society will collapse, as he demonstrated with the collapse of the Soviet Union. Ortner, on the other hand, states that social change occurs due to new meanings given to a particular symbol. My position on the determination of factors for social change, however, is more aligned with Geertz's idea that both the stability/instability of infrastructure and the control of new meanings (or meaning taken away) of a given symbol are the key elements associated with social change. They are interrelated in that infrastructure is influenced by the change of symbolic meanings of a particular social structure, and symbolic meanings can either be changed or created with the change of infrastructure.

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### "Myths in Culture"

Essay by Randall Victoria Parsons

In this paper, I will be discussing the ideas on myth in culture of the idealist Claude Levi-Strauss, the materialist Marvin Harris, and Mary Douglas, whose theories fall in between idealism and materialism. Throughout this paper, I will be using the term "myth" to refer to a culture's way of interpreting the world by designating a system of beliefs, values, and proper behavior. Levi-Strauss argues that the substance of myths does not lie in style, original music, or syntax, but in the story that it tells (Levi-Strauss, 282). Marvin Harris discusses the Soviet Union's enactment of communism and the material factors that led to the failure of a seemingly well thought-out belief system. Mary Douglas uses the animal surroundings of the Lele society to explain the symbolic power of specific animals based on their taxonomic categories.

Claude Levi-Strauss uses linguistics to look at structures behind the myths to uncover universal fundamentals of human behavior. He argues that many myths are everlasting, applicable to the past, present, and future, because the stories take place in a misty setting outside of time. In this way myths contrast politics and history, which look at systems of past or future events.

Levi-Strauss describes Saussure's distinction between the French *parole* and langue in the field of linguistics. Parole ("speech") is described as the personal side of language that does not belong to a specific time. *Langue* ("language") is the impersonal side of language belonging to a revertible time. Since these two distinctions already exist, Levi-Strauss argues that a third level can be conceived, which is the everlasting time in which myths take place. Mythology is historical, but it is also ahistorical, since it contains both *parole* and *langue*. Levi-Strauss argues that this third level is linguistic, but still separate from the other two levels.

Marvin Harris's article discussed communism, which as a political system is different from the mythological and religious articles discussed by Levi-Strauss and Douglas. While this seems different, Harris's material approach is applicable to the story a culture tells. I believe that stories are told not only through a culture's myths and religious beliefs, but are also reflected in their political beliefs.

Harris describes human social life in three features: infrastructural, structural, and symbolic-ideational. According to Harris, infrastructure is the technological, economic, and environmental activities that lead to sustaining the health and reproductiveness of the population. Infrastructural innovations will be preserved and spread if they increase effectiveness of health and reproductivity. Innovations in symbolic-ideation will be selected if they improve, or do not reduce, the productive and reproductive process and contribute to the health of society.

The communism mythos was an innovation in symbolic-ideation, and Harris introduces material reasons why it failed in the Soviet Union. In doing so, he argues that this is because of the failed infrastructure of the Soviet Union. According to Harris, all three features of social life must be successful to be selected in a society for any length of time.

Mary Douglas discusses the influence of anomalous animals in the Lele social structure. The religious life in the Lele community is organized by different cult groups, and these groups are regulated by custom to only eat specific animals, or specific parts of animals.

The natural order of animals is classified in Lele society. Animals are different from humans in that they do not observe polite niceties and have no control over their natural appetites as humans do, who conduct their natural functions in private. This distinction between humans and animals lends to an attitude of human superiority, and makes the hunting of animals a non-shameful activity.

Animals fit into categories, such as fish, who have scales and swim in the ocean; carnivores, who have fur and claws; vegetarian mammals, who have a smooth hide and hooves; and egg-laying animals, who tend to have wings and fly. However, there are anomalous animals who do not fit neatly into these taxonomic categories. Douglas gives the flying squirrel as an example, for it is a squirrel with a scaly tail that flies, and the Lele people are not sure whether it is a bird or an animal.

The biggest anomaly in Lele culture is the pangolin. The Lele say, "In our forest, there is an animal with the body and tail of a fish, covered in scales. It has four little legs and it climbs in the trees" (Douglas, 349). Douglas states that she would have understood the pangolin's symbolic status more quickly had she not identified it initially as a scaly ant eater, but as an anomalous creature who, although covered in scales, is actually outside of the water and climbing in the trees. These anomalies cause the pangolin to break the taxonomic barriers, and the worldview of the animal taxonomic process that the Lele possess results in the pangolin's high symbolic value.

Although at first glance these articles seem different, all are dealing with the mythos of human culture across different societies. I believe Harris's three functions of social life apply cross-culturally. While material surroundings have a large influence on culture, they are not the only influence.

Douglas' discussion on anomalous animals becoming symbolic based on the Lele taxonomic cultural norms is an example of the material world influencing cultural beliefs. This in turn gives the Lele culture a basis by which to classify new animals they encounter.

While there are some points in the Harris and Douglas articles that I agree with, Levi-Strauss' theories stood out the most to me. The everlasting quality of myths across cultures accounts for my intense interest and focus on global comparative mythology, and Levi-Strauss' explanations focus on the timelessness of myths because they have their own language. Myths are a language across cultures that combine the *parole* and *langue*, creating a new language of its own that can be translated and still retain meaning, unlike other language art forms like poetry. Levi-Strauss comments that the meaning of myths are conveyed even through the roughest translation. The prevalence of myths and stories in society today is a testament to their timeless cross-cultural nature.

America is a melting pot of world cultures and there are many stories that live on throughout the years that came to us from other parts of the world. Old European tales, such as the stories collected by the Grimm brothers, still persist in today's society. This season alone two new primetime television series have been released based on these stories: *Grimm* and *Once Upon a Time*. The success of the Disney corporation around

the world is also proof of the universality of these stories, proving that no matter the language, stories are told in a language all their own.

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### "A Great Asian Empire: The Khmer Narrative through Art and Architecture"

By Diana Ochoa

It has been said that Cambodia cannot be fully experienced without visiting Angkor Wat. I must agree that it was one of the most spectacular sights among my travels in Cambodia. Angkor Wat is one example of a great empire that in its prime sustained 750,000 people, controlled much of Southeast Asia, and who's infrastructure and public works rivaled that of Egypt, Greece, and Rome (Stone 2006). From the palatial grounds in its capital of Phnom Pehn to the awe-inspiring views in Angkor, the beauty of Kampuchea and Khmer culture thrive in Cambodia. Evidence of the great Khmer Empire and Angkor civilization survives through architecture, both ancient and modern. Khmer art and architecture is a manifestation of religious and symbolic narrative, but also serves as a testament of the many elements that fostered the development of a great Asian empire.

