Culture contact change and continuity: The Mohave Indians

Kathleen Anne Bonine

Follow this and additional works at: https://scholarworks.lib.csusb.edu/etd-project

Part of the Race, Ethnicity and Post-Colonial Studies Commons

Recommended Citation
https://scholarworks.lib.csusb.edu/etd-project/673

This Thesis is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.
CULTURE CONTACT CHANGE AND
CONTINUITY: THE MOHAVE INDIANS

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

by
Kathleen Anne Bonine
December 1993

Approved by:

Russell Barber, Chair, Anthropology
Francis Berdan, Anthropology
Roger Lintault, Art

December 7, 1993
ABSTRACT

Among the aboriginal tribes of the Southwest United States that have been studied, one culture lacking a study of art work is the Mohave Indians of the Colorado River. In addition, the research available today in some instances contains limited, ethnocentric, or inconsistent information.

The Mohaves were viewed as audacious traders. However, limited information is available on the changes exhibited by the Mohaves as the result of culture contact. There have been no studies done on what effect culture contact had on the production of art work by the Mohaves.

The purpose of this thesis is to fill these gaps in research and provide a more comprehensive, realistic view of the Mohave Indians, with a focus on external contact and relations. Furthermore, I will examine the effect this contact has had on Mohave art. And I will try to isolate the factors that have encouraged, or discouraged, the acceptance of innovative artistic traits by the Mohave people.
ACKNOWLEDGMENTS

While pursuing my academic career many people have helped me along the way. My husband Bob supported me emotionally and financially. He encouraged me to continue and believed in my ability to succeed. I appreciate all the times he did the dishes or fed the livestock so I could write a paper or study for an exam. Another family member who helped me is my mother. She always told me I had the ability to succeed in school if I would just apply myself. I may not have believed her in high school, but I guess it is true, "Mother is always right." Thank-you Mom. My twin sister, Karen Harries, is one of the people who spurred me to start my college career. She has an Associate Degree so I went after one, too, and then it snowballed.

In addition to family members, there are many other people who helped me along the way. Mr. W. Wiseman at Barstow Community College introduced me to anthropology. At Barstow College I took my first class in anthropology and decided to pursue this field. Mr. J. Savoie, the art instructor at Barstow College, opened up the world of art to me. These two fields, that I love, I combined for my Masters Degree. These instructors, along with others at Barstow College, such as Dr. Reeb and Mr. Sochis, encouraged me and gave me the confidence I needed to continue.
My professors at California State University played a role in my success. During my undergraduate studies, Drs. Berdan, Barber, and Pierson opened up additional new worlds for me in the field of anthropology. Their kind words and relevant criticisms taught me how to think like an anthropologist, which in turn enabled me to succeed in doing my field work and writing my thesis.

I must thank my thesis readers. Dr. Barber, Dr. Berdan, and Roger Lintault read my many drafts and provided insights which made the writing of my thesis easier, less of a chore, and more of a joy. I appreciate the time and effort they expended on my behalf.

To the curator, Carol Rector at the San Bernardino County Museum and Ken Hedges, director at the San Diego Museum of Man, I owe a debt of gratitude. They allowed me access to the artifact remains that provided some of the ethnographic material to make my thesis a success.

I also owe a debt of gratitude to the people of the Colorado River Indian Reservation. They allowed me to interview Mohave artists. And a special thanks to Betty Cornelius for arranging those interviews. My thesis would not have been possible without her. These people provided me the most satisfying experiences. I will never forget all of their kindness and openness.

Last, but surely not least, I want to thank my friends
Deborah Johnson and Margaret Winstead. They cheered me on from the sidelines and listened to me drone on about anthropology without once letting me know how bored they were. I appreciate your kindness.

