
Furthering Perspectives

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*Furthering Perspectives:
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Editor's Note

Without further ado the Anthropology Graduate Student Society (AGSS) would like to present the seventh installment of our student ran publication, *Furthering Perspectives*.

AGSS would like to thank all those people who made this journal a possibility. Thank you to all the students who facilitated the production of the journal, especially to those who served as associate editors on the journal committee, your dedication and hard work allowed this publication to come together. Thank you to the members of the review committee, your feedback and suggestions proved, as always, of value to the authors. And finally AGSS would like to thank all those students who submitted papers to the journal, we hope that you have found the process beneficial and have become more confident in your research and writing.

Joshua G.S. Clementz
Editor-in-Chief

A CLOSER EXAMINATION OF LATE ARCHAIC WETLAND ADAPTATIONS IN THE GREAT BASIN

Kyle Cordain

Abstract

This dissertation examines the role climate change played in affecting subsistence, migration, and settlement patterns in the Great Basin during the Late Archaic time period. A large majority of the literature regarding subsistence in the Great Basin has focused on small hunter-gatherer bands that occupied the area. Anthropologists have yet to draw a general conclusion on the permanence of human settlements and the influence of hunting and gathering strategies on settlement patterns. Resource availability and utilization are examined in this dissertation due to the profound impact it has on settlement patterns. Beginning in 2500 BP, the Great Basin began a transformation into a moderately wet climate featuring extraordinary biodiversity that cannot be observed across the arid basin desert today. During the Late Holocene, the cool and moist environment resulted in an increase in the prevalence of numerous species of artiodactyls, fish, and other small game. Multiple plant species also thrived during the climatic shift. The prevalence of human settlements spanning the Archaic time period peaked during the Late Archaic at the apex of the altithermal (2500-1200 B.C.). To explore the correlation between climate change and settlement patterns, this dissertation will provide a thorough examination and analyses of the archaeological evidence supporting wetland adaptations during the Late Archaic.

Introduction

Increased diversity in food and resource extraction exploded during the Late Archaic time period. During the Early and Middle archaic periods (11,500-2100 B.C.) semi-permanent settlements were not practical because of the extremely arid climate. Humans would visit the basin for short durations en route to moister more plentiful environments. Between 2500 B.C. and 1500 B.C. the Great Basin experienced an increase in average annual rainfall. New desert wetlands, marshes and lakes began to appear all across the Great Basin. Two major sinks, the Carson sink and the Humboldt sink appeared in Nevada roughly sixty miles east of Pyramid Lake. The new “sinks” that formed fueled the growth of new types of vegetation, resulting in the arrival of numerous species of fish and herbivores. During the Late Holocene, the Great Basin returned to wetland conditions reminiscent of the Early Holocene. Piñon pine nuts (*Pinus edulis*) became readily available for human consumption during this time period. The nuts were favored for their excellent storage qualities.

Knowledge of wetland adaptations and subsistence strategies during the Late Archaic is vital in comprehending the role, importance, and scale of semi-permanent human settlements that coincided with the

development of wetland areas during this time period. The wetter climate made the Great Basin a hospitable environment during the Late Archaic time period. The variety of resources available for food acquisition was plentiful during this time period. Recovered artifacts provide evidence of humans hunting various types of small and large game. Bison (*Bison bison*), sheep (*Ovis aries*), duck (*Anas platyrhynchos*) and Lahontan Cutthroat trout (*Oncorhynchus clarki henshawi*) found in large numbers across the wetlands and the surrounding ridges were a major source of protein for human settlements. The trade of obsidian, agate, and other volcanic rocks used for manufacturing tools and weapons became increasingly more prominent as game and human populations increased. Cattail (*Typha angustifoli*) and bulrush (*Scirpus robustus*) thrived in the wetland climate. Humans processed cattail and bulrush seeds into flours that would often be put in to storage for the winter. The wetlands proved to be a dynamic area for human settlement during the Late Archaic time period. The settlement pattern for each group of people was dependent on the annual flooding and shrinkage of each individual wetland and its corresponding topography. The Late Archaic is also known for its rich archaeological record. Lake Abert-Chewaucan Marsh Basin and Stillwater Marsh were used

intensively by humans during this time period. As a result, both archaeological sites have been the location for numerous excavations. Multiple artifacts that have been recovered from the sites directly reflect human activities and subsistence patterns during the Late Archaic in Great Basin wetland environments.

Hypothesis

Late Archaic climate change led to moister conditions across the Great Basin that resulted in the development of various new “wetland” adaptations. A closer examination of the archaeological record from prominent sites across the Great Basin will provide a comprehensive understanding of how wetland adaptations affected subsistence and settlement patterns.

Great Basin Physiographic Features

The geographic and environmental diversity of the Great Basin is very unique. The arid desert that comprises the majority of the Great Basin is bordered by two prominent North American mountain ranges: the Sierra Nevada Mountains to the west and the Wasatch Mountains to the east. The geologic formations that can be observed throughout the basin were created by intense seismic activity in the past. The earth’s crust within the basin has been expanding and cracking into multiple faults for thousands of years. This activity is responsible for creating the large mountain ranges that border the vast arid desert.

Any water that flows into the Great Basin stays in the Great Basin. This is due to the mountain ranges (Wasatch, Sierras) that border the huge span of desert that makes up the majority of the Great Basin Area. The Great Salt Lake, Pyramid Lake, and Humboldt Sink are the three major drains in the Great Basin. The ridges of the Great Basin are surrounded by flat, sage-covered valleys with dry lake beds and salt pans. The rapid change in elevation that is exhibited by the numerous ridges across the Great Basin is responsible for the extensive diversity of species in the area. The Great Basin’s climate displays huge temperature variations annually. Winters are very cold and dry. Summers tend to be very hot and dry. It is not uncommon for summer temperatures to exceed 100 degrees. Precipitation varies dramatically from year to year.

Data and Discussion

Late Archaic climate change resulted in the appearance of multiple marshes and “wetland” areas across the Great Basin. An increase in the frequency of rain storms preserved soil moisture levels and thus allowed for the growth of vegetation at much lower elevations. “Vegetation zones that we see today were essentially in

place at this time with a few exceptions; junipers grew 300 feet lower than they do today and Mormon Tea (*Ephedra viridis*) may have arrived during this period” (“Culture History of the Eastern Great Basin and Northern Colorado Plateau” 4). To interpret the significance and influence of wetland adaptations in the Great Basin, three major archaeological sites were chosen for research.

Stillwater Marsh

Between 1982 and 1986 record winter precipitation in the Sierra Mountain range led to major spring flooding of the wetlands in the Carson sink. The Stillwater Marsh located in the Carson sink was impacted heavily by the flooding. Floodwaters receded between 1985 and 1986. Numerous archaeological sites and skeletal remains were excavated and salvaged by the Nevada State Museum. “In 1987, archaeological crews under our direction surveyed the most heavily impacted marsh shoreline in order to document scattered skeletal remains and burials in danger of destruction” (Larsen and Kelly 7). The crew was very successful in recovering one of the largest skeletal populations of any site in the entire Great Basin. A total of 85 individuals were recovered from the remains. Further testing was performed on each individual for dental health, iron deficiency, mitochondrial DNA (population markers), osteoarthritis, and long bone cross sectional geometry. “Results are used to test competing reconstructions of the prehistoric use of wetland resources and to characterize the human condition generally in this region of the Desert West” (Larsen and Kelly 7).

Scientists (Larsen and Kelly) who analyzed the skeletal remains provided many answers to questions relating to human ecology in the Great Basin. The most notable feature that the skeletal remains possessed was a high degree of morphological robusticity. It is highly likely that this trait developed as a result of the demanding and labor intensive lifestyle that was necessary for survival in the marsh. “Moreover, the Stillwater adults show a remarkably high prevalence of osteoarthritis, a disorder related to wear and tear on the skeleton occurring over an individual’s lifetime of high activity levels” (Larsen and Kelly 134). Despite the wetland characteristics that fueled the abundance of food resources in the Great Basin, scientists also observed evidence for bone loss, which was likely due to periodic food shortages. Some of the dental remains demonstrated incidences of hypoplasia. The disease was more commonly found in juvenile individuals than in adults. Research (Goodman) suggests that the disease results from nutrient deprivation. It is inconclusive to state that adults suffered from nutritional deficits, because hypoplasia only occurs during the beginning

stages of human growth and development. The diet of the Stillwater Marsh inhabitants was highly mixed with multiple food items available in the nearby area. A highly variable diet contributed to the relatively good health of the Stillwater population. Results from skeletal and dietary analyses did not indicate whether or not the native diet was dependent on additional resources from outside of the marsh. Experiments performed with modern flora and fauna indicate that the marsh was capable of supporting small populations of human beings with necessary food resources.

This study draws bold conflicting evidence regarding piñon pine nuts. “Contrary to most ethnographic reconstructions for this area, stable isotope analysis suggests that piñon seeds did not contribute to significantly to diet” (Larsen and Kelly 135). In fact, the Stillwater Marsh only indicates evidence of piñon seed pollen after 1250 BP. The results from the Stillwater Marsh excavations refutes the generally held assumption that piñon nuts were a substantial food source for Great Basin inhabitants during the middle to late Holocene. Finally, the study concludes that walking long distances up and down the nearby mountains in the marsh was necessary for adequate food procurement. Upland foraging was primarily performed by men. Since isotopic evidence suggests that piñon seeds were not a part of the Stillwater Marsh diet, it is likely that movement over long distances was required for hunting large game.

Lake Abert-Chewaucan Marsh Basin

Lake Abert-Chewaucan is a saline lake located in South Central Oregon, in the northern most part of the Great Basin. Roughly 32 archaeological sites were excavated along 12 miles of shoreline between 1975 and 1982. Discoveries of depressions and structures representing ancient subterranean houses made this site a rarity for its time. The large numbers of habitation sites indicate a relatively sedentary population that depended heavily on the resources provided by the lake and surrounding wetlands. Archaeologists working on the sites in the Abert-Chewaucan Marsh Basin estimate that the area was occupied intensively between 3500 BP and 500 BP. The Abert Chewaucan Marsh sites are of significant importance because they address the role of wetland resource specialization in the development of sedentary settlements. The sites also provide an ideal location for examining hunter-gatherer mobility.

The Abert Chewaucan marsh was home to various species of flora and fauna. Saltbush (*Atriplex acanthocarpa*), winterfat (*Krascheninnikovia lanata*), bud

sagebrush (*Artemisia tridentata*), black greasewood (*Sarcobatus vermiculatus*), and alkali saltgrass (*Distichlis spicata*) dominated the vegetation directly bordering the lake. Upland vegetation consisted primarily of sagebrush (*Artemisia tridentata*) and juniper. Herbs were also present in small populations. Bulrush, cattail, and sedges (*Cyperaceae*) made up the majority of vegetation in the marsh and wet meadow communities. The fauna of the Abert Chewaucan marsh was very diverse. The lake itself did not support fish during the Late Archaic due to the high levels of salinity. Large populations of migratory bird species provided hunting game for the native people.

“The major criticism leveled against focal wetlands adaptation arguments was that they were based on arguments of abundance (the “Garden of Eden” proposition) rather than ones of stress” (Oetting 269).

The stress induced theory is based on the fact that mobility is always preferred by hunter-gatherers, because resources are abundant. Hunting and gathering also allows for humans to travel longer distances to gather information for future occupation and resource utilization (Binford 204). Archaeologists working on the site proposed that sedentary settlement patterns and heightened population numbers in the Abert Chewaucan Marsh likely resulted from situations of increased opportunity rather than from environmental stressors. Resource abundance discouraged foraging strategies over long distances and promoted the formation of collector-like groups that adopted a fusion-fission settlement strategy. This method of food acquisition entailed alternating periods of increased and decreased residential mobility depending on seasonal resource variability. “Within this continuum it appears that groups incorporating relatively greater proportions of marsh resources employ strategies which reduce residential mobility, a settlement pattern that can be termed semi-sedentary” (Oetting 273). Decreased mobility did not result in a complete sedentism and loss of information pertaining to food resources areas outside the marsh. Mobility reduction was simply a preferred option for efficiency in an area with plentiful food resources. Areas with greater “wetland” frequency displayed greater investment in utilizing wetland resources. The reliability, diversity, and readily available supply of food resources allowed for long term settlement stability and the development of villages and a labor system. “Throughout the Great Basin, archaeological sites with substantial dwellings such as pithouses or rock rings are most often found in areas associated with wetlands: marshes, lakes, rivers, and wet meadows. It is the presence of this site type in a wetlands setting that has prompted discussions of

1) semi-sedentary settlement patterns being associated with wetlands resources and 2) the abundance and reliability of such resources in maintain the observed pattern” (Oetting 271). Numerous grinding stone tools used for processing wild edible vegetation were also discovered in the Abert Chewaucan site. Bulrush and piñon seeds proved to be viable stored food sources that would allow settlements to persist through the winter months, and thus prevented the need to forage over long distances. “The relative reliability, abundance, and diversity of foods all found within a delimited geographic area, coupled with the processing, movement and storage space requirements of these products would foster reduced residential mobility (Oetting 273).”