There is far more to Cambodia and Khmer culture than the war and carnage of the 1970s and 80s. Khmer pride themselves in knowing and sharing their rich history, art, and traditions. Walk into the homes of Khmer-American refugees and you will be greeted by images of life-size Buddha flanked by small scale garuda, alongside elaborate paintings of ancient Angkor. An ocean away, Khmer pride runs infectiously on the streets of Phnom Penh and Siem Reap. It is reflected in reverence for sacred

ancient monuments, and in modern architecture and art. The first of many narratives to gain footing in Southeast Asia was a product of "Indianization," the term historians used to classify the merging of Indian culture with native indigenous traditions (Keyes 1997).

Cambodia, and most of Southeast Asia, was profoundly influenced by pervading Indian culture. The earliest evidence of Indianization in the region dates to the second century before the common era (Keyes 1997). Our most informing record of Indian contact comes from the diligent writings of the Chinese (Coe 2003; Keyes 1997). Among many contributions to early Cambodian culture are Hindu mythos and cosmology, along with symbolic temple architecture associated with divine deities, art, and sanskrit. For example, the suffix –*varman* that later pre-Angkorian and Angkorian kings used, was derived from sanskrit meaning "protected by" (Jessup 2004). Hindu concepts like *karma*, *dharma*, and *yugas*, derived from the *Upanishad*, are embodied in the many sculptures of Shiva, Brahma, and Vishnu that were created during the pre-Angkorian formitive period (Coe 2003). Artistic motifs rooted in religious and mythic symbolism inspired pre-angkorian civilizations like Funan and Zhenla.

The earliest report of Funan comes from Chinese text dating c. AD 245 (Coe 2003). By about AD 539, Funan was displaced by the Zhenla civilization which errected Hindu temples during its existance (Lee 1994). Both civilizations were a marriage of native indigenous traditions and Indian culture. The narrative of the Naga Princess personifies this marriage and is manifested through countless examples of *naga*, or serpent, art commonly found around ancient and modern Cambodia. The story describes the arrival of an Indian Brahman, his marriage to a local *nagarini*, or serpant

princess, and the founding of the Funan Capital (Keyes 1997). This marriage, both in myth and reality, became the basis of Khmer culture.

The Khmer Empire and its grandiose capital state of Angkor rose to great power and influence that defied geographic, linguistic, or cultural barriers. This empire spanned more than five centuries. It was first founded in the 9th century AD by Jayavarman II and maintained much of its control well into the 14th century (Coe 2003). With defeat over the Cham, Jayavarma II proclaimed himself, and future monarchs, *charkravartin,* 'a universal monarch', and established his capital at Hariharalaya (Jessup 2004). Jayavarman II named his state city after the combined manifestation of Shiva and Vishnu named Harihara (Coe 2003). The next five centuries saw an explosion of iconic pre-Angkorian and Angkorian art and architecture that narrated the empire's mythic conception, power and influence from coast to coast. The National Museum of Phnom Pehn displays a chronology of different art motifs representing Indian, Hindu, and Buddhist influence.

Khmer are proud of their rich history and traditions, and nowhere is this sentiment and its objects of reverence more conserved than at the National Museum of Phnom Pehn in the Cambodian capital. Here are housed vestiges of the country's ancient history. There are examples of many different Khmer motifs showing Hindu and Buddhist reverence. The museum offers the largest collection of Angkorian relics and artifacts, including the largest collection of Khmer bronze statues. Galleries are timelines of statues and steles from 6<sup>th</sup> century pre-Angkorian to 9<sup>th</sup> century Harihara to 12<sup>th</sup> century Buddha and Bodhisattva. Bas relief and other artifacts were brought from as far as Siem Reap and even nearby Phnom Chisor. The museum itself is a product of

ancient and post-Classic stylized layout and motifs, with a central stupa and ponds mimicking the iconic temple complex design.

Located about an hour south of the capital city in the province of Ta Keo, sits atop a 120 meter hill the remnants of Suryavaraman I's imperial reach, Phnom Chisor, the southernmost extension of the empire (Jessup 2004). Suryavaraman I reigned over the already 300 year old Khmer empire at the beginning of the 11<sup>th</sup> century and developed some of the first public works projects in the empire in the Angkor region. His contribution to new frontier expansion is recorded on the walls of Angkor Wat reliefs depicting his procession among the celebrating masses (Coe 2003). "Surya" means sun, so it is no surprise that the south most extension of Suyavaraman's power would be given the name "hill of the sun," or in Khmer, Phnom Chisor (Jessup 2004).

A 412 step causeway puts visitors into a meditative trance, forced to control their breathing just to make the next step. Scaling the final tiers of the hill, breathing is labored and one's momentum slows dramatically. Because Khmer kings were human manifestations of celestial beings, their corresponding temple complexes were palatial manifestations of their celestial counterpart Mount Meru. Every component of the temple layout was designed to represent Hindu cosmology (Jessup 2004). The ascension into higher tiers within the structure mimics cosmological transitions between *yugas* and *kulpas*, divine measurements of time and space. At the causeway's summit, one's first breath of relief is coupled with an overwhelming sight of 11<sup>th</sup> century ruins against a lush sprawled backdrop 120 meters down. The path levels out above Phnom Chisor and allows for a bird's eye view of the enclosure. Gopuras, or gates, are decorated with iconic scenes from Indian-influence folklore. Epic scenes on the walls of

the Chisor galleries are inspired by elements from the Ramayana, the epic tale of Rama, a banished yet dutiful hero (Coe 2003). The now dilapidated original east entrance is a narrow staircase descending almost vertically into the valley.

Temples like Phnom Chisor were palaces for kings. The king was the royal manifestation of the divine and his palace was a physical manifestation of Mount Meru. People could worship and pay homage at these palace temples. When Theravada Buddhism was indoctrinated as the state religion in the 12th century, however, the king was no longer the focus of divine power. Rather he had become the protector of the Sangha, the sacred order of monks (Coe 2003). He proclaimed himself a steward of Buddhist faith. Though originally Hindu and now in ruins, Phnom Chisor remains an active pilgrimage site where devoted visitors can bring offerings to resident monks and deities in return for good merit.

Angkor has been acclaimed by scholars as "the most extensive urban complex of the pre-industrious world" (Stone 2006). It was home to the almost five century old Khmer empire with a public works and hydraulic program matched by very few.

Established in the 9th century by Jayavarman II, it became the capital of the Khmer empire. From its first temple mounds in Mount Kulen about 50km north of Siem Reap (Jessup 2004), to its most astounding temples at its core, it hosted over twenty monarchs. Though the capital was moved once to Kor Ker early on, Angkor remained an important site for the Khmer. It was quickly re-designated as the imperial capital before the 11th century (Coe 2003). The Angkor region is a network of temples and barays, large reservoirs.