Looking back on the last six years I realize I could not have come this far and accomplished this much without the love, kindness, encouragement, and patience of so many people. I thank you all.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>MOHAVE TRADITIONAL LIFE</td>
<td>7</td>
</tr>
<tr>
<td>MOHAVE FISHING</td>
<td>7</td>
</tr>
<tr>
<td>MOHAVE AGRICULTURE</td>
<td>7</td>
</tr>
<tr>
<td>MOHAVE HUNTING</td>
<td>9</td>
</tr>
<tr>
<td>SETTLEMENT PATTERNS</td>
<td>9</td>
</tr>
<tr>
<td>POLITICAL SYSTEM</td>
<td>10</td>
</tr>
<tr>
<td>SOCIAL SYSTEM</td>
<td>11</td>
</tr>
<tr>
<td>RELIGIOUS SYSTEM</td>
<td>12</td>
</tr>
<tr>
<td>MOHAVE TRADE</td>
<td>17</td>
</tr>
<tr>
<td>PREHISTORIC TRADE</td>
<td>17</td>
</tr>
<tr>
<td>HISTORIC TRADE</td>
<td>22</td>
</tr>
<tr>
<td>CULTURE CONTACT</td>
<td>28</td>
</tr>
<tr>
<td>SPANISH CONTACT</td>
<td>28</td>
</tr>
<tr>
<td>ANGLO-EUROPEAN CONTACT</td>
<td>29</td>
</tr>
<tr>
<td>CULTURE CHANGE</td>
<td>31</td>
</tr>
<tr>
<td>MOHAVE ARTIFACTS</td>
<td>34</td>
</tr>
<tr>
<td>SAN BERNARDINO COUNTY MUSEUM ARTIFACTS</td>
<td>34</td>
</tr>
<tr>
<td>SAN DIEGO MUSEUM OF MAN ARTIFACTS</td>
<td>39</td>
</tr>
<tr>
<td>INTERVIEWS WITH MOHAVE ARTISANS</td>
<td>44</td>
</tr>
<tr>
<td>CRADLE BOARD PRODUCTION</td>
<td>44</td>
</tr>
<tr>
<td>BEADWORK PRODUCTION</td>
<td>46</td>
</tr>
<tr>
<td>GOURD RATTLE PRODUCTION</td>
<td>49</td>
</tr>
</tbody>
</table>

vii
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTTERY PRODUCTION</td>
<td>51</td>
</tr>
<tr>
<td>BOW PRODUCTION</td>
<td>54</td>
</tr>
<tr>
<td>MISCELLANEOUS ITEMS FOR SALE</td>
<td>55</td>
</tr>
<tr>
<td>ADDITIONAL MOHAVE ART AT CRIT</td>
<td>55</td>
</tr>
<tr>
<td>CHANGE AND CONTINUITY</td>
<td>58</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>64</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>74</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>88</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>91</td>
</tr>
</tbody>
</table>
LIST OF MAPS

MID-19TH CENTURY TRIBAL TERRITORY ........................ 6
MOHAVE TRADE ROUTE ........................................ 16
COLORADO RIVER INDIAN RESERVATION ....................... 27
# LIST OF PLATES