Danger Cave

Danger Cave is located in Wendover, Utah on the western side of the Bonneville basin. It was first excavated in the 1930s, and other additional digs have been performed since then. The cave is widely known for its rich archaeobotanical record. This site demonstrates the exploitation of piñon pine nuts and limber nuts (*Pinus flexilis*) by inhabitants from the early to late Holocene; a period of roughly 7000 years. Multiple pine nuts fragments have been discovered in the cave. “Available evidence strongly indicates that humans were the primary agent of deposition of pine nut remains in the cave” (Rhode and Madsen 1204). Pine nuts were also found in dozens of coprolites that were discovered in the cave. Interestingly, pine nuts do not grow in the nearby vicinity of the cave. It is assumed that the pine nuts were brought in from nearby pine nut forests. The macrofossil record from the cave does not indicate that the nuts were stored for long periods of time at Danger Cave. Instead, the nuts were likely carried in small quantities by travelers who moved to and from the cave en route to other destinations. “It was probably not economically viable for Danger Cave residents to mount logistical pinyon gathering expeditions to distant hinterlands and return with large quantities of pine nuts” (Rhode and Madsen 1205). However, multiple other species of vegetation associated with wetlands and human consumption have been found in Danger Cave. A small spring located directly below the cave provided a sufficient supply of bulrush and pickle weed (*Salicornia virginica*) and various other types of vegetation favorable for human consumption. Thus, pine nuts were not the most economic food source for the area. “In areas that saw the earlier loss of those more favorable foods, as at Danger Cave, people responded by incorporating significant amounts of seeds into their diet” (Grayson 246). If anything pine nuts served as an “addition” to food

resources with higher return rates native to the area. Danger cave also attracted various types of waterfowl. The cave served as an oasis for semi-permanent settlements in the harsh arid desert of the Great Basin throughout the entire Holocene.

Conclusion

The archaeological evidence recovered from Stillwater Marsh, Lake Abert-Chewaucan Marsh Basin, and Danger Cave all provide extensive evidence and data necessary for analyzing and recreating the human ecology for inhabitants living in wetland environments in the Great Basin during the Late Archaic. Sites were chosen based on proximity to Late Archaic wetland areas and variability in location. Archaeological sites were examined from a wide range of locations across the Great Basin in order to achieve an accurate depiction of Late Archaic wetland adaptation. Surmounting evidence from all three sites supports the semi-sedentary residential model as the primary settlement pattern for inhabitants of Great basin wetlands. In a vast arid desert, it was logical for hunter-gatherer groups to locate near bodies of water. Resource and food availability was greatest in wetland areas. Previous archaeological theories addressing hunter-gatherer mobility in the Great Basin assumed that wetland adaptation was the result of stress induced pressures. Hunter-gatherer populations are sustained by exploiting resources as nomads travelling through different areas. The ruins of numerous structures discovered at Lake Abert-Chewaucan Marsh indicate that the area was used intensively between the Late Archaic and European contact time. Instead of being forced into wetlands to avoid external pressures, human populations chose to establish settlements in wetlands because such areas offered a constant and consistent supply of food and construction resources. It was simply convenient to locate near wetlands because of the superior resource return rate and the abundance of resources.

The diversity of flora and fauna available for consumption in the Great Basin wetlands fueled the semi sedentary settlements that were established during the Late Archaic. The exact proportion of subsistence strategies that were implemented for acquiring flora vs. fauna has not been agreed upon in the archaeological community. It is likely that all potential food sources were utilized depending on availability, location, and time of year. Robusticity in skeletal remains from the Stillwater Marsh site support strong evidence of a high protein diet that relied on regular hunting trips into the nearby slopes that bordered the

marshes. Remains from Lake Abert-Chewaucan Marsh demonstrate settlement patterns of a society that flourished on multiple resources from the marsh. A system for processing and storing seeds was in place at Lake Abert-Chewaucan during the Late Archaic. "The number of lithic/ground stone scatter sites is impressive. Including village sites with ground stone artifacts, 65% of the sites recorded during the SHPO-funded surveys have ground stone implements" (Oetting 170). Manos and metates were primarily used for seed grinding and pestles and mortars were utilized for processing tubers and roots.

Wetland adaptations were not fueled by stress induced triggers. People chose to live in wetlands because the ecosystems provided an oasis in a hot and barren desert. Abundant resources and fresh water resulted in the semi-permanent establishment of multiple settlements across the Great Basin marshes. Many of the larger wetland settlements eventually developed technology (grinding stones) for processing seeds and tubers at higher return rates. The new technology allowed the settlements to store food supplies for the winter. "Intensified harvesting of small seeds seems to have been a by-product of the desire to privatize the subsistence economy" (Eerkins 665). The specialization of seed exploitation allowed for the people to become semi-sedentary and contributed to enhanced kinship systems and improved labor techniques. Other wetland areas such as the Stillwater Marsh and Danger cave may have relied more on hunting because large settlements were never developed. These people likely led semi hunter-gather lifestyles. Vegetation and seeds were consumed, but the lack of technology, storage capabilities, and population size forced natives to search for higher return foods by hunting. Regardless, the reduced mobility of hunter gatherers in the Great Basin during the Late Archaic period was due to a dramatic shift in the overall climate that promoted the abundance of flora and fauna. Resource-lacking environments were absent, and thus stress induced foraging strategies were mostly abandoned. Semi-sedentary settlements strategically posited near wetland ecosystems were preferred for efficiency and close proximity to resources.

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Does Size Matter? Consideration of Body Mass in Interpreting Hypoglossal Canal Size in the Genus *Homo*

James Haas

Abstract

It is a common practice among physiological ecologists to consider the effect of body mass when comparing biological phenomena among groups of animals of different sizes. Yet the hypothesis that hypoglossal canal size in the more derived members of the genus *Homo* is related to the development of human speech has been proposed and refuted by several authors without considering body mass, even when making comparisons between primate species that vary in mass by nearly three orders of magnitude.

Hypoglossal canal area and oral cavity volumes reported by Kay *et al.* (1998), DeGusta *et al.* (1999), and Jungers *et al.* (2003) were normalized to reported body masses for over 30 species of primates, including *Homo sapiens*, *H. neanderthalensis*, and *Australopithecus afarensis*. Both hypoglossal canal area and oral cavity volume were highly correlated to body mass across families and genera; when normalized to body mass, however, they were not significantly correlated to each other.

Based on the regression relationship between hypoglossal canal size and body mass, hypoglossal canal sizes in *H. sapiens* and *H. neanderthalensis* were larger than would be expected based on body mass alone. Results for *A. afarensis*, for which there were few published measurements, were dependent on assumptions. Further evaluation of Australopithecus and early *Homo* specimens is warranted before dismissing the possibility that larger hypoglossal canal size represents one element of a suite of adaptive characteristics that facilitates human speech.

Introduction

Physiological ecologists and evolutionary biologists have a long history of using body mass scaling to evaluate physiological phenomena, such as metabolic rates (Nagy 1987), and life history variables, such as longevity and clutch size (Charnov 1993). Relationships between measures of skeletal size and body mass in modern apes and humans have also been used to estimate body masses for early hominins (McHenry 1992). Conversely, body mass can be used to calculate expected skeletal measures as a way of evaluating differences in observed values. Given this possibility, it is curious that the question of body mass never entered the recent debate on the significance of hypoglossal canal size in the genus *Homo* as an indicator of speaking ability.

Human speech is facilitated by a suite of characteristics that includes the lips, teeth, palate, tongue, oral cavity, nasal cavity, pharynx, larynx, and vocal cords (Bonvillain 2008); of these, only the teeth, palate, bones that bound the oral and nasal cavities, and occasionally the hyoid bone preserve well. This has frustrated efforts to evaluate the development of early hominin speaking abilities

compared to modern *Homo sapiens*. In 1998, however, Kay *et al.* proposed that the cross-sectional area of the hypoglossal canal could be used as a surrogate to assess speaking ability in hominins. The hypoglossal canal in the basioccipital allows passage of cranial nerve XII (the hypoglossal nerve) between the dorsal medulla of the brainstem and the tongue, providing motor innervation of the tongue. Kay *et al.* (1998) hypothesized that greater innervation of the tongue would mean a greater number of motor units, requiring a larger hypoglossal nerve, which in turn would require a larger hypoglossal canal. Consequently, hypoglossal canal area in modern humans would be greater than in non-human primates, and provide an index with which to evaluate speaking ability. Kay *et al.* expressed concern over the “large size, rather than rich innervation, of the ape tongue” (1998:5417) in interpreting the results. The reasons why a larger tongue would imply a lower level of innervation and less fine motor control were not clearly articulated, but the authors hypothesized the volume of the oral cavity could serve as a surrogate measure for tongue size. They expected that a higher ratio of hypoglossal canal area to oral cavity volume would provide additional support for their hypothesis. After

measuring hypoglossal sizes in modern humans, a range of non-hominin primates, *H. neanderthalensis*, and several species identified as *Australothithecus africanus* and/or *H. habilis*, they concluded that hypoglossal canal areas were absolutely and relatively (normalized to oral cavity volume) larger in modern humans and Neanderthals, indicating advance speaking capability in those species not shared by apes and early hominins.

Kay *et al.*'s conclusions were almost immediately challenged by DeGusta *et al.* (1999). DeGusta *et al.* measured hypoglossal canal areas and oral cavity volumes in primate specimens ranging from lorises (*Nycticebus coucang*) to gorillas (*Gorilla gorilla*), as well as modern humans and several Australopith specimens. Although they questioned the premise of the hypoglossal canal area to oral cavity volume ratio, believing that oral cavity volume was not a good surrogate for tongue size, they concluded that a number of non-human primates had hypoglossal canal sizes in the modern human range, both absolutely and relatively. In addition, they found no relationship between hypoglossal canal size and the cross-sectional areas and numbers of axons in the hypoglossal nerves of human cadavers. DeGusta *et al.* (1999) concluded that hypoglossal canal size and hypoglossal nerve size were not correlated and, by extension, that hypoglossal canal area was not an index of human speaking ability.

Jungers *et al.* (2003) confirmed DeGusta *et al.*'s conclusions regarding the size of the hypoglossal canal; in addition, they refined calculation of the hypoglossal canal area to oral cavity volume ratio to put both values in the same dimension, based on the fact that area increases by the square, while volume increases by the cube; the

appropriate ratio would therefore be the square root of the hypoglossal canal area to the cube root of the oral cavity volume. They found the ratio in *Homo* to be comparable to that of the gibbon (*Hylobates lar*). Further, they found no statistical difference in the weights per mm of lengths of hypoglossal nerves taken from chimpanzee (*Pan troglodytes*) carcasses and human cadavers. Based on this work, the question was essentially considered settled (Allen 2012).

However, none of the foregoing authors considered the effect of body mass on the either hypoglossal canal area or oral cavity volume, even when making comparisons between animals that can vary in mass by nearly three orders of magnitude. In addition, ratios of hypoglossal canal size to oral cavity volume were evaluated without allowing for covariance of both those values with body mass. Before leaving the question altogether, it seems prudent to look at Kay *et al.*'s (1998) underlying assumptions, as well as the subsequent critiques, with consideration given to the body masses of the primates that were evaluated.

Methods

Mean hypoglossal canal and oral cavity sizes reported by Kay *et al.* (1998), DeGusta *et al.* (1999), and Jungers *et al.* (2003) for 32 primate species were compared to the species' mean body masses. Canal areas (mm²) reported by DeGusta *et al.* were consistently smaller in all species measured in common with Kay *et al.* or Jungers *et al.* (Table 1). This was due to a systematic difference in DeGusta *et al.*'s methodology; however, Wysocki *et al.* (2003) (who collected data for a question unrelated to the speech debate) reported a mean hypoglossal canal size of 18.6 mm² for 100 adult male and female modern human

Table 1. A comparison of hypoglossal canal cross-sectional areas in apes and modern humans reported by three teams of authors. In all cases, measurements reported by DeGusta *et al.* (1999) are lower than those of the other teams. (n.a.=not analyzed.)

Species	Kay <i>et al.</i> 1998		DeGusta <i>et al.</i> 1999		Jungers <i>et al.</i> 2003	
	Number of specimens	Hypoglossal Canal Area (mm ²) Mean (SD)	Number of specimens	Hypoglossal Canal Area (mm ²) Mean (SD)	Number of specimens	Hypoglossal Canal Area (mm ²) Mean (SD)
<i>Pongo pygmaeus</i>	n.a.		2	4.2 (1.2)	22	9.21 (3.09)
<i>Hylobates lar</i>	n.a.		3	5.0 (0.8)	58	6.77 (2.26)
<i>Hylobates moloch</i>	n.a.		2	4.2 (2.4)	28	6.20 (1.82)
<i>Pan troglodytes</i>	44	10.26 (2.56)	6	9.1 (3.2)	57	11.57 (3.33)
<i>Pan paniscus</i>	53	7.79 (2.31)	n.a.		31	7.79 (3.01)
<i>Gorilla gorilla</i>	30	14.28 (6.42)	5	12.7 (3.8)	55	14.85 (6.10)
<i>Homo sapiens</i>	48	19.00 (6.89)	104	13.8 (6.1)	47	17.84 (5.39)

specimens, more consistent with Kay *et al.* (1998) and Jungers *et al.* (2003). Therefore, the most recent measurements by those authors were used when available. However, DeGusta *et al.* (1999) was the only source of data for hypoglossal canal areas and oral cavity volumes for non-hominoid primates.