An affinity for water and water access is seen in every example of sacred site design and artistic narrative. This affinity can be interpreted as a manifestation of the Khmer Empire's reliance and systematic control of water access. The idea of water as more than a necessity was imbued with sacred value. Not only was the presence of large moats and reservoirs at or near temples indicative of the empire's meticulous and complex exploitation of monsoonal flooding, but a temple's proximity to water also symbolized its place in the sacred cosmic realm and reinforced the temple as both divine and powerful. Moats represented the cosmic oceans that encircle Mount Meru (Stone 2006). Nowhere is the proximity to water as representative of power and religious reverence through a complex hydraulic system as it is at the Angkor complex in Siem Reap.

The Angkor Thom enclosure in the Angkor complex is an overwhelming sight. Constructed within Angkor Thom as Jayavarman VII's state temple, Bayon ranks as one of the most impressive buildings within all of Angkor (Jessup 2004). The most obvious and striking features at Bayon are the colossal, towering placid faces carved in stone. Walls depict narratives of battle, celestial beings, and Buddha. Jayavarman VII is credited with proclaiming Buddhism as the state religion (Coe 2003). The motifs of tantric Buddhism, narrative, and faced towers are common among Jayavarman's design. Buildings from his time come in a close second to a more well-known structure (Jessup 2004).

The most impressive in scale at Angkor is undeniably Angkor Wat commissioned by Suryavaraman II in the mid-12<sup>th</sup> century. While previous palace temples were dedicated to Shiva, Angkor Wat pays homage to Vishnu (Jessup 2004). There is a

1,150ft causeway that passes over a grand moat toward the first gallery. A second moat stands before the main *gopura* and central galleries. The galleries are a series of narratives depicting scenes from the Ramayana and Mahabharata (Coe 2003). One of the most beautiful galleries features a 47m depiction of the churning of the see of milk, a familiar motif among many of the Angkorian temples. Here *devas* and *asuras*, good and bad celestial beings, are shown in an epic tug of war. The battle moves the sea to life, and from the sea life is created (Jessup 2004).

The Royal Palace located in Phnom Pehn also offers depictions of sacred, mythic narratives and houses remnants of Angkorian kings. The palace is of French design with incorporated traditional Khmer motifs constructed during French colonial occupation. The palatial gardens are trickled with statues of previous monarchs, deities, and Buddhas. Some of the buildings house displays of Khmer artifacts. Others are active Buddhist shrines frequented by local residents.

The Royal Palace at Phnom Pehn is only one great example of ancient architectural themes and art surviving despite post-colonial conflict and globalization. With a backdrop of big billboard advertisements, *garudas, apsaras*, and *nagas* have a place in society despite modernity all throughout Cambodia. Adapted to fit onto modern and commercial architecture, Khmer narrative survives.

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### "The Reproduction of Khmer Classical Dance in Long Beach, CA"

By Alexx Salazar

### Introduction and Methodology

The focus of this paper is the reproduction of Khmer classical dance in Long Beach, California. I use the term "reproduction" because this cultural art form has been modified and influenced by numerous events and circumstances in Khmer history, changing it from its original form that was practiced in the Angkor period in Cambodia. Thus, it is an adaptation to the cultural changes experienced by Cambodians and Khmer classical dancers. I was first introduced to Khmer classical dance on a class tour of the Cambodian community in Long Beach. From my first encounter with Khmer classical dance I was struck by its complexity, deliberateness, and beauty. This prompted me to look deeper into the cultural background of Cambodia, some history of

Khmer classical dance, and dance in the Cambodian community of Long Beach. This paper is based on data collected from participant-observation, a personal interview, observations at cultural events, and a literature review.

For the past few months, I have been spending time with dancers, instructors, and family members at the Khmer Arts Academy in Long Beach. I frequently visited the Academy to observe dance practices and performances, to interview Serey Tep, the Khmer Arts Academy manager, and to visit socially with the dancers and their families. Over the short amount of time that I was able to study the topic of Khmer classical dance, the prevalence of dance in the Cambodian community became evident. This paper will briefly discuss the background of Cambodian culture, background of Khmer classical dance, Khmer classical dance as it is practiced today in Long Beach, and the significance or need for Khmer classical dance in the Long Beach Cambodian community.

#### Brief Cambodian Background

Cambodian culture has been largely affected by events that transpired in the 1970s. When the Khmer Rouge took over Cambodia in April of 1975, many aspects of Cambodian lives and culture were threatened, such as family, music, dance, visual arts, health, subsistence, and life itself. Under the Khmer Rouge, millions of Cambodians were murdered in the regime's efforts to transform the political and economic systems in Cambodia (Heuveline, 1998). Strategies of the Khmer Rouge included separating families, murdering the educated population, and prohibiting classical Khmer dance and music performances (Phim, 1998).

As a result of the turmoil created by the Khmer Rouge in Cambodia, refugees began to flee the country. Many refugees began to migrate to the US, more specifically to Long Beach (Needham, 2008). Once in the United States, Cambodians began to reform their lives, putting back together the pieces broken by the Khmer Rouge. Slowly, and without ease, Cambodians were once again able to practice their cultural traditions. Buddhist temples, community and/or family gardens, classical music, dance, and arts began to be reestablished.

#### Background of Khmer Classical Dance

Khmer classical dance is a cultural art form that has existed for at least 1000 years, dating back to the 9th century when dancers were commissioned to dance in the royal court. Khmer classical dance has been influenced and transformed by historic events, both positive and negative, but still remains a central art form in Cambodian culture. Much of the information on the history and origins of Khmer classical dance has been lost or destroyed, partially because of time, but largely because of the Khmer Rouge. When the Khmer Rouge gained control, many Cambodian cultural arts and customs were prohibited from being practiced. The Khmer Rouge "eliminated any proof, any details of [Khmer] classical dance" (Tep, n.d. interview), including the dancers themselves. "Cambodia went through a lot of suffering, so a lot of our dances we cannot confirm exactly when [they were] created" (Tep, n.d. interview). What is known is that Khmer classical dance started out in temples of Angkor. Inscriptions on temple walls provide evidence for the presence of this art form during the Angkor period (Tep, n.d. interview).

The main purpose or function of Khmer classical dance during its earliest years is also known.

Khmer classical dance [was] a form of art that [was] usually used for ritual prayer...Basically the king would ask the dancer to pray for the people to be blessed, if his country [was] going into a drought, or [if there was a] flood, anything from starvation, and things like that. So it's more of a ritual prayer dance. [Serey Tep]

Because Khmer classical dance was seen as a "spiritual sacred dance" (Tep, n.d. interview) only the royal family was allowed to witness dance performances. "Commoners" were prohibited from seeing performances (Tep, n.d. interview). This changed, however, in the late 1800s when Khmer classical dance was brought to a larger audience, including foreign audiences in places like France (Tep, n.d. interview).