<table>
<thead>
<tr>
<th>Plate</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A1900-59, A5-1061</td>
<td>66</td>
</tr>
<tr>
<td>2</td>
<td>A4671, A5-1065</td>
<td>67</td>
</tr>
<tr>
<td>3</td>
<td>A5981, A5-298</td>
<td>68</td>
</tr>
<tr>
<td>4</td>
<td>A5-977, A1900-56</td>
<td>69</td>
</tr>
<tr>
<td>5</td>
<td>A1900-51, A1900-46</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>A1900-58, 159-103</td>
<td>71</td>
</tr>
<tr>
<td>7</td>
<td>S30-A530, L-41</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>A5-1003, A1900-62</td>
<td>73</td>
</tr>
<tr>
<td>10</td>
<td>1955-40-42, 1955-41-3</td>
<td>77</td>
</tr>
<tr>
<td>11</td>
<td>1975-57-1, 1968-59-1</td>
<td>78</td>
</tr>
<tr>
<td>12</td>
<td>1969-60-1, 971-41-1</td>
<td>79</td>
</tr>
<tr>
<td>13</td>
<td>8946, 3006</td>
<td>80</td>
</tr>
<tr>
<td>15</td>
<td>3005, Rim of 3005</td>
<td>82</td>
</tr>
<tr>
<td>16</td>
<td>1971-41-3, 1971-41-4</td>
<td>83</td>
</tr>
<tr>
<td>17</td>
<td>1967-77-89, 1926-15-293</td>
<td>84</td>
</tr>
<tr>
<td>18</td>
<td>1992-8</td>
<td>85</td>
</tr>
<tr>
<td>19</td>
<td>1992-8</td>
<td>86</td>
</tr>
<tr>
<td>20</td>
<td>1979-12-1, 1958-63-15</td>
<td>87</td>
</tr>
<tr>
<td>21</td>
<td>Modern Mohave Beadwork</td>
<td>89</td>
</tr>
<tr>
<td>22</td>
<td>Modern Mohave Gourd Rattles</td>
<td>90</td>
</tr>
</tbody>
</table>
INTRODUCTION

The theory of diffusion has been used by anthropologists for centuries to determine how culture traits spread, and if ideas and items found in a culture are the result of individual innovations or the result of culture contact.

Beginning in the late nineteenth and early twentieth centuries two schools of diffusionist thought arose. One was the German school; the second was the British.

William J. Perry, W.H.R. Rivers, and G. Elliot Smith, the major advocates of the British school of diffusion, believed that civilization began in Egypt, and that traits diffused through human contact from there. The German school of diffusion theory, advocated by Father Wilhelm Schmidt and Fritz Graebner, thought people were basically uninventive. Culture traits diffused over great distances, through human contact, either one at a time, or as a group. The major difference between the two theories was that the German school believed that there were a number of culture complexes from which traits diffused (Ember 1985:182), while the British school held that everything diffused from one area (Egypt).

In addition to the diffusion theories in Germany and England, another arose in the United States. This school, led by Clark Wissler and Alfred Kroeber, was similar to the
German school. However, this theory differed in that it was proposed that traits developed in culture centers and diffused from these areas (Ember 1985:182-183).

None of these schools of diffusion thought, however, dealt with how or why some ideas are rejected and some are accepted. When researching how and why cultures change we must remember that the characteristics of culture are that it is learned, shared, dynamic, and integrated. This integration is an important aspect when dealing with change. People accept only those traits which "fit" reasonably well into their existing lifestyle.

Integration and the personalities of the people in contact is the focus of Anthony Wallace in *Culture and Personality* (1966). H.G. Barnett examines culture change in *Innovation: The Basis of Cultural Change* (1953). In Part Four, Barnett discusses why innovations are rejected or accepted. He views "diffusion, acculturation, and faddism" as "manifestations of the same phenomena" (Barnett 1953:293). The acceptance or rejection of an innovation and the consequent changes is of primary importance. The individual involved, either as innovator or advocate, and as acceptor, also plays a major role in the acceptance of innovation. Barnett believes that many innovations do not have, or need, an advocate because they are not viewed as a departure from the traditional (Ibid.). Some innovations can
end up as peculiarities, and some die out because they are not used with regularity (Ibid., 294). Some are not intended to be popular but rather to be a mark of distinction (Ibid., 295).

Everett Rogers, in Diffusion of Innovations (1983), takes a close look at the definition, history, criticisms, and contributions of diffusion theory. In addition, he examines different processes of innovations, the rate at which they are adopted, and the people involved with these processes.

Rogers defines diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers 1983:34). This is the definition I will be using when referring to diffusion throughout this thesis.