Body masses for each species were taken from various sources (Appendix A); since the hypoglossal canal sizes for modern humans were reported with sexes mixed in all three relevant papers, and the male to female ratio of the additional primate specimens measured by DeGusta *et al.* (1999) is unknown, each species body mass in Appendix A represents a combined average of both sexes.

Statistical comparisons were made using Microsoft Excel (Version 7); values of $p \leq 0.05$ were considered significant.

Results

Figure 1 shows hypoglossal canal area in non-hominin primates as a function of body mass; the best fit relationship is a non-linear power relationship. Hypoglossal canal area and body mass were highly correlated (Pearson's $r=0.808$, $n=29$; $p<0.001$) using log10-transformed data, as implied by the power relationship. *Homo sapiens* and *H. neanderthalensis* both have, on average, larger hypoglossal canal sizes than would be expected based on body mass alone.

Interpreting hypoglossal canal size in *A. afarensis*, for which there was a paucity of published measurements, is dependent on the assumptions used to calculate a mean value; DeGusta *et al.* (1999) reported measurements for three skulls (one adult, two immature); using the mean of those three measurements (which could potentially equate to a combined adult male and female mean, allowing for sexual dimorphism in body mass), *A. afarensis* hypoglossal canal size is consistent simply with mean body mass, most closely matching that of the chimpanzee; however, using the single adult measurement of 17.3 mm^2 , the result for *A. afarensis* would be consistent with the two *Homo* species.

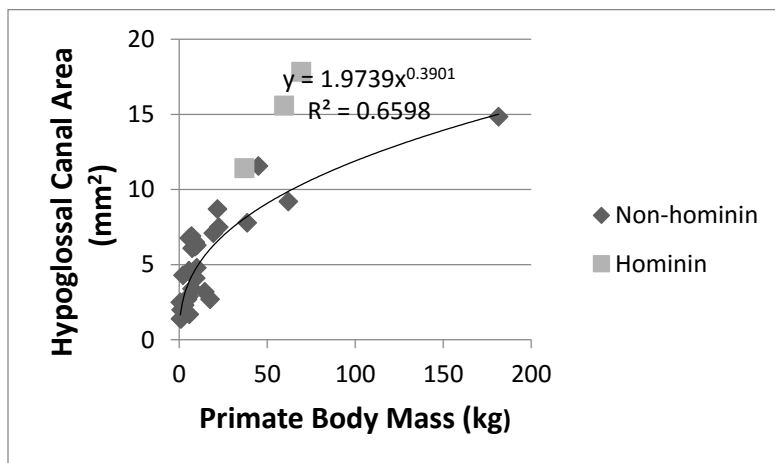


Figure 1. Relationship of hypoglossal canal size to body mass in non-hominin primates; hominin values are shown for comparison but are not included in the regression equation. Hominin species represented, in order of increasing hypoglossal canal size, are: *A. afarensis*, *H. neanderthalensis*, and *H. sapiens*.

Figure 2 shows mean oral cavity volume in non-hominid primates as function of body mass. The best fit relationship is also a power relationship; however, it is only marginally better than a linear relationship. Oral cavity volume and body mass are highly correlated ($r=0.897$; $n=28$; $p<0.001$); however, there are no obvious standouts. Neither *A. afarensis* nor *H. sapiens* deviate markedly from the expected relationship. An oral cavity volume was not available for *H. neanderthalensis*.

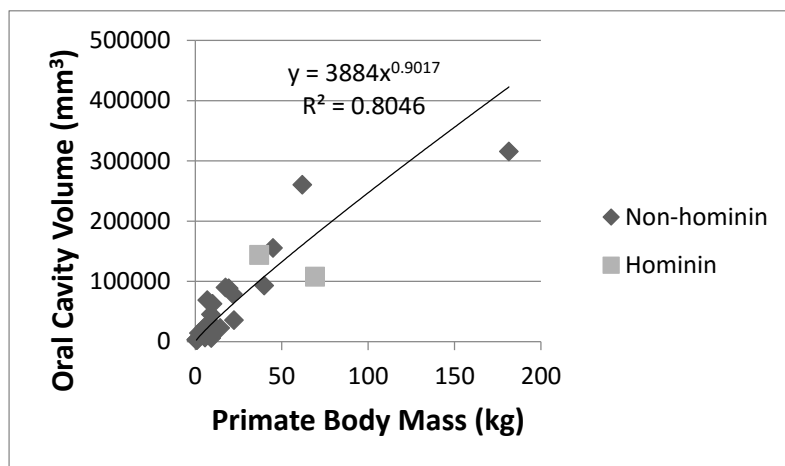


Figure 2. Relationship of oral cavity volume to body mass in non-hominin primates; hominin values are shown for comparison but are not included in the regression equation. Hominin species represented, in order of increasing oral cavity volume, are: *H. sapiens* and *A. afarensis*.

Although both hypoglossal canal area and oral cavity volume were highly correlated to body mass across families and genera, when each metric was normalized to body mass by using residual values

(calculated as the measured value minus the value predicted by the body mass regression) they were not correlated with each other ($r=-0.067$; $n=28$; $p>0.50$). Therefore, ratios were calculated after correcting hypoglossal canal area for dimensional differences using the following formula (which provides a similar correction to that of Jungers *et al.* [2003]):

$$\text{Ratio} = (\text{Hypoglossal Canal Area}^{1.5} / \text{Oral Cavity Volume}) * 1000$$

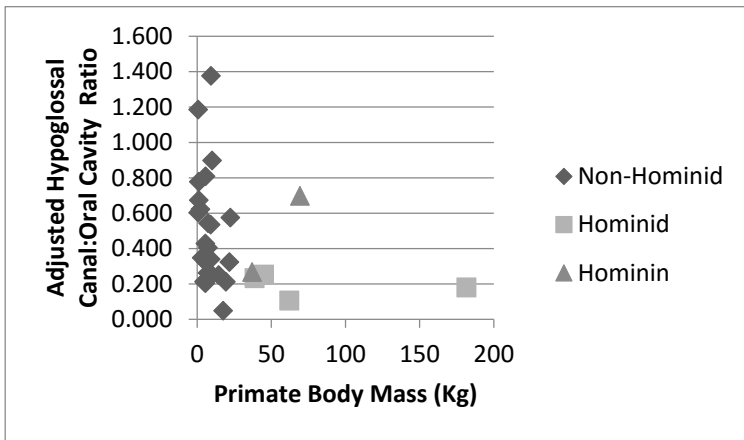


Figure 3. Ratios of adjusted hypoglossal canal areas to oral cavity volumes in relation to body mass for 29 primate species. *H. sapiens* is an outlier among hominids; *A. afarensis* clusters with the chimpanzee and bonobo (*P. paniscus*).

Ratios among the hominids (Figure 3) ranged from 0.107 for the orangutan (*Pongo pygmaeus*) to 0.698 for modern humans. The hominid mean was 0.290 (s.d. = ± 0.208 ; $n=6$), making the ratio in modern humans nearly two standard deviations greater than the mean for other hominid species. Ratios in non-hominid primates ranged from 0.049 in the gelada baboon (*Theropithecus gelada*) to 1.377 in the red colobus monkey (*Colobus badius*) with a mean of 0.509 (s.d. = ± 0.323 ; $n=23$). The ratio for *H. sapiens* was thus well within one standard deviation of the mean for non-hominid primates.

Discussion

The results of this analysis suggest that hypoglossal canal sizes in modern humans and Neanderthals are approximately 42% and 37% larger, respectively, than would be expected based on body mass alone; data for *A. afarensis* specimens are too few to allow meaningful interpretation. This supports Kay *et al.*'s (1998) observation of hypoglossal canal sizes. But the presumed significance of hypoglossal nerve size

to human speaking ability still needs to be considered. Do these results support Kay *et al.*'s hypotheses that hypoglossal canal size can serve as a surrogate for hypoglossal nerve size, or that oral cavity volume is a surrogate for tongue size? With regard to the latter question, DeGusta *et al.* (1999) make a convincing case that tongue size (hypothetically related to greater innervation) and oral cavity size in modern humans are not correlated; whether this is true for other primates is unknown. However, the results of this study suggest that a ratio of hypoglossal canal area to oral cavity volume has little utility in evaluating speaking ability, since modern human ratios are close to the mean for primate species across families, and the original premises of Kay *et al.* (1998) in evaluating ratios are not well-supported (DeGusta *et al.* 1999).

With regard to the former question, Jungers *et al.* (2003) and Wysocki *et al.* (2003) make the point that much of the area in the hypoglossal canal is taken up by the venous plexus, implying that the size of the hypoglossal canal might be related to venous return rather than to accommodating the hypoglossal nerve. However, the potential relationship of hypoglossal canal size to tongue innervation is still unknown. The work of DeGusta *et al.* (1999) and Jungers *et al.* (2003) on this question shows methodological and/or interpretive weaknesses that were acknowledged in the original papers, but not discussed in detail.

DeGusta *et al.* (1999) measured hypoglossal canal area, hypoglossal nerve area, and number of axons in the hypoglossal nerve cross-section in five human cadavers (three male, two female). They reported no significant correlations, but acknowledged that the sample size might be too small. Their results are summarized in Table 2a. Table 2b shows the result of a correlation analysis using the full set of data from all five cadavers; hypoglossal canal area is not significantly correlated to either hypoglossal nerve area or number of axons. However, Table 2c shows that when Specimen 1 is eliminated from the analysis as a potential outlier, the positive correlation between hypoglossal canal area and nerve area increases, and the correlation of canal area to number of axons becomes statistically significant. The fact that inclusion or exclusion of one sample from the

analysis can alter the statistical interpretation so dramatically suggests that DeGusta *et al.* were correct: their sample size was too small to answer the question they were asking; so, the question remains open.

Table 2. *a.* Hypoglossal canal and hypoglossal nerve cross-sectional areas compared to axon counts in five human cadavers. *b.* Pearson correlation coefficients for the full data set. *c.* Pearson correlation coefficients with Specimen 1 eliminated as an outlier; *r*-value in bold font is significant at $p < 0.05$. (Data estimated from Figure 3 in DeGusta *et al.* 1999).

a.	Specimen	Canal (mm ²)	Nerve (mm ²)	Axon #
	1	9	0.68	7000
	2	11.7	0.32	1000
	3	14.2	0.45	4000
	4	15.5	0.89	6200
	5	17	0.54	6200

b.	n=5; df=3	Canal	Nerve	Axon
	Canal	1		
	Nerve	0.1463	1	
	Axon	0.1321	0.7910	1

c.	n=4; df=2	Canal	Nerve	Axon
	Canal	1		
	Nerve	0.6014	1	
	Axon	0.9617	0.7856	1

Jungers *et al.* (2003) dissected sections of the hypoglossal nerves from 11 preserved human cadavers and two fresh chimpanzee carcasses, and preserved them in 100% ethanol; they then calculated the nerve mass (g) per mm of nerve length for each specimen, and concluded that the results for the two chimpanzees “fall comfortably within the human range” (2003:479). Two issues are not addressed in the analysis. First, the effects of preservatives on tissue weights are highly variable. Depending on type of preservative, length of time between dissection and preservation, and length of time in the preservative, weights can vary markedly in either direction from their fresh wet weight value (Shields and Carlson 1996); yet there is no indication that Jungers *et al.* controlled for those factors. Assuming the samples were comparable, however, there remains the question of defining a comfortable fit for

the chimpanzee data within those of the 11 human specimens. Jungers *et al.*’s box-and-whisker plot (2003:Figure 4) shows that the human data are not normally distributed, but rather are skewed toward the high end of the range. The median nerve weight of the chimpanzees falls in the low end of the human range, well below the median human value. Again, a need for larger sample sizes is indicated.

The work to date evaluating the significance of human hypoglossal canal size and its significance to speech has been impressive, considering the logistical challenges, but key pieces remain inconclusive. Further work is warranted before dismissing the possibility that the larger hypoglossal canal size in later hominins is part of a suite of adaptive characteristics that facilitates human speech. It could also provide insight into the question of where and when speech developed in the hominin line. Avenues for further investigation include:

evaluation of additional Australopith and early *Homo* specimens; repeating the evaluation of hypoglossal canal size correlations to measures of tongue innervation with larger samples sizes; and re-examining differences between modern humans and non-hominin primates, again with larger sample sizes, and with consideration of the effect of body mass in interpreting results. An alternative hypothesis is that a larger hypoglossal canal size is related to the need for more capacious venous return (Jungers *et al.* 2003; Wysocki *et al.* 2003). This hypothesis could also be evaluated with larger sample sizes measuring the venous plexus across species.

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Appendix A. Species, body masses (both sexes combined), hypoglossal canal areas, and oral cavity volumes of non-hominin and hominin primates.