Originally, "there was no specific person that danced, [the royal family] basically [went] to different rural area[s]" and picked girls who were "pretty" and then brought them to the royal court to be trained as dancers (Tep, n.d. interview). Also, parents who had a daughter could "put their daughter in the palace to get trained to become a classical dancer." Socio-economic class was not a factor in choosing who could be a dancer, as long as a girl was given to the royal court, then she was a part of it and could become a dancer. Girls lived in the court while being trained to dance, so their dance teachers became their parents; dancers were taken care of, taught classical dance, and taught "the value of being a Cambodian female" (Tep, n.d. interview). Some dancers would leave the royal court when they got married, while others would make dance an occupation, "stay[ing] to teach future generation[s]." Up until the take over of the Khmer

Rouge, to be a classical dancer was considered to be one of the most prestigious occupations in Cambodia. However, the Khmer Rouge targeted dancers and dance became a life threatening, rather than prestigious, occupation.

Khmer classical dance often depicts aspects of Cambodian myths, religious beliefs or celebrations, and the veneration of ancestors, deities, and the royal family.

Movements in Khmer classical dance have explicit meanings symbolizing images such as trees, waves, beauty, tendril, leafs, fruit, flowers, picking flowers, fish, the sea serpent, water, and monkeys (Cravath, 1986).

#### Khmer Classical Dance in Long Beach

As mentioned previously, dangers of the Khmer Rouge resulted in a period of time when Khmer classical dance was prohibited. Later, a revitalization of Khmer classical dance began to restore this cultural practice in refugee communities, such as in Long Beach, CA. Sophiline Cheam Shapiro experienced the affliction of the Khmer Rouge firsthand. However, she did not let this fact stop her from practicing Khmer classical dance. Instead, Sophiline embraced Khmer classical dance and was determined to pass it on to future generations.

Sophiline and her family suffered many struggles and pain during the Khmer Rouge period, including losing her father and two brothers (Shapiro, 2009). Khmer classical dance became one positive outlet for her after the traumatic events she experienced. "Dance was something that gave me a sense of elevation, and [took] me to a different place..." (Shapiro, 2009). She has stated that there was so much suffering and ugliness associated with Cambodia and the Khmer Rouge, but Khmer classical dance gave her a way to find beauty in life. "Every time I think about the tragic (events)

that happened to me, to my family, and to my people during the Khmer Rouge, I have to think also about something that is beautiful about my culture and about my country. And one thing that is beautiful is the dance and music" (Shapiro, 2009). Her husband, John Shapiro, states that "she was able to see beyond her circumstances, and to say 'I want more'" (Shapiro, 2009).

In 2002, Sophiline founded Khmer Arts Academy in Long Beach. She opened the Academy because she feels that "providing free access to Cambodian American children...is important... I thought that giving access to their sense of cultural heritage [would] help them grow to be more confident as a Cambodian American" (Shapiro, 2009).

#### **Examples of the Reproduction of Khmer Classical Dance**

#### Khmer Classical Dance at Khmer Arts Academy

Today, the focus of Khmer classical dance remains on Cambodian myths and some religious content, although the primary purpose and function of the dance is to preserve, transmit, and share Cambodian culture with others (Cambodians and non-Cambodians alike). Khmer Arts Academy dancers perform in public at cultural events, festivals, and celebrations, rather than strictly in religious settings. The difference in the dance in Cambodia versus the US manifests in several ways. However, Khmer Arts Academy tries to incorporate as much as possible from the practices in Cambodia.

Khmer Arts Academy offers dance lessons predominantly to young Cambodian-Americans between the ages of six and 21. Ideally, dancers begin Khmer classical dance training at the age of six, since this is an age where bodies are still developing and highly limber. In the short amount of time that I was able to observe the Khmer Arts

Academy dancers, I noticed that classes are primarily made up of female dancers, although males are welcome as well. The reason girls decide to become dancers today may or may not have changed since earlier times. Some girls may become dancers because "their parents asked them to do it, they really want to find themselves, they want to understand their culture, [and/or] they want to understand the styles" (Tep, n.d. interview). Today, anyone can be a dancer at Khmer Arts Academy, regardless of ethnicity, sex, or age, as long as they are dedicated and respect the art form.

Dancers meet for class at Khmer Arts Academy on Friday evenings from 5:00pm to 7:00pm and on Saturdays from 10:00am to 3:00pm. Because everyday life in Long Beach differs from that in Cambodia, dancers only practice for a few hours one or two times a week, rather than eight hours every day like dancers in Cambodia (Tep, n.d. interview). Despite the difference in practice time, Serey Tep believes "that our girls are as good as the girls in Cambodia, because if you put your heart into it, and you focus, and it's something that you like, you'll make it look good...And with the right training and the right teacher, we would be as good as the girls in Cambodia."

Practices consist of stretching, perfecting dance gestures, learning new dances, and practicing dances previously learned. "Stretching is very important in dancing because it helps us maintain our flexibility" (Mia, n.d. Southeast Asia Day). Dancers go through routine stretches at the beginning of every practice. Fingers, toes, arms and legs are stretched through a handful of different stretch techniques. Since there are about 4,000 gestures in Khmer classical dance (Mia, n.d. Southeast Asia Day), dance instructors are present at all times during practices, to assist dancers in correcting their movements and to direct dances. At Khmer Arts Academy a repertoire of dances are

performed, which include classical dances. A few of the dances in the repertoire are: the Wishing dance, *Buong Suong* ("Blessing Dance"), *Dao* ("Sword Dance"), White Dove, *Bopha Lokei* ("Flower of the World"), *Neary Chea Chuo* ("Girls in Line"), *Moni Mekhala* and *Ream Eyso*, *Sovann Macha* and *Hanuman* (Ramayana), and *Tep Monorom*.

Dance performances by Khmer Arts Academy can be seen at many different festivals and cultural events throughout Southern California. With the exception of restaurants, Khmer Arts Academy will perform at any venue where they are asked, which points out a major difference between Khmer classical dance in Long Beach and the dances originally performed in Cambodia; a sign of consumerism in America affecting this cultural art form.