Rogers ascribes five characteristics to diffusion. First is relative advantage, whether an innovation is more advantageous than what is currently being used. Next is compatibility: will the innovation "fit" within the existing system? Thirdly, how complex is the innovation? Is the innovation easy to understand and implement? In addition, trialability is a concern. The innovation needs to be relatively easy to try. Finally, the innovation has to be observed by others as an advantage (Rogers 1983:35). These characteristics will determine the rate of adoption of an
innovation. These characteristics will be examined in the context of the rate of adoption of innovations that have influenced Mohave artistic expression.

The theory of diffusion has been beneficial not only to the field of anthropology in explaining culture change, but to other areas of the Social Sciences. "Social psychology, communication, public relations, advertising, marketing" (Rogers 1983:88) and other areas have benefited as well. They have benefited by knowing how new innovations are adopted by a group of people.

While the school of diffusion has made contributions, it has also had shortcomings which I shall endeavor to avoid in this thesis. Rogers thinks a lack of critical viewpoints on the paradigm of diffusion is a major weakness in the research (Rogers 1983:91).

One of these weaknesses is a pro-innovation bias (Rogers 1983:92). This is the idea that all innovations are beneficial to the receptors of the innovation. In addition, there has been an individual-blame bias in diffusion research (Ibid., 103-111). When an innovation is not accepted, it is perceived to be the fault of the individual. It is not taken into account that the innovation itself may not be beneficial to the people. Rogers suggests that the group sponsoring the innovation, or the system, may be to blame for the failure of the innovation. They may not
consider the results of the innovation. Rogers then suggests ways in overcoming these biases, such as "keeping an open mind about the causes of a social problem" (Ibid., 111).

When different groups of people come into contact with one another, sometimes the contact can be relatively peaceful and stress-free. At other times contact occurs with open hostility and forced acculturation by the politically dominant group.

Both of these types of contact occurred between the Mohave people and the conquering European groups in North America. These contacts manifest themselves in a wide variety of culture change for the Mohave.

In this thesis I will be examining the results of change for the Mohave from pre-historic times through today, as it is expressed in Mohave artistic values and media.
MID-19TH CENTURY TRIBAL TERRITORY
(Adapted from Stewart:1983)
**MOHAVE TRADITIONAL LIFE**

It is unknown exactly how long the Mohaves have been inhabitants along the Colorado River. It has been proposed that they entered the Colorado River area at approximately 1000 A.D. (Schneider 1988:33). The Mohaves have practiced a wide variety of subsistence techniques while residing there.

**MOHAVE FISHING**

The Colorado River provided the Mohaves with a variety of fish before the Laguna Dam was built in 1909 and changed the flooding pattern of the river. The humpback, the bony tail, the minnow, and a type of mullet were the most important fish in the Mohave diet (Stewart 1957:198).

A variety of techniques were utilized to catch these fish. The Mohave would either wait until the flood waters receded and left fish in the sloughs or use a drag net. Other techniques included using basket scoops, smaller nets, weirs, or sometimes bows and arrows when the fish were in the sloughs; occasionally they caught them by hand or angled.

This fishing complex ties the Mohave more with the people of Northern Mexico, California, and the Great Basin, rather than the Southwest cultures because of the widespread but not universal Southwest taboo of eating fish.

**MOHAVE AGRICULTURE**

In addition to fishing the Mohaves practiced
agriculture when the banks of the Colorado River would overflow. Estimations are that farming provided for at least one-half of the diet, and that among the Mohaves famines were rare (Stewart 1966:5).

Prior to the seasonal flooding of the Colorado River the land was prepared for planting. The land was cleared by tramping down the arrowweeds. When the weeds were dry they were burned. The flooding, which generally was not destructive, began about late April and continued sometimes into June. Planting was done by the women with a digging stick, usually aided by children. Planting was done from late June to early August and ceased according to the stars. There were no ceremonies or observances for successful crops. A type of fence was erected out of vegetal matter to keep the rabbits out, and scarecrows were used in some instances. Both women and men harvested the crops. Corn was stored in "birds' nest granaries" (Stewart 1966:13). Beans were dried and stored in gourds or ollas. Pumpkins and melons were also dried and stored.