Family	Species	Ave. Body Mass (kg)	Ave. Hypoglossal Area (mm ²)	Ave. Oral Cavity Volume (mm ³)	Hypoglossal/Oral Cavity Reference	Body Mass Reference
Cercopithecidae	Green Monkey (Vervet)	5.7	1.7	6800	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	DeBrazza's Monkey	5.5	2.9	24167	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Talapoin	1.05	2	3636	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Red Colobus Monkey	9.3	4.1	6029	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Black & White Colobus Monkey	9.1	6.5	30952	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Patas Monkey	10	4.8	11707	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Long-tailed Macaque	4.7	2.7	20769	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Rhesus Macaque	7.38	6.1	27727	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Pig-tailed Macaque	10	6.3	63000	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Celebes Crested Macaque	7	6.9	69000	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Mandrill	22.4	7.5	35714	DeGusta <i>et al.</i> 1999	Setchell & Dixson 2001
	Olive Baboon	19.35	7.1	88750	DeGusta <i>et al.</i> 1999	Cawthon Lang 2006
	Chacma Baboon	21.75	8.7	79091	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Gray Langur	14.5	3.2	22857	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Gelada Baboon	17.53	2.7	90000	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
Atelidae	Mantled Howler Monkey	5.5	4.6	23000	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Central Am. Spider Monkey	7.27	3.4	15455	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
Aotidae	Noisy Night Monkey	0.7	1.4	2745	DeGusta <i>et al.</i> 1999	Morales-Jimenez <i>et al.</i> 2008
Cebidae	White-fronted Capuchin	2.2	4.3	14333	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Brown Capuchin	3.05	2.3	10000	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	White-faced Capuchin	3	4.8		DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
Lorisidae	Sunda Slow Loris	0.64	2.5	3333	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
	Potto	1.1	1.4	2456	DeGusta <i>et al.</i> 1999	Myers <i>et al.</i> 2013
Hylobatidae	Siamang	9.07	6.2	45,383	Jungers <i>et al.</i> 2003	Jurmain <i>et al.</i> 2011
	Gibbon	5.67	6.77	21,776	Jungers <i>et al.</i> 2003	Jurmain <i>et al.</i> 2011
Hominidae	Bornean Orangutan	62.00	9.21	260,406	Jungers <i>et al.</i> 2003	Myers <i>et al.</i> 2013
	Gorilla	181.44	14.85	315,697	Jungers <i>et al.</i> 2003	Jurmain <i>et al.</i> 2011
	Chimpanzee	45.00	11.57	155,469	Jungers <i>et al.</i> 2003	Myers <i>et al.</i> 2013
	Bonobo	38.60	7.79	93,160	Jungers <i>et al.</i> 2003	Myers <i>et al.</i> 2013
	Australopithecus afarensis	37.00	11.43	144,167	DeGusta <i>et al.</i> 1999	McHenry 1992
	Neanderthal	59.50	15.59		Kay <i>et al.</i> 1998	Smithsonian 2013
	Modern Human	69.25	17.84	107,945	Jungers <i>et al.</i> 2003	USEPA 2011

The Subjective Well-Being of International Students: A Case for the Use of Anthropological Theory and Method

Max Van Oostenburg

Abstract

For centuries people have crossed national borders in order to pursue higher education and vocational opportunities. In most contemporary cases, the individuals that take this path have spent the first chapters of their lives in the country within which they were born, raised, and reached young adulthood. The psychological and social dimensions of this shift in sociocultural context have been of interest to a number of disciplines, namely psychology and other social sciences. These investigations have generated a collection of terms and concepts which attempt to capture the complex sociopsychological phenomena that accompany student migration. One objective of this article will be to identify the concepts and approaches within this literature that appear compatible with anthropological insights into the relationship between the psychological and the social. The latter will be the subject of in-depth exploration, highlighting points where these insights perhaps offer ways to amend and more effectively operationalize existing concepts in the international student well-being literature. The result will be an argument in favor of an anthropologically-informed mixed-methods approach to understanding the sociocultural aspects of subjective psychological well-being among international students.

Introduction

The cognitive and psychological branches of cultural anthropology offer many powerful tools designed to make sense of the way that sociocultural context and the human mind interact. These tools operate under the basic premise that the most experientially immediate locus of culture is the human mind. The individual is always seen as an individual *in context*. Thus construed, culture can be thought of as a shared set of dynamic and interrelated 'schemas' people use--at varying levels of awareness--to guide the way they perceive and experience existence. In other words, human beings are not simply programmed by culture. Rather, they actively interact with it, embodying aspects of it that stand up to the test of experience and calling into question those that do not. Significantly, however, many thinkers have argued convincingly that aspects of culture are unconscious or even pre-conscious (Bourdieu, 1980; Csordas, 2002). Taking this important insight into account complicates the notion that individuals are always able to consciously assess or even recognize all aspects of their cultural background. Thus, not only does it seem reasonable to hypothesize that a change in sociocultural context would cause an individual to change in conscious ways, but perhaps also in more fundamental and less accessible ways. This model recognizes the knowable and unknowable possibilities and constraints prescribed to the individual by culture, but still

positions the individual as an agent with some level of distance from the shared cultural world(s) around them.

Given this framework, many questions become apparent when we consider the adult international student. What effect does a new sociocultural context have on the individual's stance toward their home community and culture? What aspects of the "self" remain the same and which undergo transformation? What are the factors that influence these processes? What kinds of social ties are most closely tied to subjective (psychological) well-being in this context (e.g. connection to home country, connection to host culture/community, connection to other co-national students, etc.)? Does the international student context uniquely configure subjective well-being and health outcomes? What are the dimensions of the adjustment process are pertinent to subjective well-being? These questions have received some attention in the international student adjustment literature, though an expanded application of research frameworks that take an 'individual in context' perspective would perhaps more clearly elucidate some of the complexities of international students' experiences.

Hence, the core aim of this article is to make a case for the integration of theory and method from psychological anthropology with existing concepts and lines of thought within the literature on the subjective psychological well-being of international students. I will first attempt to trace

and clarify the concepts developed thus far to understand the social and psychological adjustments made by international students. I will then outline anthropological perspectives and frameworks for looking at the way culture and the mind interact to produce the human experience. Additionally I will suggest a set of methodological procedures guided by these theoretical insights. Ultimately, I hope to put forth an anthropological mixed-methods research scheme for exploring the social components of subjective psychological well-being among international students. Central to this scheme is the idea that new cultural configurations emerge from the unique dynamics of international student contexts.

Acculturation and Acculturative Stress

Early use of the concept of acculturation largely referred to the group-level phenomena by which changes in cultural patterns would occur during extended intergroup contact (Redfield, Linton, & Herskovits, 1936). A distinction between group-level, or collective, acculturation, and individual-level, or psychological, acculturation, was later made by Graves (1967). Over the course of the subsequent few decades of acculturation research, usage of term received criticism for its synonymy with ‘assimilation’ in the literature (Berry, 1997). Interculturation (Clanet, 1990), an alternative concept perhaps able to provide a less asymmetrical framework for understanding the dynamics of intercultural adjustment, has aided more recent research. According to Berry (1997), the added sensibilities of the concept of interculturization, including a recognition of the productive properties of the intercultural situation (i.e. the emergence of new cultures), have largely been brought under the umbrella of the concept of acculturation in more contemporary research. It is this notion of the emergence of a new cultural context unique to the international student experience that is the focus of this article. Is there reason to suspect that unique sociocultural configurations take shape among groups of co-national international students? If so, how can these contexts be best conceptualized? Do these contexts reconfigure a cultural notion of subjective well-being? And finally, how might ‘acculturation’ to this unique context impact individual subjective well-being? I argue that all of these important questions call for an ‘individual in-context’ approach.

In a particularly comprehensive article, Berry (1997) outlines four major “acculturation strategies” from the point of view of the non-dominant group, suggesting that individuals from the non-dominant group can be characterized as generally employing one of these four strategies. Individuals who seek to eschew their old

cultural identity and adapt a new one that more closely corresponds to the dominant or host culture are said to be taking up the strategy of ‘assimilation’. Alternatively, those that place primary importance on retaining their pre-existing cultural identity--often actively avoiding overexposure to host culture--are seen as employing a strategy of ‘separation’. ‘Integration’ is suggested as the middle-ground alternative to the assimilation-separation dichotomy. Individuals who employ this acculturation strategy place importance on both maintaining a connection to their home culture and integrating aspects of host culture that meet their discretion or that are necessitated by some aspect of their lives. Lastly, ‘marginalization’ is defined as an involuntary condition of acculturation that occurs when non-dominant groups or individuals are simultaneously unable to maintain their cultural identity (due to lack of resources and power) and kept from integrating (due to discrimination by the dominant group) (Berry, 1997). While potentially helpful in terms of orienting the researcher toward a spectrum of acculturative conditions, further reading of the literature (e.g. Tseng and Newton, 2002; Kagan and Cohen, 1990) suggests that_ invariably some unique blend of these strategies, hinged on multiple and interacting factors, is employed by those in transnational or transcultural settings--including international students.

Recent work in the study of international students and acculturation has rightfully taken a turn toward a more bilinear approach that is attentive to both acculturation (to mainstream, or host culture) and enculturation (to home, or origin culture) (Kagan and Cohen, 1990; Yoon et al., 2008; Du, 2012; Hendrickson et al., 2011; Khandelwal, 2002; Al-Sharideh and Goe, 1998; Atri et al., 2006; Ying and Han, 2006). Du’s (2012) longitudinal study of Chinese international students, for example, found that social connectedness to Americans and American culture was a significant mediator of subjective well-being for students who were more acculturated, while social connectedness to other Chinese students and Chinese culture was a significant mediator of subjective well-being for students who were more enculturated. Du’s definition of subjective well-being is akin to Diener et al.’s (1999) use of the concept, and can be simply put as an individual’s evaluation of their life according to their own standards. Acculturation and enculturation were measured using the Vancouver Index of Acculturation (VIA; Ryder et al., 2000), a two-part index that measures an individual’s extent of adherence to both home and host culture. The VIA seems potentially useful, although I would suggest that it is limited in that it entails

assumptions as to what the domains of import relevant to the acculturation and enculturation processes might be, that are based on concerns particular to the unique configuration of cultures and nationalities implicated in these processes as they happen in Vancouver. These domains include values, social relationships, and adherence to traditions (Ryder et al., 2000). Though these domains likely touch on aspects of the acculturative/enculturative process that are more-or-less ubiquitous across contexts, carefully implemented setting-specific adaptations would enhance its correspondence with the real-world dynamics of a given group's transcultural experience.

A number of these bilinear studies frame social connectedness as the mediator between acculturation/enculturation and subjective well-being (Al-Sharideh and Goe, 1998; Cassel, 1960; 1976; Du, 2012; Hendrickson et al., 2011; Kagan and Cohen, 1990; Yoon et al., 2008). The trend throughout these studies is to operationalize social connectedness as either (1) the degree to which a person feels like they get along with either host-nationals or co-nationals, or (2) the amount of time spent socializing with each group. Levels of acculturation and enculturation are often then gauged in terms of cultural competency. Logically, it does seem like these variables would be related. If an individual is spending a lot of time with a culturally unified group of people and getting along well with them, for example, then it makes sense that that individual would be more competent in the context of that cultural group. Furthermore, if a person spends their time socializing with a group of people they get along with, they may reasonably be expected to report higher levels of subjective well-being than someone who spends time socializing within a milieu of people they tend not to agree with. There is precedent in the literature for taking social connectedness with co-nationals to be a greater determinant of subjective well-being than social connectedness with host-nationals (Al-Sharideh and Goe, 1998; Rosenthal et al., 2007). Even if this is sometimes the case, it does not necessarily mean enculturation is more tied to subjective well-being than acculturation. Such a conclusion ignores the possibility that social alignment with co-nationals may entail a normative model of the proper blend of enculturation and acculturation, making the two processes difficult to separate. Again, we have uncovered a space for the notion of an emergent cultural context, unique to each university's population of international students of a given nationality.

Where I break with some of the existing acculturation literature (e.g. Searle and Ward, 1990) is where researchers take the step of separating psychological and social adjustment to a new cultural setting. Pan et al. (2008) perhaps frame their examination of adjustment in the cross-cultural migration process in a more holistic manner. They identify the factor most closely mediating "life satisfaction" (a concept closely related to subjective well-being in the literature) to be "meaning of life", or a person's sense of purpose in life. From the perspective of cognitive anthropology, people assign meaning and purpose to their lives through the use of experientially-informed, shared cultural models (Strauss and Corbin, 1998; Quinn, 2005). Thus, a separation between psychological and sociocultural adjustment seems unwarranted. It seems more likely that the adjustment process, or set of processes, contains both psychological and sociocultural elements which interact in ways that blur the lines between the two related domains of experience. Put simply, the psychological is always sociopsychological. This seems to better capture an overall picture of an individual's well-being; sociocultural and psychological adjustment processes leaving often overlapping marks on the individual. A view such as this, which takes experienced outcomes of mental health to be informed by processes both within and around the brain (the psychological and the sociocultural), takes up Kendler et al.'s (2010) important call for a mechanistic property cluster conceptualization (MPC) of psychiatric disorders, or in this case, simply states of mental well-being. The measurement of subjective well-being then becomes not a search for a primary factor of change or principal component of well-being, but rather a quest to capture the relationships between a multitude of factors at levels within and beyond the individual.