Southeast Asia Day at the Aquarium of the Pacific in Long Beach is one example. The day exhibited several tables displaying Southeast Asian art, material culture, and other cultural information. The day also had several performances, including dance performances by Khmer Arts Academy. Khmer Arts Academy showed the audience a dance routine (using two of the younger girls to display the dance moves) and performed two classical dances. The first dance was Neary Chea Chuo ("Girls in Line"), performed by seven girls who are in the younger group at Khmer Arts Academy. "This dance describes the beauty of Cambodian dance and culture. The dancers express great gratitude to our ancestors who have carefully *preserved* and *passed down* the traditions to our new generations" (Mia, n.d. Southeast Asia Day). The second dance was performed by six girls who are in the older dance group at Khmer Arts Academy. In the dance the girls are "...comparing themselves to flowers. So, like a flower bud about

to blossom these dancers emerge from a new beginning into a world of happiness, wealth, and peace for all" (Mia, n.d. Southeast Asia Day).

#### Khmer Classical Dance at the Cambodian Arts and Culture Exhibition

The Cambodian Arts and Culture Exhibition provides another example of Khmer classical dance being reproduced in Long Beach. Khmer Arts Academy, as well as several other dance groups, performed dances at the Exhibition. The Exhibition is a cultural event that allows Cambodians to display and share their culture with the public of Long Beach. Some of the cultural arts and practices at the Exhibition were: a prayer ceremony, the banana tree and gardening, the Chhayam dance group, Khmer classical dance and costuming, Folk dance, sey (a game similar to hackysack), Apsara crowns, Kampuchea Krom history, Khmer (Cambodian) language, the Mohori orchestra, Cambodian textiles, Theravada Buddhist monk robes, and Cambodian weddings and wedding clothing. Two dancers from Khmer Arts Academy performed the Buong Suong dance at the Exhibition. The Buong Suong dance, meaning prayer or blessing dance, is a ritual dance and was performed in conjunction with the prayer ceremony.

#### **Discussion**

After studying and observing Khmer classical dance in Long Beach, I have made some tentative conclusions in regards to the significance or need for dance in the Cambodian community of Long Beach. As previously stated, the prevalence of dance in the Cambodian community is evident. I propose that the suffering caused by the Khmer Rouge, which lead to the mass displacement of Cambodians, also lead to the need for Cambodians to practice their culture and beliefs even more vehemently in Long Beach

than in Cambodia. After being prohibited by the Khmer Rouge to practice Khmer classical dance, being able to practice dance in Long Beach symbolizes Cambodians ability to reclaim their sense of cultural identity and power. In "Performances of Power: Indigenous Cultural Festivals as Globally Engaged Cultural Strategy," Peter Phipps states that,

Cultural festivals are one of the few consistently positive spaces for...

communities to forge and assert a more constructive view of themselves, both inter-generationally and as part of a drive for recognition and respect as distinct cultures in local, national, and international contexts.

Performing Khmer classical dance at cultural events, celebrations, and festivals allows

Cambodians to ensure the transmission and maintenance of their culture. I also believe
that Khmer classical dance serves as a form of communication between past and
present generations, not only through lyrics which are in the Khmer language, but also
through paralanguage that is present in dance movements.

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STUDENT RESEARCH ENVIRONMENTAL



"Perceptions of Waste and Waste Management at CSUDH"

By Jasmine McElroy and Dylan Myers

Contributor: Diana Ochoa

Abstract

As the world's economic output continues to grow, we are faced with an increasing need to manage waste disposal. Current waste management systems, such as landfills and modern recycling programs, have lagged behind contemporary needs. This research is an observation of the diverse waste disposal methods available on the Cal State Dominguez Hills (CSUDH) campus, including the awareness of waste management practices of the average Dominguez Hills student. The Dominguez Hills campus has adopted many environmentally friendly ideas, like solar panels and the use of biodegradable utensils and containers, but more often than not these implementations are overshadowed by the inefficient waste practices of the student body ignores. This research seeks to reveal how students interact with waste on campus and to ultimately provide recommendations for waste management.

Introduction

California State University Dominguez Hills as an academic institution, encourages and has already implemented to a degree, environmentally sound practices. Assumedly, access to and quality of waste management would be uniform

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and improper hazardous waste disposal would be at a minimum. Despite the institution's environmental efforts, not all facilities are given the same amount of consideration in regards to waste management. In order for a university to impart a sense of environmental ethics in its students, it must first take steps to act in an environmentally sound way (Pike, 2003).

While some areas of CSUDH are well kept, facilities do not receive an equal amount of attention when it comes to waste. Some portions of the campus have noticeable waste problems, while others have little to none. We found it necessary to conduct a study of the campus as a whole to determine the state of standardization of waste management.

Do students lack waste awareness? Should the administration reinforce waste awareness and do more to actively encourage proper waste practices? This study seeks to address matters of cleanliness and proper waste disposal, to bring awareness to both the student body and administration about this under-addressed issue.

#### Methodology

Data for this study was collected using the creation and administration of a closed and open-ended survey, participant-observation mapping the interconnectedness of the cleaning departments, and campus personnel interviews. The survey presented simple affirmative or negative questions about what students thought of the waste situation on campus. In conducting our investigation, we used surveys and observations to interpret the correlation between the student's perceptions of waste, and the institutional discrepancies in waste management on campus. A total of 200 students, fifty from each prominent section of campus, (Loker Student Union, Welch

hall, The GYM and Library, and University housing) participated in the survey. We also referred to key literature regarding the issue, especially Lisa Pike' Science education and Sustainability Initiatives (2003). A pilot survey of sixty participants was administered in November 2010 and the data for this study, with a total of 200 participants, were collected in December 2010 and January 2011.

#### Comparison and Contrast of Sections of Campus

It is necessary to note the difference in action taken towards monitoring and maintaining certain regions of campus. Waste management differs significantly across campus. While there are attentive custodial services and recycling bins at Loker Student Union (LSU), there are unsightly conditions present at the gym, the older wing of the library, and especially campus housing. "Trash Only" and "Cans and Bottles" receptacles are not hard to spot at LSU but rarely seen elsewhere. The recycling dumpsters in campus housing, however, overflow frequently. Students do not always place recyclables in designated bins. Student complaints about waste management are often unaddressed. With the exception of LSU, receptacles for recyclables are few and far between.

For the purposes of this study, the Dominguez Hills campus has been divided as follows: Welch Hall, Loker Student Union, the Gym & Library, and Campus Housing.

These sections were chosen according to frequency of use and quantity of visitors. Left out of this study was Lacorte Hall. Aside from classes, this building does not attract large groups of students and has traditionally not been thought of by students as a place to socialize.

#### Welch Hall

Welch Hall, the public face of the university, is an administrative building. The ground floor of this building houses the largest computer lab on campus and is open later than the library. Welch Hall contains the financial aid office, administrative office, offices of admissions and records, and the cashiers desk. A convenience store, the Health Center, and classrooms are found at the lower level. There is an open air sitting area next to the convenience store and a public restroom nearby. This area combines social functions and administrative needs.