Maize was the staple crop of the Mohaves. In addition, they planted pumpkins, melons, and tepary beans. Wheat also became important after it was introduced by the Spaniards. Other plants were semi-cultivated and these included wildseed plant, crowfoot grass, panic grass, and curly dock.
The land used for planting was individually owned and loosely inherited along the male lines. Anyone could use unclaimed land and there was no formal distribution of land by the chief. Occasionally fights raged over ownership of land; these battles were won when one man, or group, succeeded in chasing the other individual, or group off the land in question.

**MOHAVE HUNTING**

Hunting was also a method of obtaining food, though it was not as important as fishing or agriculture. As in other aspects of Mohave life, to be a successful hunter the man had to dream the way to do it. There was specialization for deer hunting, just as there were sharpshooters. Occasionally mountain sheep were hunted, but most hunting was done for jack rabbits and cottontails.

The Mohave used a variety of techniques to hunt rabbits. At times they were driven toward archers, or the brush was set afire to drive them. Hunters also used nets and snares to capture them. The meat hunted was at times exchanged for other foods and was shared with others. Quail was the most important game bird, along with ducks.

**SETTLEMENT PATTERNS**

Mohave settlement patterns were different from other groups in California and the Southwest. Their settlements were "scattered throughout the valleys near arable land"
(Stewart 1982:57). These settlements consisted of extended families that were either patrilocal or bilocal. There was tribal cohesion, despite the widespread settlement pattern. In times of warfare they presented a united front to the enemy.

**POLITICAL SYSTEM**

The role of chief was not institutionalized, but rather he was a charismatic individual who obtained his power through dreams. The position of chief, though, was inherited through the male line, and this apparent abnormal inheritance pattern may be attributed to Spanish influence. When the Spaniards dealt with the indigenous populations they liked to have one person they perceived as being in charge. In fact, the Mohave word for "chief" is Spanish for "general."

There was no tribal council among the Mohaves. However, there were meetings of prominent men to discuss important matters. Sub-chiefs existed along with local group leaders, but again they had no real authority. They needed to be good speakers and had to have dreamed their powers.

Warfare among the Mohave was led by those who had "great dreams" which gave them "power in battle" (Stewart 1983:64). They dreamed "especially of the morning star and of certain hawks" (Kroeber 1972:752). A variety of weapons were used which included hardwood clubs for hand-to-hand
combat, a mallet-headed club, and long bows "with untipped arrows of sharpened arrowweed" (Stewart 1983:64). There was little use of lances and shields. (Kroeber 1972:752). The Mohave's favorite method of attack was a surprise attack on settlements. An individual could distinguish himself in hand-to-hand combat, and losses could be heavy (Kroeber 1972:752). A special individual who had dreamed his powers was the scalper; he was also the one who treated those who became ill because of contact with the enemy.

In warfare mostly females were taken as slaves, and as an insult to the other group were given to the old men of the Mohave tribe. Kroeber tells of one narrative about a battle in 1855 when two women were taken captive. After days of singing and dancing the two women were taken to the river. Everyone present, along with the captives, plunged into the river. As a result of this action the captives became Mohave, so they would not bring sickness to the people (Kroeber 1972:746).

SOCIAL SYSTEM

There was no marriage ceremony among the Mohave, and clan exogamy, where an individual had to marry outside of his or her clan, was practiced. There were no in-law avoidance rules, and no specific residence rules where a newly joined couple had to live with or near either set of in-laws. The nuclear family (mother, father and children,)
was the most important unit in daily life. Divorce consisted of the couple separating. There was co-operation among the extended family.

Twenty-two clan names were noted by Stewart which pertained to "plants, animals or natural phenomena" (Stewart 1983:65). Women were called by their clan names. The men were silent carriers: they carried the clan name, but were not referred to by it.