Measuring Subjective Well-Being

Research on subjective well-being (SWB) in general has advanced prolifically over the course of the last few decades. According to Diener et al. (1999), "Growth in the field of SWB reflects larger societal trends concerning the value of the individual, the importance of subjective views in evaluating life, and the recognition that well-being necessarily includes positive elements that transcend economic prosperity." In the same article, Diener et al. put forth a set of components of subjective well-being. The four major factors the authors identify include pleasant affect, unpleasant affect, life satisfaction, and domain satisfactions (Diener et al., 1999). Joy, elation, contentment, pride, affection, happiness, and ecstasy are provided as subdivisions of pleasant affect, while guilt,

shame, sadness, anxiety, anger, stress, depression, and envy are given as instances of unpleasant affect thus far explored in the literature. Diener et al. additionally detail components of life satisfaction--which include desire to change life, satisfaction with current life, satisfaction with past, satisfaction with future, and significant others' views of one's life, as well as components of domain satisfaction--which include work, family, leisure, health, finances, self, and one's group (1999). Lacking are clear definitions of each form of pleasant and unpleasant affect, as well as any delineation of causal relationships between circumstance and SWB factors. Diener et al. admit these shortcomings and emphasize the need for more rigorous and sophisticated methodologies (1999).

From a psychological anthropology perspective--one which emphasizes the role of the sociocultural environment in the way an individual perceives, experiences, and expresses--Diener et al. make the mistake of reducing social relations to a discrete subset of factors in a list. Instead, a better model of subjective well-being would recognize the capacity for social interaction and shared cultural knowledge to, at least in part, shape and inform all of the components of well-being put forth in Diener et al.'s model. Furthermore, the sociocultural impacts on these components, as well as the components themselves, potentially differ greatly by context. As Christopher (1999) argues, any understanding of psychological well-being engages with notions of morality and is thus cultural. For these reasons, it may be advantageous to assume little, building a contextually-faithful picture of the social elements of subjective well-being from the ground up. I will further explore what this idea might look like in action later in this article.

The Question of Culture: Models, Schemas, and the Cultural Mind

Despite its increasingly ubiquitous usage in population health studies, the concept of culture is often taken for granted and employed without being clearly defined (Hruschka 2009; Kohrt et al., 2009). Far from trivial, this is deeply problematic, as it becomes difficult to determine if different researchers are evoking the culture concept in the same way. Not only is the working definition of culture an issue on a theoretical level, it also fundamentally configures methodology. One major problem is that there is not an end-all be-all definition of culture, nor are there grounds for one at this point. As Roy D'Andrade famously discusses in the preface of *The Development of Cognitive Anthropology* (1995), many problems arise when we start to think about what culture is.

What is the problem? The problem is the nature of human culture. One can conceive of a society's culture, in Ward Goodenough's famous phrase, as "whatever it is one has to know or believe in order to operate in a manner acceptable to its members." Certainly humans do learn an enormous amount of cultural knowledge. The problem comes when one tries to understand what that knowledge is. Is it lists of propositions? Organized structures of contrasting attributes? A storehouse of images? A collection of taxonomies? A set of computer-like programs? Is it totally language based, or does it include images and physical skills? (p. xiii)

In other words, if culture seems to be contributing to a phenomenon or set of phenomena, how can it and its effects on individuals be found and measured? Complicating things further, we of course see innumerable personal differences between individuals who may all be supposedly of the same culture. For psychologically-minded anthropologists, culture presents itself not as an external force interacting with the subject, but as a set of processes, symbols, and structures that help constitute and orient the subject in particular ways. It would thus seem that an operating definition of culture capable of tracing its effects on the individual must recognize culture as something that people carry with them that helps them organize the perceivable world. Framed as such, shared cultural knowledge is seen as always present in experience at various levels.

An effort to determine what culture is on an essential level (see Kendler et al., 2010) may be go beyond the scope of both this article and any research that uses this review as a guide. Perhaps a more useful endeavor at this juncture would be to settle upon a practical definition of culture, one which renders the cultural traces left on individuals measurable. For this I turn to Kohrt et al.'s simple definition of culture as "...a system of beliefs, values, norms, and behaviors that are transmitted through social learning" (2009: 230). This shared knowledge is transmitted and stored within the mind of each individual in the form of mental models and schemas (Quinn, 2005), which provide the cultured individual a roadmap with which to interpret the world around them, leaving spaces that each individual must fill out in accord with their own unique experiences. Since each individual holds a unique and intersectional position in relation to the people around them, each will treat the larger community's norms, values, expectations, beliefs, myths, etc. in a different way. Here we can think of culture as a uniquely embodied component of a person's *habitus* (Bourdieu, 1980). Culture provides the socially embedded individual with a

set of conceptual tools with which to build models of reality that are partly cultural, partly experiential. These cognitions are both models and *modelers*, simultaneously being built by, and building, subjective experience.

The power of this conceptualization of culture has been recognized in the literature, particularly by those interested in the idea that cognitive processes are not able to be fully accounted for through neurobiological explanations alone; that the phenomenological realm entangles processes both in (neurobiological components) and around (contextual components) the human brain. Kirmayer and Sartorius (2007), for example, discuss the phenomena of psychosomatic and sociosomatic looping, which they argue occur when individuals interpret psychic or somatic sensations through the filters of cognitive cultural models, and result in differences in symptom expression that need to be taken into account nosologically (with regard to psychiatric diagnoses). This idea, I argue, can be extended beyond thinking about psychiatric disorders and diagnoses. A cognitive cultural model of subjective well-being, for instance, may fundamentally direct the cultured individual's attention in relation to their own body and mind. Thus, this idea of looping is potentially insightful when examining the way subjective well-being is experienced among Indian international students.

Having established this working definition of culture, the questions now become methodological in nature. How is one to determine if a given belief, value, norm or behavior is shared? Further, how is one to trace the impact of this shared knowledge on the experience of individuals? It is these concerns to which I will now turn.

Finding Culture

So how might one go about applying this conceptualization of culture when looking at the subjective well-being of international students? To begin, the researcher would need to decide upon a research site, as well as a specific group of international students. One obvious way to parse out distinct groups of international students is to do so based on nationality. While there are many reasons to be reluctant to assume that a shared nationality automatically entails a shared cultural identity, there are likely at least some basic commonalities between co-nationals that may not be present between people from different countries (Anderson, 2012). Depending on the parameters of the research, there may also be practical reasons to either include international students of multiple nationalities in the research population, or conversely, to limit the study to a particular demographic within a single

nationality. When making this decision, the researcher or research team should be conscious of the aims of the research and the methodologies they intend to utilize. In the case of Cultural Consensus Theory (see next section), where the elicitation of a shared cultural model around a given domain is the aim, researchers should have sufficient reason to believe that those included in the research population have enough in common to potentiate a meaningfully shared understanding of the domain--or domains--of interest.

There is much in the established literature on psychological and subjective well-being that suggests very strongly that conceptions of well-being are culture-laden, and effectively vary to a degree among the world's cultural groups (Christopher, 1999; Diener et al., 2003). However, there are also studies that have found cross-cultural similarities in the determinants psychological of subjective well-being (Chirkov et al., 2003; Diener et al., 2003). In fact, there is no clear consensus in the literature as to which aspects of subjective well-being are informed by an individual's cultural affiliation and which are universal. In the interest of parsimony, it seems reasonable to operate based on the null hypothesis that species-level dynamics of well-being do exist. That said, any study of subjective well-being that takes to heart the idea of grounded theory should seek to understand local conceptions of well-being on their own terms before assuming commonalities with other contexts.

The idea of 'community', or 'social connectedness', is also evoked frequently in studies of international student health and adjustment (Al-Sharideh and Goe, 1998; Du, 2012; Hendrickson et al., 2011; Kagan and Cohen, 1990; Yoon et al., 2008). Often community refers to either the host community within which international students find themselves in their new sociocultural environment, or to the community of fellow co-nationals. Much like the concept of subjective well-being, what constitutes sense of community, or social connectedness, encompasses ideas that may be generalizable in some abstract sense, as well as ideas that vary by culture. In alignment with the principles of grounded theory, researchers concerned with the cultural model of community in a given location should resist assumptions regarding the meanings, dynamics, and significance of the concept of community for the group of interest. Due to the social basis of human life, I argue that an exploration of the culturally-specific domain of community (or the local equivalent of it) is essential to any study of subjective psychological well-being. In the case of international students, this line of

thinking is very much supported by the literature (as noted above).

There are two main ways of beginning the process of eliciting localized understandings of subjective well-being and community that I would like to propose. These methods are participant observation and open-ended or loosely structured interviews. The principle underpinning both of these means of cultural interpretation is the idea that minimizing the role of the researcher (and his or her set of assumptions) is the best way to access a culture on its own terms. To begin to understand a particular group of international students' conceptualization of subjective well-being in this way, a researcher should regularly spend time with members of the group, interacting in informal ways that promote rapport and trust. This might include being present where groups of students are congregating in their down time, as well as for more formal cultural events. During these 'hangouts' the researcher should make an effort to minimize their influence on what happens, which could mean being an active participant or not, depending on the situation. The researcher should look for opportunities to ask questions they may have about the situation. This could involve asking questions to the group and/or meeting with individual members of the group after the fact. While openness is key here, the researcher should maintain cognizance of the ideas they wish to explore and test. Over time, patterns and themes of interest may begin to emerge. These patterns and themes can be brought into the interview context to give more structure to the interview process. The aim in all of this is to fully explore and grasp the complexities of these culturally-laden ideas and mental models.

Here it is important to distinguish between two distinct ways of situating the interviewee within the context of the ethnographic interview. Questions that aim to elicit knowledge shared at the group level put the interviewee in the position of 'informant', while questions that invite the interviewee to indicate their personal stance towards something position them as a 'respondent' (Levy and Hollan, 1998). Ideally, an interview that hopes to get at the ways culture interacts with experience should employ a combination of these two types of questions.

The next step in the process of understanding the models of subjective well-being and community of a given group of international students, in a way that takes insights from psychological anthropology seriously, is to attempt to "find culture in talk" (Quinn, 2005). This entails transcribing recorded interviews and 'coding' them

according to recurrent themes and ideas, all in an attempt to uncover people's culturally-informed schemas of these domains. In line with grounded theory, the aim should be to let codes (which represent recurrent themes and elements of narrative structure) emerge organically (Quinn, 2005). Groleau, Young, and Kirmayer (2006) identify three kinds of culturally-informed mental models they see as particularly revealing of an individual's cognitive map of health-related experiences: explanatory models, prototypes, and chain-complexes. Having had some experience using these concepts as guides during narrative analysis, I would contend that they are apt tools for understanding not only experiences and conceptualizations of health problems, but of experiences and conceptual models more generally. For example, by being attentive to explanatory models of what it means to be an international student and why, the use of prototypes in making sense of one's own orientation towards finding a balance between acculturation and enculturation, and the construction of chain-complexes which piece together various levels of explanatory modeling and prototypical reasoning, a researcher may best be able to make sense of what shared models might exist, as well as how individuals are differently embodying them.

Cultural Consensus and Consonance

One useful and practical method for testing whether or not seemingly shared knowledge gleaned from qualitative methods maps onto a population in general, pulls from Cultural Consensus Theory (CCT) (Romney et al., 1986; Romney et al., 1987; Weller, 2007). Based on coded interviews, the researcher(s) compiles a set of statements that reflect emergent themes and ideas within and around the domains of interest (subjective well-being and community for our purposes). These statements can be more-or-less directly pulled from interviewee responses, or simply inferred from these responses even if not explicitly stated. This is also a means of exploring and testing relationships between established codes in the qualitative data, and statements should reflect these hypothesized relationships. It is important that the chosen set of statements be centered around a single topic and of roughly the same difficulty level. In this hypothetical case, since subjective well-being and community constitute two separate domains of interest, perhaps two sets of statements are suitable. By saying the statements should be of about the same difficulty level, Weller (2007) means that it should be reasonable to expect that an 'average' person from the group of interest will be able to indicate the accuracy of each statement in the set. Keep in mind that these statements are, in essence, meant to 'test' the

models of subjective well-being and community that the researcher has come to through qualitative analysis. Not only this, but responses to these statements can also be used to assess the extent to which each individual aligns with the beliefs and values of the group. For this reason, the series of statements should be compiled into a survey with at least two parts. One of these parts will be asking participants to indicate their level of agreement with the statements as an informant, the other as a respondent. If significantly shared models of subjective well-being and community are shown in the data, each individual's *consonance* with these shared models can be assessed qualitatively by comparing their responses to the respondent portion of the survey to the set of average, or 'correct', responses to the informant portion. Gathering consensus and consonance data simultaneously deviates from the established norm of this kind of research in that usually these measures are done at different times, often involving separate sample groups within a community (Dressler et al., 2005; 2007). Collecting these measures simultaneously, however, may be advantageous for a couple of reasons. First, it eliminates the need for the researcher to locate two separate samples of participants, thus saving time, energy, and resources. Second, having participants respond to survey items focused on their own opinions and values, as well as items focused on their perception of the opinions and values of those around them, may give the analyst a better sense of the ways in which people personally embody the shared sociocultural world they live in. In the formal Cultural Consensus Model, an extra step is taken to correct for guessing (Romney, Batchelder, & Weller 1987). Essentially this added step uses statistical procedures in order to determine which individuals' answers are most likely a reflection of cultural knowledge rather than guessing, weighing these individuals' answers higher than those of less 'culturally reliable' individuals. Alternatively, the informal Cultural Consensus Model gauges individual responses in relation to the answers of the rest of the group rather than to the 'correct' set of responses (Weller, 2007). It is consonance to this consensus model which is hypothesized to be associated with subjective well-being (Dressler et al., 2005; 2007). If multiple clusters of answers seem to appear, there may be multiple cultural models worth exploring further. If this is the case, it may be informative to compare reported level of subjective well-being according to the model individuals are most in line with.