In the course of observing students it became clear that the convenience store and surrounding area was a very popular area with students. While other students prioritized this area as a place for study, others use this area as a place to socialize. The area is well maintained overall. There are plenty of trash cans for waste disposal and rounds are regularly made by custodial staff. The tidiness of this area suggests either that the students take care to manage their waste properly or that the vigorous presence of the janitorial staff deters student from littering.

#### Library and Gym

The library and gym are grouped as a single section in this study due to their close proximity. There is a steady flow of students in this area, but a minimal amount of custodial attention is paid to the gym area. The students that spend large portions of time around the gym are either intramural students or members of the schools athletics teams. Improperly discarded waste found here includes bottles and plastic wrap used for temporary ice packs.

In contrast, the library exhibits near pristine maintenance. The newest wing of the library was opened in 2010 and is a point of pride for the university. Similarly to Welch Hall, it has a vigilant custodial staff. There are a few locations in this area that are not prioritized as others, such as the first floor reference desk and music rooms, and older wings of the library. The newer portion of the library was built in a modern style incorporating walls of glass that allow in much more natural light than the older library section constructed in the 1970s. The new library has computers available for student access. With the amenities of the new wing, fewer students visit the older section. Hours of operation in this area may also contribute to a reduced amount of litter by students. For a university library, the hours of operation are not very long, only 8am to 8pm during week days. The fact that the library is an expensive new addition to the Dominguez Hills campus makes it understandable that this area of campus receives regular attention from the maintenance staff.

#### Loker Student Union

Loker Student Union (LSU) is a facility that students rely on heavily for recreation, socializing, studying, and dining. The building is available Monday through Thursday from 7:30am to 7:30pm, Friday from 7:30am to 5:00pm, and Saturday from 7:30am to 3:00pm. The eateries located within LSU operate Monday through Friday until 4:30pm. LSU was chosen as an area of interest for this project because of its role in the everyday student experience. Observations of the location were conducted on various days throughout the semester. Most notes were taken in the afternoons and evenings. Despite large crowds of student traffic, LSU manages to remain relatively clean and well maintained most hours of the day. This is largely due to its attentive custodial regimen and the number of waste and recyclable disposal bins.

Custodial porters frequently make rounds throughout the facility. Among their many duties, they were often seen emptying receptacles, maintaining lavatories, and ensuring that LSU had an overall presentable appearance. Though the building is always busy with a continuous flow of students, custodians are promptly available for even the smallest mess. LSU custodial services are divided into day and night shifts. Each shift has one to two porters making rounds as mentioned by the LSU Information Center. Day porters are students currently attending CSUDH. LSU custodial services are supervised by Associate Director, Arnecia Bryant. Also mentioned as a supervisor, is Assistant Director Jaime Leal. Both Associate and Assistant Directors fall under the supervision of Dr. Kim Clark, Executive Director. Besides having a dedicated custodial staff, LSU administration provides students with the opportunity to take an active role in maintaining this valuable student center.

Students who visit LSU, especially those who frequent it, appear to be quite mindful of their waste habits. Students respectfully clear their area after they are done for the day, and dispose any waste produced during their visit in available receptacles. This is prominent because it indicates students' willingness to recycle when the opportunity to do so is provided, in this case in the form of proper sorting receptacles (Pike 2003). LSU eases the stress of waste management by providing students with separate silver receptacles, each designated for either "Trash Only" or "Cans and Bottles." Most areas within LSU have these receptacles side-by-side. The two together cue students to sort their waste before absentmindedly placing disposables anywhere. There are areas in which the two receptacles were not so close in proximity and

students forgot to sort their mixed waste. Fortunately, this does not appear to be problematic, as most students abide by the recycling rule within LSU.

The same emphasis on waste awareness is not common even immediately outside LSU's doors, with the exception of the LSU central courtyard. The silver waste receptacles are not available outside of LSU and instead are replaced by unlabeled brown receptacles. The bins are not designated for any particular waste material, so it is no surprise that one finds a mélange of trash, glass, plastic, paper and aluminum.

#### Campus Housing

CSUDH housing accommodates approximately 580 students and live-in staff. The housing complex is an area of the university occupied continuously throughout the day. Campus housing differs from traditional dormitories in that they are designed much like small-scale apartment complexes. Because this area is constantly occupied, it may be expected that this area has the most regular waste management. Unfortunately this is not the case.

When observing campus housing, it became obvious that minimal was done to maintain it, this includes landscaping and emptying dumpsters once a week. On a weekly basis the dumpsters in housing experience an overflow of trash; most of these items thrown away were recyclable like cans, bottles, plastics, and metal, or non-disposable material such as televisions, microwaves, mini-fridges, and other electronics. Dumpster capacity is exceeded on a weekly basis. The majority of discarded material is "e-waste," "electric and electronic equipment that have ceased to be of any value to their owner" (Rolf Widmer, 2005). At the end of each academic year, when residents leave for the summer, there is an overwhelming accumulation of trash in the dumpster

and small recycling areas. Dumpsters become overflowed by trash. The ways that housing management has settled this problem in the past has been to bring in larger temporary dumpsters; the trash, both recyclable and non recyclable, is shoveled into these bins to be hauled off to the nearest dumping center. "The sorting of waste before allowing it to be sent to dumping facility can reduced detrimental environment effects" (Pethi, 2000). Unfortunately contamination that may result from these practices has not been acknowledged by the administration.

Campus housing has two sections: the older building, phase one, and the newer portion that accommodates majority of the residence, phase two. In phase one, there is a small recycling center that consist of eight bins, four for plastic bottles, and four for aluminum cans. The area is not well maintained and recyclables and trash are not sorted correctly. Campus housing does not accommodate recycling needs of the residence. There are only eight recycling receptacles for over 500 residents and live in staff. In phase two, small 17x12 inch containers rest next to most of the dumpsters and are for aluminum recycling only. The limits of these specific recycling containers are often ignored. The lack of recycling receptacles also means plastic waste is disposed of incorrectly.