RELIGIOUS SYSTEM

The Mohave had what was described by Kroeber as a "dream life" which was the "basis for everything in life" (Kroeber 1972:754). Powers along with knowledge were acquired during dreams. Luck, good or bad, was acquired during dreams, and success or failure in hunting, fishing, or war was also acquired in dreams.

Mohave dreams were also the basis of their mythological world, and their song cycles were "strung on a thread of myth" (Kroeber 1972:755). The mythological heroes, of whom Mastamho was, and still is, the primary figure, experience a transformation into landmarks or animals during their mythological journeys. This could have significant meaning considering the arid environment inhabited by the Mohaves. This intimate knowledge of landmarks and water sources could prevent an individual from wandering the desert aimlessly when traveling, and the Mohave traveled a great deal.
Kroeber notes there are about thirty song cycles that are individually named. These song cycles are told by singers and can be quite long and involved. The singers generally stated to Kroeber that they "dreamed the myth and cycle" (Kroeber 1972:755).

Some songs are repeated at funerals, and about one-third are used by the shamans for curing specific illnesses. The rest are divided into groups such as those that tell of war, or those used with a specific instrument, or those that can be danced to (Kroeber 1972:756). Kroeber also states that as the story is being told the "Narrator is sometimes guilty of gross inconsistencies" (Ibid.,757) and will alter the story when resummarizing.

These stories relate some of the areas where the Mohave have traveled. One song begins in Shoshonean territory approximately two hundred-fifty miles northwest of Avikwame and ends in Chemehuevi territory at the New York Mountains after passing through the Mohave Valley (Kroeber 1972:760). Another song relates the location and origins of a place to gather salt, which may have been an important trade item during pre-historic times. Other songs include travels to the ocean, down the Colorado River and to Mount San Gorgonio.

Three types of myths are usually not sung. These are their origin myth, pseudohistorical narratives, and "coyote
stories and miscellaneous tales" (Kroeber 1972:770). One
dream tale recounts how people were created, taught
subsistence techniques, located the land given to them, and
how shamans acquired their curative powers.

Like other people geographically close to the Mohaves,
the Mohaves believed that disease could be caused by the
introduction of an object into the human body. In addition,
some people became ill because their soul had been taken
away. The shaman had the power to bring it back because he
had dreamed of it. Mastamho during creation saw the
mythological individual’s power and knew how to combat this
power "with song or breath or spittle, blowing or laying on
of hands or other action, as his own shadow then saw and was
instructed" (Kroeber 1972:775).

Shamans occupied a precarious position in Mohave
society. A shaman could be killed for failing to cure, or
when they were suspected of gathering souls. In 1889 John
C. Bourke, while talking with his Mohave guide, was told
about shamans who kill. These shamans can keep the souls of
their victims in a type of limbo along with all the
possessions that were cremated with them. In doing this
they can become "the chief of a rich and powerful band"
(Heizer 1976:82).

According to George Devereux, dreams are the "real
adventures of the soul" (Devereux 1976:331). The souls of
everyone but twins are mortal. Everyone has four souls, and these souls resemble the physical body. In addition to duplicating the actions of the individual they can also have activities of their own.

The souls are: the individual identity or "real shadow" a power soul that has good and bad luck, a soul of "worldly wealth", and Matmakwi'-ca:cuma'-ta mitce'-mvetc which is the vision of death (Devereux 1976:333). When the individual is cremated the "real shadow" turns into a ghost and goes to the land of the ghosts. This ghost land is a duplication of the land of the living. If the chin is not tattooed the "real shadow" goes down into a rathole.

The Mohaves believed that if a loved one had been dead too long that the living would never catch up to them when they died. George Devereux believed this may have been the leading reason for the high incidence of suicide and attempted suicide among the Mohave (Devereux 1976:336).