There is much precedent in the culturally-informed population health literature for causally linking cultural consonance to health outcomes (DeCaro and Worthman,

2008; Dressler et al., 2005; Dressler, 2005; Dressler et al., 2007; McDade, 2002; Balieiro et al., 2011). I argue that these linkages are traceable among international students as well. I hypothesize that the shared model of community for a given group of international students will identify a 'normally valued' level of balance between acculturation and enculturation. Hypothesizing further, I suggest that individuals who fall outside of this normal range may be more likely to experience psychological distress and diminished subjective well-being.

The cultural consensus/consonance approach is an attractive option in terms of validating ethnographic findings. Through the use of both qualitative and quantitative methods, I argue that researchers can effectively broaden the scope of their ethnographic claims. Population-level statistical analyses are only meaningful when they capture relationships between contextually-salient variables, and ethnography provides a powerful means of accessing them.

Conclusions

Throughout this article I have argued for an integration of perspectives from psychological and cognitive anthropology with existing concepts and approaches in studies of subjective well-being among international students. The former set of perspectives (i.e. culture as a set of mental models, cultural consonance) effectively orient the researcher towards integral social aspects of cognition, experience, and by extension, subjective psychological well-being. In particular, the cultural consonance approach--fundamentally an extension of the cultural models approach--seems to hold much potential in terms of being able to operationalize culture as an influence on individual experiences of health and well-being. If rigorously applied, I argue that the cultural consonance approach can help clarify the influence of shared cultural models on the subjective well-being of international students. Thus, not only does this proposed approach hold academic merit, it also holds potential to provide universities and international students alike with a means by which to consider subjective psychological well-being in relation to the unique sociocultural configuration characteristic of the international student experience. Ultimately, the hope for this proposed research 'blueprint' is to examine the unique sociopsychological complexities inherent to life as an international student. I hypothesize that the experience of an international student is fundamentally marked by a balancing act between acculturation and enculturation. Further, I suggest that a normative model of this balance may be reflected in a shared cultural frame. My hope is

that light will be shed on the relationship between cultural embodiment and mental health outcomes, both in the international student context and more generally, through the kind of research this article advocates.

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Prohibition of Polygamy: A Historical and Political Economic Analysis of Polygamy in the U.S.

Kristen Sweet-McFarling

Abstract

Using a feminist anthropological perspective, this paper explores the historical and cultural context in which polygamy was made illegal in the U.S. by examining the intersection of politics, economics, religion, marriage, sexuality, and gender roles. For this analysis, I collected and examined primary historical documents, scholarly articles and books, and information from the Internet and media regarding polygamy, historically and contemporarily. The paper analyzes how the particular historical, cultural, political, and economic context of the U.S. during the 19th century led to the practice being viewed by mainstream society as socially and morally unacceptable, and why the practice was criminalized by the federal government. It is important to examine this multi-faceted and intricately woven string of events, set within the particular historical and cultural context of the U.S. in the 19th century, in order to gain a better understanding of the historical roots of polygamy in the U.S. and the practice's status in today's society

Using a feminist anthropological perspective, I explore the historical and cultural context in which polygamy was made illegal in the U.S. by examining the intersection of politics, economics, religion, marriage, sexuality, and gender roles. I argue that the particular historical, cultural, political, and economic context of the U.S. during the 19th century led to the practice being viewed by mainstream society as socially and morally unacceptable and illegal to practice in the U.S., and why it remains this way today.

Polygamy as a marriage practice has long been studied in the field of anthropology, but little research has been conducted by anthropologists on polygamy in the U.S. The term polygamy breaks down into two different terms: polygyny and polyandry. Polygyny is the marriage of one man to more than one woman, and polyandry is the marriage of one woman to more than one man (Stone 2006:18). In this article, I focus specifically on polygyny and refer to polygyny as polygamy; in most of the literature reviewed it is referred to as such, and the majority of people understand and recognize polygyny to be polygamy.

I use a political economic approach to analyze the historical and cultural context in which polygamy was criminalized and made illegal in the U.S. by examining the intersection of politics, economics, religion, marriage, sexuality, and gender roles. Political economy is defined by Micaela di Leonardo as “. . . new work in anthropology that attends both to economics and politics and to the ways in which they are culturally construed by differing social actors in history” (di Leonardo 1991:27-28). In order to

gain a deeper understanding of why polygamy is illegal in the U.S., it is essential to examine the historical roots of polygamy, the political and economic context of the U.S., and cultural ideas of marriage, sexuality, and gender.

I also use Henrietta Moore's idea of dominant and subdominant discourses that are both reproduced, and in some ways resisted, to help understand how pro- and anti-polygamist discourses can exist simultaneously throughout history (Moore 1994:58-63). Moore's framework allows for the possibility of the existence of multiple femininities and masculinities that could be contradictory and competing, so there is a possibility for multiple discourses of love, marriage, and sexuality to coexist. Marriage structures can and do come in many forms; the institution is culturally constructed, and there is not a single “right” way to express love and sexuality (Moore 1994:58-63).

For this analysis, I collected and examined primary historical documents, scholarly articles and books, and information from the Internet and media regarding both historic and contemporary polygamy. This article should not be considered an all-inclusive review of differing marriage structures. For example, this article does not contain research on Native Americans and differing marital structures that may have been or still are being practiced, which may have added to the historical analysis of this topic. In addition, I did not include any information regarding polygamy in Africa or other parts of the world outside of the U.S. and Europe, and I focused primarily on heterosexual marital relationships.

Historically, polygamy has been practiced by many religious groups, and is allowed by Islam, Judaism, Hinduism, and historically by some Christian groups (Kilbride 1994:60). This article focuses mostly on Christian groups and their perspectives and practices of polygamy and monogamy. Religious law in the Hebrew Bible allowed for concubinage and polygamy, and the Law of Moses recognized both monogamy and polygamy and generally did not distinguish between the two (Dixon-Spear 2009:8). According to the Bible, David, Abraham, and Jacob practiced polygamy. Levirate is an ancient Hebrew custom in which a widow would marry her deceased husband's brother who may already be married, so polygamy and levirate were often found in conjunction with one another (Kilbride 1994:53).

According to a Greek Christian Church Historian in the fifth century, Roman emperor Valentinian I authorized Christians to take two wives in the fourth century, and also had two wives of his own; however, this is disputed by some later scholars who suggest that most likely Valentinian I divorced his first wife before marrying the second (Clinton 1850:111; Gage 1893:383; Gibbon 2003). Charlemagne practiced polygamy in the eighth century, and depending on the scholar, he had either six or nine wives (Becher 2003:144; Gage 1893:383; Lecky 1897:343). There is evidence that the Germanic Tribes of Northwestern Europe practiced polygamy, and in early Christian Ireland, polygamy was a common marriage arrangement in aristocratic households (Kilbride 1994:55, 59). In the 16th century, marriage was officially recognized as a sacrament or religious rite and is believed to have become much more central to the Catholic Church at this time, which enabled the church to define what constitutes a marriage (Kilbride 1994:58).

During the Protestant Reformation in the 16th century, a man petitioned Martin Luther to marry a second wife while his first wife was still alive. Luther formed a church council, and came to the decision that "... 'as the Bible nowhere condemns polygamy, and as it has been invariably practiced by the highest dignitaries of the church,' the marriage was legitimate and permission was granted" (Gage 1893:384). Many reformers felt that polygamy was not inconsistent with the Bible or the principles of the Gospel. The Reformation in Europe generated several arguments to recreate the marital structure of the Old Testament as a way to recover genuine Christian primitivism (Gordon 2002:28). The issue of polygamy was not settled by the Catholic Church until the council of Trent in 1563 which opposed

polygamy and concubinage; this action was thought to be a direct attack on Luther (Kilbride 1994:64).

According to African American studies scholar Patricia Dixon-Spear, before Christianity, there are no known laws prohibiting the practice of polygamy, and the Romans made the first known prohibition against it in the sixth century (Dixon-Spear 2009:8). Western conceptions of marriage have been largely influenced by Greco-Roman marriage, and many Western wedding traditions stem from this culture such as a ring given for the engagement, wearing of a veil, the bride being handed to the groom by her father, expressing mutual consent by saying "I do," the permanence of marriage expressed by saying "until death do us part", the eating of cake, and the husband carrying the wife over the threshold (Dixon-Spear 2009:13-14). Exclusive monogamy in marriage was also a feature of Greco-Roman society, which influenced Christian ideologies of marriage and spread as the church gained power and influence (Dixon-Spear 2009:14-16).

Even though monogamy was the norm, this did not stop groups or individuals from practicing polygamy or endorsing it. In Munster, Germany, John of Leiden established what has been referred to as the polygamous kingdom of Munster in 1534; this occurred within the Anabaptist movement (Kilbride 1994:65). Anabaptists had puritanical views on sex and advocated producing many children without sin or lust, and adultery was considered a serious transgression. The Anabaptist belief system, combined with a focus on the Old Testament, patriarchal social structure, and a population of three times more women than men, set the stage for polygamy to be practiced openly in Munster (Kilbride 1994:66). After only 11 months, the practice of polygamy, conflict with Catholic officials, and other political and economic factors contributed to the siege of the polygamous kingdom.

In 1646, Lord John Selden wrote *Uxor ebraica* with the purpose of proving that polygamy was allowed according to the Hebrew Bible (Gage 1893:385). English poet John Milton wrote in favor of polygamy in the 17th century, and found support for it in the Bible. In a work published after his death, Milton wrote: "It appears to me sufficiently established by the above arguments that polygamy is allowed by the law of God; lest however any doubt should remain, I will subjoin abundant examples of men whose holiness renders them fit patterns for imitation, and who are among the lights of our faith" (Milton 1825:241). In the 19th century, Henry Ward Beecher, an American Protestant clergyman, found scriptural basis for the practice of polygamy. A number of other Protestants

wrote in favor of polygamy, including John Lyster and Rev. Dr. Madden (Gage: 1893:387). The American scholar, William Ellery Channing, also found no prohibition to polygamy in the New Testament as he wrote in *Remarks on the Character and Writings of John Milton* published in 1826.

For those who practice Christianity and Judaism, there are several biblical examples as well as historical evidence that suggests that monogamy was not always the only accepted marriage style. The unfavorable view of polygamy in Europe most likely stems from the practice being subsumed under the term bigamy, being married to one person while legally married to another, which is viewed as adultery and sinful in the eyes of most Christians (Kilbride 1994:61). It is evident that the influence of the Greco-Romans on Christian ideas of marriage and the power play made by the Catholic Church to oppose polygamy also play a role in shaping Western views of polygamy. European countries were largely responsible for conquering and expanding into the New World, so these culturally constructed views of marriage became part of the American colonies and, later, part of mainstream culture in the U.S. Cultural influences of the Greco-Romans, new religious ideologies, and issues of power created by competing religious groups all influenced changing attitudes towards polygamy in Europe and among Christians.

Ideals about marriage, gender roles, and sexuality in the American colonies, which later became the U.S., were heavily influenced by their Puritan roots. In 17th century New England, the Puritans viewed sex as a natural and joyous part of marriage, but were opposed to sexual behavior that occurred outside of the marital bonds they believed to be ordained by God and society; polygamy would have fallen outside the spectrum of acceptable sexual behavior (Kilbride 1994:57). During the 19th century, American culture was influenced by Victorian era notions of sexual restraint and religious morality. Polygamy appeared to pose a threat to Americans because it was so different from Victorian family ideals that established the validity of monogamous marriage (Kilbride 1994:66). In line with Puritan and Victorian ideals, polygamy was not accepted by the majority of U.S. society, the members of which were mostly Christian, and was viewed as the desecration of Christian morality (Cracroft 2008:234). Polygamy was, and often still is, associated with promiscuity, lust, impurity, and prostitution (Kilbride 1994:50, 70). Polygamists were thought to be infidels who gave into their passions while

using fraudulent arguments of religious freedom to disguise their self-indulgence (Gordon 2002:39).

Matilda Joslyn Gage, a 19th century women's rights activist, said, ". . . under the light of advancing civilization, it [polygamy] has somewhat fallen into disrepute with the majority of men and women, yet its renewal as an underlying principle of a new Christian sect, need not be a subject of astonishment" (Gage 1893:408). The idea of advancing civilization that Gage references was established by American anthropologist Lewis Henry Morgan's work *Ancient Society*, published in the late 19th century. Morgan described savagery and barbarism as stages each society advances through to reach the stage of civilization, which is the desired level of progress. According to Morgan, monogamy is the marital style of the civilization stage, and he describes it as a "moral development" (Morgan 1877). Polygamy is described as the "right of the males" and existing alongside slavery (Morgan 1877). It is important to note that Morgan's unilineal evolutionist views, while an important step in early cultural anthropology, are seen as ethnocentric and flawed by modern anthropologists.