Lax waste practices are a result of many factors: lack of programs to educate residents, lack of efficient recycling facilities, lack of personal responsibilities, and a general ignorance by both management and residents. For example, a small mound of discarded tuna was left out on the sidewalk next to the rear exit in housing. This pile was left out for three days before it was cleaned. Most residents who noticed the spill simply ignored it and avoided it. The student's reaction demonstrates an indifference to

waste in public areas and certainly towards proper waste management. Incidents like this exacerbate pest infestations in Campus Housing. Not all poor practices of disposal can be blamed on housing residents. Housing staff and managerial workers also reinforce poor waste management

#### **Findings**

While participants of the survey expressed personal responsibility towards monitoring and disposing their litter soundly and properly, perceptions do not align with students' behavior. Though students believed that they behaved in an environmentally conscious way, their behavior demonstrated the opposite. In short, desiring to act in an environmentally sound way does not guarantee any action based on those beliefs (McGuinness, 1977). Of the people who took part in the survey, we found that:

- There is an overall student consensus that the campus is very clean.
- The majority of students either agreed or strongly agreed that they have a personal responsibility toward keeping the campus clean by recycling and properly disposing of their waste.
- 59% of students are not as aware of where the campus recycling centers are.
- 65% of students agree that the campus is well maintained, while 35% did not agree.
- 66% of students did not feel that they need to actively help minimize waste, 34% felt they did.
- 68% of students do not know where proper recycling bins are on campus.
- 82% of participants are aware of litter and litter reducing practices.

The majority of students were aware of waste reducing procedures, however their attitudes do not correspond with their behavior. Welch Hall has been observed to be the cleanest area on campus. We surmised this area is better maintained because it is one of the most visited buildings on campus and is the face of the school. The Gym is frequented by students more often than Welch Hall but lacks the necessary amount of trash bins to accommodate the amount of waste produced by student athletes. The library is a new addition to our campus and has few waste management concerns. Like the gym, many students visit the library and the trash bins need to be attended to and emptied more often. Loker Student Union remains well kept due to its attentive custodial management and many visible waste and recyclable disposal bins.

#### **Discussion**

Observations of CSUDH uncovered many unsightly waste practices. Findings include: the accumulation of e-waste and other non-disposable materials, students failing to pick up after themselves, and the disposal of small trash items in small spaces behind vending machines, in bookshelves, and next to teller machines instead of proper disposal bins.

The survey of student perception of waste produced quantitative data on how students at CSUDH interact personally with waste management. The majority of surveyed students said that they do dispose of their waste in receptacles. Though some admitted that they do not practice proper recycling etiquette, most will agree that they usually do sort obvious recyclables like bottles, cans, glass and cardboard. In regards to coming across inappropriately discarded waste, most students feel that they do not often encounter trash on campus compared to other communities. Of the trash that is

encountered, most student surveyed say they will attempt to dispose of discarded material properly, given that it is relatively sanitary or convenient. Students often said they would pick up items if they were large, seemingly clean, or recyclable. As to whether the campus has a waste problem, most students from all sectors surveyed argue that there is not a waste problem at CSUDH.

Due to lax administration, the residential area of the campus exhibited low standards of maintenance and inadequate student participation. During this case study made housing administration made little effort to promote resident involvement in waste management. Because housing is temporary, students living on campus feel no personal obligation towards maintaining their living space. A lack of pride and sense of community in the housing area perpetuates indifference to proper waste management.

#### Conclusion

There is a critical need for more waste awareness programs to educate students on campus. This includes the introduction of additional recycling bins and a call for improved waste management education. We maintain that the same effort toward encouraging waste awareness should be presented equally across all areas of CSU Dominguez Hills. Short-term fixes for waste production will not suffice in the long term for the residential section of campus.

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## "Urban Development vs. Impact on Archaeological Resources"

By Diana Ochoa

Though pervaded by modern Angelino urban sprawl, La Ballona's geographic presence and geological development attracted human occupation long before oil production and Howard Hughs's aviation projects existed in the area. The Ballona region belonged to a complex estuarine environment encompassing large networks of low-lying wetlands and marshes, once occupied by thousands of years of paleo human settlements (Altschul et al 2005). Once the largest and last remaining coastal wetlands in California located in the area now dominated by Marina del Rey, Westchester, and Playa del Rey (Klein n.d.), the Ballona is virtually unrecognizable, now a network of pavement and beach-front housing. The process by which urban development proposals must adhere is long and arduous. Potential impacts from urban sprawl on an environment must be evaluated and mitigated to prevent effects that may alter or diminish the integrity of a site with sensitive characteristics. The reality of this procedure, however, fails to suitably address impacts on archaeological resource found in an environment. Such was the case of the Ballona Lagoon Archaeological District and the projects that threatened it.

Embayment of La Ballona began in the late Pleistocene around 5000 BP as sea levels rose due to glacial meltdown. Sediment was deposited by coastal watersheds, gradually forming alluvial lowlands and estuarine environments (Grenda and Altschul 1994). The resulting wetlands became prime real estate for paleo human occupation, exploiting resources created by shifting intervals of marine and estuary ecozones

(Altschul et al 2005). This area is listed under the California Register as the Ballona Lagoon Archaeological District (PCR Services Corporation 2003). Thousands of years after its first occupation, Ballona has long been sought after by urban development and became the center of controversial planning and protection policy. Between the late 80s and well into the new millennium, developers, government officials, researcher and stakeholders fought for fair mitigation of proposed projects in the region.

Ballona Lagoon Archaeological District and the Ballona wetlands have long been the foci of relentless debate over urban development in highly sensitive environments. Proposals to develop low-lying wetlands and surrounding bluffs in the area were first approved in the early 1990s. Among these were the Playa Vista Village Project and the West Bluffs Project, which would be instructive examples of green mixed-use design (Parlow 2008). Both projects created heated debate among developers, city officials, environmentalists, archaeologists, Native American groups, and residents. In both cases, the projects were ordered to be reevaluated to account for impacts inadequately addressed, or otherwise undisclosed, in previous Environmental Impact Reports (EIR). One of the most pressing issues was the risk of destroying archaeological and cultural resources. Archaeological resources are the material remains of past human occupations that may have scientific, cultural, religious or educational value (PCR Services Corporation 2003). Cultural resources, as defined by the Native American Graves Protection and Repatriation Act (NAGPRA), include human remains and any artifacts or features of funerary relevance (United States Bureau of Reclamations 1996). In 1996, Statistical Research, Inc. (SRI) researchers conducted an EIR on the West Bluffs development, and in 2003 they completed an EIR for the Playa Vista Village

Project (Klein n.d.; Douglas et al 2005). These EIRs detailed the historical and archaeological significance of the area which mandated assessment of potential effects on the archaeological and cultural resources located in La Ballona.