The Mohave traditional life comprised a wide variety of subsistence techniques and a rich oral tradition. Also, the Mohave propensity for travel and trade placed them in contact with other groups. Contact through trade, and its impact, will be discussed in the next chapters.
MOHAVE TRADE ROUTE
(Adapated from Farmer:1935)
MOHAVE TRADE

Trade existed in prehistoric times and was a major avenue of culture contact between the Mohaves and other tribes. With contact and trade there can be the diffusion of items and perhaps ideologies. Prehistorically it is easier to trace artifact remains than ideologies. Items such as obsidian and turquoise can be traced to their place of origin.

Ideologies that existed in adjacent culture areas, such as coyote as trickster, can be harder to trace. There is the possibility that this ideology was spread with culture contact. In addition, this idea could also be part of an ancient ideology possessed by the people who colonized the area. However, coyote as trickster could also be a result of independent innovation. Coyotes are present in a wide area and exhibit certain characteristics that could have them described similarly in different cultures.

PREHISTORIC TRADE

Trade routes were established in prehistoric times and one important route was the Mojave trade route. It followed, in part, the Mojave River and went through the mountain passes such as Cajon. Trade routes provided access to those people living along the Pacific coast, enabling the diffusion of traits.

Trade also extended in the opposite direction to the
east. During these periods the proof of culture contact appears in the ceramic remains. Shaul and Anderson suggest that around A.D. 1000 "some Yuman groups lived in close association with speakers of Upper Piman" (Shaul, Anderson 1989:105). Pottery was received by the Sand Papagos from the inhabitants of the lower Colorado River. In addition, during the Sedentary Period (ca. A.D. 1000-1175) pottery is also present at the sites of Gatlin and Citrus (Ibid.,113). At Las Colinas, from around A.D. 1050-1200, Yuman pottery is present consisting "of several thousand sherds and fourteen whole vessels" (Ibid.,114). Prehistoric trails connected the lower Colorado River peoples with those along the "middle Gila River and the Gila Bend area" (Shaul 1989:117). Apparently this pottery contained a desired item. It is difficult to apply Rogers' characteristics of diffusion not knowing what was transported in the pottery. Perhaps it was salt, an item necessary for existence in the desert.

Prior to this, archaeological remains show that the areas around the Colorado River into the Mojave Desert to the west coast of California, and into the Southwest culture area proper, were part of a wide trade network during prehistoric times. Contact between the Southwest people and those along the Colorado River into the Mojave Desert has been substantiated for the Gypsum period, (B.C.2000-A.D.500), the Saratoga Springs period, (A.D.500-1200), and
the Shoshonean period (1200 to historic contact) by Warren and Crabtree (Warren and Crabtree 1986:193).

Associated with the Early Middle Archaic (B.C.2000-200), a major trade network developed throughout southern and central California to Nevada and Utah. It is during this period "the best evidence for obsidian trade" becomes apparent (Hughes 1986:254-255).

Obsidian, for projectile points, could be viewed as having an advantage over existing materials, because a sharper edge could be produced. The recipients could chip the obsidian with perhaps minor variations in techniques which then they could easily incorporate into their existing repertoire.

If the recipients were already using points, environmentally this new material was compatible. If points were introduced with the obsidian this would add an advantage in food getting techniques. Points would allow for the hunting of larger game if available.

Stone for utilitarian use was not the only stone traded. Turquoise for specialty uses was also traded. The desire for turquoise encouraged people to search in areas away from their customary lands. In the Mojave River area during the Gypsum period remains of Basketmaker II pit houses and split-twig figurines are present. During the Saratoga Springs period, the northeastern Mojave experienced
a strong influence by the Anasazi people. During this time:

"Turquoise mining in the eastern Mojave and the Anasazi occupation of the lower Virgin and Muddy rivers indicate increased interaction with the Southwest. The Mojave River also developed as a trade route, and by the end of the Saratoga Springs period the Mojave River Valley shared a ceramic complex and projectile point styles with the lower Colorado Valley" (Warren, Crabtree 1986:193).