German socialist philosopher Friedrich Engels, a contemporary of Morgan, described monogamy as "the subjugation of the one sex by the other," and a result of the need for men to produce heirs for the purpose of passing down ownership of private property (Dixon-Spear 2009:30). Engels viewed monogamy as the first marriage structure based on economic needs rather than natural ones (Dixon-Spear 2009:27). Because monogamous marriage is not based on love or sexual desire, men need an outlet for their sexual needs, so prostitution and concubinage exist in conjunction with monogamous marriage (Dixon-Spear 2009:28-29). Engels also viewed slavery existing alongside monogamy as another sexual outlet for men through the use of their slaves (Dixon-Spear 2009:28). Engels and Morgan are examples of two competing discourses existing simultaneously in the 19th century regarding monogamous marriage. Morgan viewed monogamy as civilized and a sign of societal progress and morality, and Engels viewed it as the subjugation of married women alongside the potential sexual exploitation of women through prostitution, slavery, and concubinage. Morgan's viewpoint was shared by mainstream American culture during this time

For 19th century Americans, monogamous marriage was also tied to conceptions of liberty. Christian moral truth was the basis of liberty in the U.S., and the Christian faith of the country's founders was intertwined into the

Constitution (Gordon 2002:69). Religious freedom and free thought were viewed as components of liberty as long as they upheld Christian ideals held by the majority of society, so actions seen as anti-Christian were not protected under the concept of religious liberty (Gordon 2002:38,71). It was believed that the welfare of the country and the protection of the “home of liberty” were dependent on Christian monogamy, sexual restraint, and the protection of women and children (Gordon 2002:30, 33). Anti-polygamists like Metta Victor, a popular novelist in the mid 1800s, thought liberty would disappear if the Constitution was not protected against the abuses by heretics and zealots (Gordon 2002:30). The arguments of anti-polygamists played on Americans’ emotional logic, visions of Christian religious liberty, and the importance of monogamous marriage (Gordon 2002:31).

Protestant beliefs of marriage as a holy sacrament intimately tied the institution of marriage to that of religion. The wife and mother’s spiritual wisdom was thought to make her God’s representative in the family, and the glue that binds the family unit together (Gordon 2002:40). Husbands and wives were thought to find God in matrimonial love, which made adultery an act of sacrilege (Gordon 2002:40). Trust was thought to be at the heart of monogamous marriage, and polygamy was viewed as adultery and a betrayal of matrimonial trust and the emotional integrity of the relationship (Gordon 2002:32).

Women were expected to be wives and mothers and be obedient and faithful to their husbands. Devotion to the Christian faith, fidelity, and sexual restraint were important moral values during the 19th century. Womanhood and femininity, during the Victorian era, were defined by domestication, religious devotion, chastity, and submissiveness (Pisarz-Ramirez 2008:59). Evil was associated with women who departed from traditional roles of sexual expression and Christian faith to experiment with new and different sexual practices, and they were ostracized by the larger society (Batton 2004:613; Gordon 2002:38). Women who strayed from “proper” mainstream ideals were labeled harlots, and embodied the definition of licentiousness. Men were thought to naturally need sexual variety and were more sexual than women, so men needed to practice self-restraint in order to overcome sexual urges (Batton 2004:603). Although extramarital sexual activity was viewed as immoral for both men and women, this did not stop many men from visiting prostitutes or committing adultery. White males had unrestricted sexual access to their female slaves and servants, and rape committed by a

white man on a black woman was not considered a crime under slave law (Dixon-Spear 2009:42). Any deviation from what was deemed as proper sexual behavior by the larger society was met with hostility. For example, men who practiced polygamy were thought to be greedy for money, power, and women; polygamist men were viewed as failures, fools, self-indulgent, and in some cases, criminals (Gordon 2002:45). Still, there were many groups in the U.S. that were experimenting with marital structure and sexuality in the 19th century.

The country’s Puritan roots, Victorian era morals, ideas about progress and civilization, culturally constructed gender roles, Christian ideology, and ideas about “proper” sexual behavior intersected to create and reproduce a mainstream culture of heterosexual monogamy in the 19th century. Though the dominant discourse regarding marriage was Christian heterosexual monogamy, other competing discourses about marriage and sexuality also emerged in the 19th century. Polygamy among the Mormons was one of these competing discourses. It is essential to examine the establishment and early history of the Mormon Church in order to fully understand the cultural, political, and economic context in which polygamy was made illegal in the U.S. The move by the U.S. federal government to criminalize the practice of polygamy was fueled by anti-Mormon and anti-polygamy sentiments and rhetoric in the 19th century and the rising political and economic power of the Mormon Church.

The Mormon Church or the Church of Jesus Christ of Latter-day Saints (LDS) was founded in upstate New York in 1830 by Joseph Smith. Mormonism was a new religion that emerged out of Christianity and members follow the *Book of Mormon* which is believed to be the word of God revealed to Smith (Gordon 2002:2). The *Book of Mormon* explains that two families fled to the New World hundreds of years before the birth of Jesus. This story seemed to resonate with the desire to reconcile American history with religious truth (Gordon 2002:21). Mormons insisted that their church was the true Christian church (Gordon 2002:11).

In 1843, Smith received the “Revelation on Celestial Marriage” from God, and this revelation officially associated polygamy, also known as celestial marriage, with Mormonism; however, it is rumored that Smith was practicing polygamy long before receiving this revelation (Gordon 2002:22). The revelation regarding polygamy was kept a secret for 10 years and only shared with Smith’s inner circle, and during this time, polygamy and any association with it was denounced and denied by

Mormons (Gordon 2002:23). In 1852, the Mormon Church acknowledged the practice of polygamy at a conference at which an elder, Orson Pratt, delivered a sermon on the religious and social superiority of polygamy (Gordon 2002:27). The practice of polygamy was reserved for church leaders and thought of as the most exalted form of marriage. Acceptance of polygamy was difficult to swallow for many members, including Smith's wife Emma, who, after Smith's death, stated she never consented to any polygamous marriages (Gordon 2002:22).

Mormons were not the first religious nonconformists to challenge traditional structures of marriage, but they were the biggest, most powerful, and best organized (Gordon 2002:28). Groups experimenting with marital structures, sexuality, and religion appeared often in the 19th century. In the early 1800s, Jacob Cochran founded the Conchranites in Maine. Legal marriages were not considered valid, and members believed in spiritual wifery or affinity, which dictated that members could form and dissolve relations as they or Cochran, their religious leader, saw fit (Gordon 2002:28). Spiritual wifery helped to explain free love movements in the 19th century as well.

The Progressive Union Club practiced free love, or Passional Attraction, which denied the traditional marriage system and the state's right to interfere in the matter; in 1855 this group had 300 members. Marriage could be limited to one partner or thought of as a life partnership that could begin and end at the discretion of the man and woman involved. The group believed that a woman had the right to choose the father of her child, and many members were involved with extramarital sexual relationships with other members (Barnes 2008:139).

In the 19th century, some thought that the institution of marriage was no different from that of slavery or prostitution, and marriage was thought of as the economic enslavement of women (Barnes 2008:138). In line with this view of marriage, Fanny Wright, writer and feminist, combined religious free thought with the philosophy of free love in her establishment of the community of Nashoba (Barnes 2008:138). Wright opposed marriage and its restrictions, and she encouraged free sexual relations within the community (Barnes 2008:138; Gordon 2002:38). To mainstream American culture, she embodied sexual and religious danger, and challenged the rights of husbands and the law of marriage. Wright was called the "voluptuous priestess of licentiousness" and the "Red Harlot of Infidelity" (Gordon 2002:38). John Humphrey Noyes also promoted free love and the opposition to

marriage in the Oneida Perfectionists group he founded in the mid-1800s in New York (Barnes 2008:138). The Oneida community practiced spiritual affinity, or complex marriage, and selective breeding (Gordon 2002:28).

These differing marital structures and ideas of love and sexuality were under scrutiny from the larger society. Mainstream U.S. culture found polygamy to be immoral and uncivilized, which helped to make the Mormon religion, and those who practiced it, seem foreign, exotic, and frightening (Sturgis 2003:78). In 1838, two Mormon boys and 17 Mormon men were killed in a massacre in Missouri; the Federal government could not offer protection from or punishment for the state official who allowed the violence to occur (Gordon 2002:9). Mobs tarred and feathered the Mormons' prophet, harassed missionaries, pillaged fields, and even murdered women and children in the 1830s and 1840s (Gordon 2002:8). By the 1840s, Mormons had maximized their political and economic strength by bloc voting, forming a private militia, and dealing only with approved merchants. These activities in combination with rumors of polygamy, aggressive proselytizing, and unquestioning obedience to their leader, Smith, made Mormon settlements unpopular and threatening to nearby residents (Gordon 2002:24-25).

In 1844, Smith ordered a printing press in Nauvoo, Illinois, be destroyed because the owner published a story critical of Smith's policies. Smith was arrested by Illinois law enforcement and was murdered by a mob of anti-Mormons who attacked the jail (Gordon 2002:25). After Smith's death, members of the Mormon Church migrated to the Great Salt Lake Basin in 1847 with their new leader, Brigham Young, seeking refuge from political and religious persecution. Young settled the area between the Rocky Mountains and the Sierra Nevada and the Columbia River and the Gila River (Sturgis 2003:77-78). At the time, the area belonged to Mexico and offered the isolation and space the church needed for its growing congregation of converts (Gordon 2002:25-26).

After the land settled by Young came under the possession of the U.S. government in 1848, the Mormons petitioned the U.S. federal government for statehood as the state of Deseret in 1849 (Gordon 2002:26). However, the organization of the Territory of Utah in 1850 crushed this request (Gordon 2002:26). Mormon leaders applied the same principles of local majority rule used in the states to dictate that they had the same rights to self-governance in their own jurisdiction because the Territory of Utah was not entirely under federal or state governmental control (Gordon 2002:9). Intertwining religious, economic, and

political power was necessary in order to build the new Zion, the kingdom of God as envisioned by Mormon doctrine (Gordon 2002:27). Creating an economically independent, theocratic community was the goal of the Mormon Church, and they did develop a city, factories, farms, dairies, foundries, iron works, machine shops, textile mills, and coal mines in Utah (Dixon-Spear 2009:44).

In the late 1850s, polygamy became a large issue on the Republican Party's agenda, and they aimed to eliminate the "twin relics of barbarism," slavery and polygamy (Cracroft 2008:234; Dixon-Spear 2009:45). President James Buchanan sent U.S. troops to the Territory of Utah in 1857 to establish U.S. rule in the area and end what he considered to be a rebellion in Utah (Sturgis 2003:78). By 1860, there were more than 150 self-sustaining Mormon societies established in the territory (Sturgis 2003:78). Many non-Mormons came to the area in a miner's rush during the Civil War era, and tensions flared between the two groups and their ways of life (Sturgis 2003:78). William H. Hooper, U.S. congressional delegate from the Territory of Utah and member of the Mormon Church, defended polygamy as a religious right sanctioned by the authority of the Old Testament. Hooper defended the Mormon settlements in the Territory of Utah as being safe, Christian communities without gambling, drinking saloons, or brothels, and affirmed that the community members were good people (Kilbride 1994:71).

Six different bids were submitted for the creation of a Mormon state to join the union and all six failed (Sturgis 2003:78). It became clear that the U.S. government would not grant Utah statehood while it remained a Mormon theocracy. Members of the Mormon Church, like Hooper, were very involved in the government, and Young was even the first governor of the Territory of Utah (Gordon 2002:28). President Chester A. Arthur supported anti-Mormonism and referred to polygamy as a "barbarous system." Arthur made the following statement in his Third Annual Message on December 4, 1883: "I am convinced, however, that polygamy has become so strongly entrenched in the Territory of Utah that it is profitless to attack it with any but the stoutest weapons which constitutional legislation can fashion" (Sturgis 2003:80).

Reformers, women's rights advocates, educators, Christian church leaders, and politicians of the 19th century condemned polygamy (Cracroft 2008:234; Kilbride 1994:70). There was an abundance of anti-Mormon and anti-polygamy rhetoric and literature circulating in the mid 1800s. Anti-polygamists could not

compete with the revelations that inspired the Latter-day Saints, so they used the story telling approach of abolitionists (Gordon 2002:29). Popular literature like novels, short stories, and newspaper exposés created the initial rhetoric. Middle class, women authors from the East wrote stories about the imagined pain and humiliation that polygamy must inflict on women; the authors were obscure, but the impact of their writing endured for decades (Gordon 2002:29). Ridicule of Mormon polygamy was also supplied by 19th century comedians in the form of traveling performances and newspaper columns (Cracroft 2008:236-237). Almost 100 novels, including the first Sherlock Holmes story, and hundreds of magazine and newspaper stories built a market for anti-polygamy fiction (Gordon 2002:30). Victor's novel *Mormon Wives* sold 40,000 copies during the 1850s (Gordon 2002:31). The works of fiction were often about women who were tricked into or followed their husbands reluctantly into polygamy and eventually died or escaped from terrible conditions.

A flaw of the anti-polygamist movement and works of fiction available in the 19th century is that they assumed that women could not be morally different from one another. Anti-polygamist advocates believed that women whose husbands converted to Mormonism had little choice but to follow them to Utah due to the inherent desire of women to obey their husbands. The literature also insinuated that the plan for polygamy was concealed by the husband until the opportunity for escape was long gone (Gordon 2002:43). The dominant belief shared by anti-polygamists was that women would not freely enter into a polygamous relationship (Cracroft 2008:234). The problem with this view is that it assumed that there was a universal way of being a woman. If women in the East could not fathom the thought of being in a polygamous marriage, then how could any woman fathom it? The anti-polygamists of the 19th century failed to recognize that not all women share the same views, and some women may have enjoyed and willingly chosen polygamous marriage.