In lieu of modifications to the National Historical Preservation Act (NHPA) in 1996, in which Section 106 requires federal agencies to consider the effects of land use, and invite interested parties to adjudicate on potential impacts on historic properties (National Historical Preservation Act 1966, as Amended 2006 2006), SRI and PCR Services Corperation (PCR), cultural resource management firms, were hired to conduct new EIRs for the Ballona region. Extensive archaeological research provided significant data on paleo human occupations of La Ballona, spanning thousands of years during the late Pleistocene well into the Holocene. The archaeological record indicated interval occupations of the region highly influenced by changing sea levels and sedimentation of the bay (Altschul et al 2005). Material recovered from the proposed Playa Vista Village and West Bluffs projects present archaeological signatures of mobile and sedentary patterns dating from 4500 years ago to as recent as the 1800s (PCR Services Corporation 2003). SRI concluded the existence of 350 features, thousands of point-provenience artifacts, and, most controversial of findings, human remains present at the West Bluff site (Douglass et al 2005). Excellently preserved cultural material and two intact archaeological sites at the Playa Vista location indicated estuarine-dessert settlement and subsistence strategies shared through complex migration and demographic shifts associated with environment changes (Grenda and Altschul 1994; PCR Services Corporation 2003; Altschul et al 2005). The sites were

deemed significant and unique in accordance with federal and state public police concerning archaeological resources.

Under the California Environmental Quality Act (CEQA), any site that can prove to be a "unique archaeological resource" is subject to eligibility into the National Register and California Register as historically significant (PCR Services Corporation 2003). This inducted La Ballona into the California Register and made it eligible for Federal consideration. In compliance with CEQA and NHPA criteria, the provenience of the recovered cultural material proved the Ballona sites were eligible for federal and state protection. Potential impacts of the Playa Vista Village and West Bluffs projects were measured, and mitigation was proposed to prevent damage and unauthorized collection of resources (PCR Services Corporation 2003). The goal was to have minimal impact on the archaeological sites and the Native American community that advocated their protection. Unfortunately, there was a disconnection between interested parties involved, and many concerns were disregarded.

Native American discontent, for example, was rooted in agencies failing to consider their participation. Field work determined that much of the contention toward excavating, in fact, was "on the premise that burials were being desecrated" (Douglas et al 2005). Archaeologists were dissatisfied with the way in which public policy addressed archaeological resources. Under Section 106 of the NHPA, mitigation measures were proposed, but not enforced. Public policy does not protect archaeological sites from destruction, especially on privately own land in which neither government agencies nor Native American groups have jurisdiction. The goal of Section 106 and CEQA policy is

not preservation of cultural or archaeological resources. Rather its goal is strictly procedural compliance (Douglas et al 2005).

The proposed development projects at Ballona were in essence well-rounded attempts at sustainable green development, an example of mixed-use, pedestrian-oriented urban development. Many times developers proposed restoring natural wetlands to appease displeased environmentalists (Parlow 2008). This type of community outreach can, and did in fact, lead to positive mitigation. However, in the case of La Ballona archaeological resources, public policy failed to effectively mitigate the impacts urban developments imposed on the historical and cultural value of the environment.

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### **Book Abstract: Dirt The Erosion of Civilizations**

By Diana Ochoa

In *Dirt: the Erosion of Civilizations,* David R. Montgomery argues that socioeconomic disintegration is fundamentally rooted in soil degradation, overpopulation, and increased demand of already compromised resources—in something as seemingly humdrum as dirt. Archaeological and environmental records tell a story of man's contrived occupation of the natural realm and the negligence that led civilizations to ruin. Though the introduction of agriculture increased food production to sustain larger populations, practices fell out of sync with what Montgomery calls the environment's "natural rhythm." Like a broken record, great civilizations such as

Mesopotamia, Rome, the Maya, and Egypt mistreated their soil and suffered the grand-scale consequences of plowing, over-grazing, and monocultures. Shifts toward agriculture had pernicious impacts on social infrastructures. The question is, can present day civilizations learn from the errors of the past?

The mistakes of these ancient civilizations can be the catalyst for change.

Ancient civilizations lacked an understanding of sustainable land development.

Unsuitable agriculture has an inevitable domino effect that exacerbates erosion and soil degradation—ruinous ingredients that brought down great empires. However, agriculture can function with minimal impact to soil if sustainable methods are used.

Unlike the erroneous practices of the Maya, Montgomery describes agriculture of the Inca to be prosperous, long lived, and sustainable agriculture because it included intercropping, crop rotation, fallowing, and using "manure and ash to maintain soil fertility."

Montgomery provides an articulated narrative of man's relationship with dirt and an understanding of how our impact on soil can profoundly shape the infrastructure of our society. A reader need not be proficient in geology, biology, archaeology, or sociopolitical phenomena to understand soil and the implications of sustainable practices. Though the concept of dirt seems simplistic, dirt is a complex building block of civilization and the consequences of how we treat it need not be taken lightly.

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# Précis: Seed Procurement and the Intensification of Pottery Use in the Owens Valley

By Samantha Glover

#### Background and Intent

The prehistoric peoples of the Owens Valley in southeastern California continually relied on indigenous plants as an important part of their overall diet. The material remains of a number of different wild seed bearing plants appear in the archaeological record at nearly all sites throughout the 12,000 year history of occupation in the Owens Valley as well as in other areas of the Great Basin. Sites dating to the Marana Period (700 BP to historic times), however, show a significant increase in material remains in the form of seeds, nuts, pottery, and millingstone technologies. The purpose of this research paper is to analyze the caloric benefits of cooked versus raw seeds in order to understand the dramatic increase in the use of pottery and seeds during the Marana period in the Owens Valley.

#### Hypothesis

Employing Wrangham, et al.'s hypothesis which states that cooked food has an increased energetic efficiency over raw food, I will attempt to determine if this applies to seeds and nuts indigenous to the Owens Valley. An increase in the energetic efficiency of cooked seeds over raw seeds should show not only an increase in seed production and material remains associated with that production, but also a decrease in the

mobility patterns of people in the region since less food would be required to fulfill daily caloric needs.

#### Methodology

Prior research in the field of Great Basin archaeology will be used to determine which seeds and nuts were the most prominently used by the inhabitants of the Owens Valley. Samples of those seeds will be analyzed using a calorimeter in order to determine if there is any caloric increase between raw and cooked seeds. Research will also be conducted on the effects of cooked food on metabolism, prenatal and postnatal care, and mortality rates within hunter-gatherer societies. Since the amount of time to produce a pot would be significantly less than producing the types of basketry used to boil seeds, the material record will also be evaluated in order to determine if there was a decrease in the manufacture and use of these specific baskets. Other areas of research by noted archaeologists with respect to residential mobility, seasonal subsistence variability, and changing environmental factors will be conducted to support the above hypothesis.

#### Potential Results

Based on prior tests by Wrangham, et al. on seeds indigenous to Africa where cooking boosted the caloric value by 40%, we can expect to see similar results with seeds that are indigenous to southeastern California. Baskets formerly used to boil seeds should decline in appearance from the material record and mobility patterns should be more restricted due to better use of food stores.

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