In fact, the Mormon women of Utah were one of the most vocal feminist groups in the 19th century; these women defended their right to practice polygamy, their territorial right to vote, opposed the idea of women as passive objects, and advocated the education of girls (Iversen 1984:505-510). Mormon women of Utah even published the *Woman's Exponent*, a feminist periodical that displayed a masthead of "The Rights of Women of Zion, and the Rights of Women of All Nations" (Iversen 1984:505). Although anti-polygamist activists used a platform of women's rights to argue against polygamy,

Mormon women viewed polygamy and their feminism as linked and used women's rights rhetoric to defend their marriage practices (Iversen 1984:506). Modern feminist critique of the *Woman's Exponent* shows that polygamy allowed for female bonding, increased independence, closer mother-child bonds, and challenged the idea of dependent womanhood by promoting an image of competent womanhood (Iversen 1984:507, 512). From a 19th century Mormon woman's perspective, polygamy offered a way for all women to become wives and mothers, have their own homes, obtain a social position, enjoy freedom from sexual obligations, practice sexual abstinence during pregnancy and lactation, and the ability to space pregnancies (Iversen 1984:508-509). The practice of polygamy was also viewed by Mormon women as keeping men from committing adultery and licentious behavior (Iversen 1984:508).

Young, second leader of the Mormon Church, warned against the falsehoods of the anti-polygamy fiction that was circulating during the 19th century, but the purpose of the literature was to arouse sympathy from the general public and inspire activism for legal intervention (Gordon 2002:30). Often, the only way Mormons could respond to anti-Mormon and anti-polygamy rhetoric was through their own pamphlets and publication, which were not as widely circulated or well received by non-Mormons (Grow 2006:112). Anti-polygamists appealed to mainstream America's ideals of religious liberty and importance of monogamous marriage (Gordon 2002:31). Congressional debates in the 19th century regarding polygamy revealed mainstream America's feelings towards the practice as a violation of natural law or god given monogamy, unethical, and the enslavement of women (Kilbride 1994:81).

It was decided by the federal government that in order for Utah to be awarded statehood, the Mormon Church would have to discontinue the active role it played in the politics of Utah, Mormon leaders had to stop doing business only with fellow Mormons, and the practice of polygamy had to end (Sturgis 2003:78). The Edmunds Act of 1882 was a federal statute passed to prohibit bigamy and unlawful cohabitation, which removed the need to prove that an actual marriage had occurred (Utah Commission 1884). The Edmunds Act revoked polygamists' right to vote, made them ineligible for jury service, prohibited them from holding political office, and implemented fines and prison time as punishment (Kilbride 1994:70). This act reinforced the Morrill Anti-Bigamy Act passed by congress in 1862 and signed into law by President Abraham Lincoln, which prohibited polygamy in U.S.

territories, disincorporated the Mormon Church, and restricted the church's property ownership to \$50,000 (Dixon-Spear 2009:45). Congress passed the Edmunds-Tucker Act in 1887 which disinherited children born in polygamous marriages, required wives to testify against their husbands, and provided an instrument through which church properties could be confiscated (Dixon-Spear 2009:46; Kilbride 1994:70). The official ban on polygamy occurred in 1890 as the result of a Supreme Court decision that ruled the Edmunds-Tucker Act was constitutional (Kilbride 1994:70).

The enactment of legislation criminalizing polygamy caused Mormons to decide between practicing religious beliefs that were thought to be given straight from God himself to the founder of their church, or partaking in the rights of citizenship, like voting, holding political office, and jury duty. The U.S. government was eventually successful in forcing the Mormons to submit to its demands by withholding civil liberties (Sturgis 2003:78). This did force polygamy into the underground especially when the Mormon Church decreed on September 25, 1890 that followers should abide by the laws enacted by the U.S. government (Kilbride 1994:70). Some families relocated to secluded parts of Arizona, Canada, Colorado, Mexico, Nevada, and Wyoming in order to continue the practice of polygamy, keep their families intact, and avoid arrest (Dixon-Spear 2009:46). Utah finally gained statehood in 1896, but during the process, many Mormons were subject to time in jail, separated from their families, and experienced economic hardship (Sturgis 2003:78). Anti-polygamy and anti-Mormon sentiments continued in the media as evident in the enormously popular publication that appeared in *Everybody's Magazine* in installments running from December 1910 through August 1911 entitled "Under the Prophet in Utah: The National Menace of a Political Priestcraft" by Frank J. Cannon, son of a powerful Mormon Church leader and well known anti-Mormon campaigner, and Harvey J. O'Higgins, a novelist and playwright (Cannon II 2011:60, 68-69, 73).

The Mormon Church faced some backlash because the practice of polygamy continued after it was officially renounced by the church. As a result of this, the Mormon Church released a public document upholding their loyalty to the laws of the U.S., the separation of church and state, and that polygamy is a violation of civil and church law (Dixon-Spear 2009:46). Church leaders that continued to practice polygamy were relieved of their positions and some were even excommunicated, which led to the development of factions within the Mormon Church (Dixon-Spear 2009:47). At this point, the Mormon

Church's conflict started with the Mormon fundamentalists, the factions continuing to practice polygamy. The fundamentalists left the Mormon Church and some eventually settled in towns of Hildale, Short Creek, and Colorado City located on the Utah-Arizona border (Dixon-Spear 2009:47). Raids by various government agencies were made on fundamentalist Mormon communities in the 1930s, 1940s, and 1950s; as a result of the raids, arrests were made, families were split up, children were put into foster homes, and women were forced to give their children up for adoption (Dixon-Spear 2009:47-48). In 1991 Utah's attorney general made the following statement: "Unless it is associated with child abuse, welfare fraud or any other illegal act, polygamy for its own sake has not been a crime susceptible of successful prosecution and uses up an awful lot of resources" (Dixon-Spear 2009:48). The fundamentalist Mormon communities are still in existence today despite the raids made in the past, the practice remaining illegal in the U.S., and persisting negative attitudes towards polygamy from mainstream American society and the Mormon Church.

In the 19th century, the Mormon Church and its followers were viewed as a threat to the political and economic order of the U.S., to Christianity, and to monogamous marriage. The intertwining of religion, politics, and economics by the Mormon Church threatened the very foundation the country was built on. The unrestrained political independence exercised by the Mormon Church was in complete opposition to the nation's democratic political system (Cracroft 2008:234). Because the Mormon theocracy wanted statehood so badly, the U.S. government was able to use its power to achieve a separation of church and state and end church sanctioned polygamy in Utah. Polygamy, during the 19th century, was viewed through a lens of progress, civilization, and Christian morality. It was viewed as a barbaric practice that must be ended, so the federal government took the opportunity to criminalize the practice in order to crush the Mormon Church's political and economic influence. The actions of the federal government during the 19th century solidify the dominant discourse of heterosexual monogamous marriage as the only legal and "right" way to express love and sexuality in the U.S.

The legislation criminalizing polygamy is still in place to this day, but people are actively working to change this. Mark Henkel, National Polygamy Advocate™, is a non-Mormon advocating for the repeal of anti-polygamy laws on the behalf of consenting adult polygamy. According to his website he is pro-marriage, pro-woman, and a pro-Bible Christian. (National Polygamy Advocate™ 2013).

Other activist groups lobbying for the decriminalization of the practice of polygamy are the Centennial Park Action Committee and the Principle Voices, a Utah-based group run by wives of polygamous marriages (Barnes 2008:154).

Polygamy is still very present in the media like on HBO's *Big Love* and TLC's *Sister Wives*, and topics of polygamy and polyamory are being examined on episodes of *Taboo* and *Strange Sex*. The National Geographic Channel recently featured several polygamist families in the community of Centennial Park on its series titled *Polygamy USA*, which aired in May 2013. Families who practice polygamy and live in mainstream society are "going public" and sharing their positive experiences, such as the Darger family, an independent fundamentalist Mormon polygamous family living in Utah. The Dargers co-authored a family memoir entitled *Love Times Three: Our True Story of a Polygamous Marriage*, which was published in 2011. Negativity in the media has not waned completely, and polygamy is not necessarily a positive experience for all who practice it. There are many diverse groups and families from various religious and secular backgrounds who practice polygamy in the U.S. today. Some who practice polygamy live in intentional communities surrounded by others who also practice polygamy, while other individual families live within mainstream American society either hiding their marriage structure or making it public.

One of the most notable cases involving polygamy in the media was the coverage of the Warren Jeffs trial, which brought to light the abuse of young women that occurred within the Fundamentalist Church of Jesus Christ of Latter-day Saints (FLDS). Jeffs is the leader of the FLDS and the prophet of the church, and he is currently serving a sentence of life in prison plus 20 years (CNN Wire Staff 2011). He was found guilty of aggravated sexual assault against two girls (aged 12 and 15) that he claimed were his wives (CNN Wire Staff 2011). Jeffs was only one of several men from the FLDS compound in Eldorado, Texas, who were convicted of sexual assault (CNN Wire Staff 2011). Women who have had negative and traumatizing experiences within the FLDS are speaking out, like Carolyn Jessup who in 2008 published her memoir *Escape*, which provided a detailed account of her life in a polygamous marriage, life in an FLDS community, and how she escaped. TLC also aired two new series, *Breaking the Faith* and *Escaping the Prophet*, in November of 2013 and January of 2014. *Breaking the Faith* follows the journey of young men and women who escaped the FLDS church and their attempt to adjust to life outside of the FLDS community. *Escaping the*

Prophet features Flora Jessup, an ex-FLDS member turned social activist, whose goal is to “take down” the church by working “. . . with law enforcement, the Attorney General of Arizona, and a network of inside informants to help rescue runaways and extract victims within the community, as well as to help empower families who chose to stay and fight” (TLC 2013).

While atrocities like sexual assault of a child have occurred within the FLDS, it is important to remember that this group does not represent all people who identify as Mormon fundamentalists or all people who practice polygamy. What has been condoned in FLDS communities under the rule of Jeffs can be interpreted as more attributable to unequal power relations, patriarchal rule, a cult-like environment, and seclusion from the outside world, rather than merely the marriage practice of polygamy. Polygamy is not the root cause of sexual assault of children or other abuses that can and do happen in some marriages and families. Domestic violence, rape, incest, and child abuse can and do happen in and outside of any type of marital or family structure and among persons of varying backgrounds.

The culmination of the right social, cultural, and historical circumstances may be approaching that will allow for all marital structures and relationship types to co-exist and be acknowledged as legal in the U.S. Opinions about homosexuality and same-sex relationships have changed drastically over the last century; many gay rights activists are fighting for marriage equality, and in several states they have won. The achievements of the gay rights movement and same-sex marriage advocates along with the positive media exposure of polygamy and polyamory may open the door for changing perceptions and acceptance of other expressions of marriage and love in the U.S. besides the established norm of heterosexual monogamy. One change that has recently occurred is the ruling made by U.S. District Court Judge Clark Waddoups on December 13, 2013, which essentially decriminalized polygamy in the state of Utah (Dalrymple II 2013).

It is important to continue to examine and acknowledge the cultural, historical, political, and economic context in which polygamy and other expressions of love and marriage become socially and morally unacceptable and illegal in order to have a better understanding of the various mechanisms at play. I believe that it is a human right for consenting adults to choose how and with whom they want to express love and sexuality, without discrimination. If this expression includes entering into marriage, then the structure of the marriage and the

partners involved should be left to individuals to decide what feels right for them. It is my opinion that federal or state governments should not have the authority to dictate what the appropriate expression of marriage, sexuality, and love is for every citizen of the U.S. I myself am a heterosexual woman who is monogamously married, and because my type of love is recognized as “normal” or “natural” by the larger U.S. society and legal system, I am awarded certain privileges that accompany legal marriage. I have never experienced any discrimination based on the type of relationship I chose to be in or for the love and sexuality I express with my husband. This is not the case for everyone in the U.S., and I think it is important to examine why this is in an attempt to challenge the status quo.

The intersection of religion, politics, marriage, sexuality, and gender roles was crucial in creating the historical, cultural, political, and economic context in which polygamy was made illegal in the U.S. A religious revival known as the Second Great Awakening, anti-slavery and abolitionist movements, and women’s suffrage were all occurring during the 19th century. The political, religious, and cultural climate of the time set the stage for anti-Mormon and anti-polygamy rhetoric, anti-polygamist advocates, and the condemnation of free love and its proponents. In the U.S. a cultural norm of heterosexual monogamy was created and reproduced by the country’s Puritan roots, Victorian era morals, ideas about progress and civilization, culturally constructed gender roles, Christian ideology, and ideas about “proper” sexual behavior. I argue that this particular historical, cultural, political, and economic context of the 19th century led to polygamy being viewed as socially and morally unacceptable and illegal to practice in the U.S. and why it remains this way today. The decision of the federal government to criminalize the practice of polygamy in the U.S. in the late 19th century is better understood as a multi-faceted and intricately woven string of events set within a particular historical and cultural context. By criminalizing polygamy in the 19th century, the federal government solidified the dominant discourse of heterosexual monogamous marriage as the only legal and “right” way to express love and sexuality in the U.S., but polygamy has persisted despite being illegal and viewed as abnormal by mainstream American culture. There is a possibility for multiple discourses of love, marriage, and sexuality to coexist, as they have historically and do contemporarily, but rights of a legal spouse and social acceptance are reserved only for those conforming to the

dominant discourse of heterosexual monogamy and some same-sex partners and spouses.

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