In the north central Mojave Desert, during what is defined as the Phase II stage of the Amargosa Industry (A.D.200-900), the artifact assemblage includes "plain Gray Ware pottery, and mauls and picks in sites associated with turquoise mining" (Warren 1984:356). Materials that bear a close resemblance to Basketmaker III materials were also present.

Turquoise was used differently than obsidian. It was desired in one respect for its color and was used for decoration. The use of turquoise as a specialty item makes it a marker of distinction. Other items that can be defined as specialties are shell beads, especially among groups in the southwest. Shell was believed to be "a sacred material which, coming from the water, in a measure symbolized the power of that life giving fluid" (Orchard 1975:19). The importance of shell to the Pueblo people would encourage trade with the coast, with the Mohaves, among others, acting as intermediaries.

Engraved rocks beside a trail in Imperial County
provides an example of stones strategically placed beside overland routes in both the Colorado and Mojave Deserts. It is not unusual that "some travelers sacrificed a portion of their burden at such shrines when embarking on a trip, and in this case they broke or burned their offering in order to kill it" (Davis 1965:330). This practice was also known to occur in other areas of the Southwest. In addition, a Mohave jar was found that apparently was "Influenced by Pueblo III ceramics of Anasazi design" (Davis 1965:327). This find implies either direct contact between the groups, or ideas passing through intermediaries.

Indications of widespread trade in shell occurred during the late Archaic (A.D. 700-1500). Pacific coast shell species show up in areas such as "southern Oregon, southern Idaho, and all of Utah as well as northern Arizona" (Hughes 1986:254).

Trade did not flow only between the Colorado River and the Southwest, but it continued past these areas and flowed between the Pacific Ocean and the Great Basin. Artifact assemblages found in the Great Basin area of North America contain shells such as Cerithidea californica and a single large bilobed bead. "These beads apparently moved along the Colorado River route" (Hughes 1986:251). One of the major routes traveled was through the Colorado River area along the Mojave River trade route.
During the Shoshonean period (A.D. 1200 to contact), trade was still being practiced between the people of the lower Colorado River and those of the California coast. "Brown, buff, and red-on-buff lower Colorado River pottery" appeared, and "villages, apparently in part dependent on trade developed on the upper Mojave River" (Warren, Crabtree 1986:193).

During the prehistoric period the archaeological record reveals a wide diffusion of artifacts. Beads, pottery, obsidian, and turquoise were traded over a wide area. Inedible items were not the only things that passed between people in contact.

Maize was an innovation that was diffused. It is not known when the Mohave received maize, but they were cultivating it by the time the Spaniards arrived. According to Rogers' characteristics of diffusion it "fit" into their existing lifestyle. Maize was compatible with the environment they were inhabiting. It was not a complex cultigen and was easy to try. The Mohave could incorporate maize into their existing methods of flood-plain agriculture. Moreover, maize added an advantage to their food getting strategies, by adding one more cultigen they could harvest.

HISTORIC TRADE

During the historic period, early accounts tell of
trade continuing throughout California and the Colorado River areas. Beads and shells were still being traded by the indigenous populations.

The trade routes that were established during the prehistoric period continued to be used in the historic period. Even today some of these ancient routes are our modern roads (Farmer 1935:155). The Mohaves were an integral part of this trade network. Goods were traded through the Gitanemuk in the lower San Joaquin Valley from the Mohaves. The Mohave also traded with "the Gabrielinos, [sic] Fernandeños, Serranos, Ventureños, Barbarbeños, and Gitanemuk of Southern California" (Farmer 1935:155).

During California's Mission period, the military authorities tried to stop this trade. They perceived the contact, as a result of trade, as a way for the Mohaves to cause unrest. Problems did begin when the Spanish military tried to prohibit trade.

Farmer (1935:157) believes that the Mohaves may have been the "only tribe that traded directly with the coast Indians." This trade could have been carried on for several reasons: the desire or need for olivella shells and beads, curiosity, or adventure. I believe that it could have been for all of these reasons.

In contrast, Kroeber believes that the Mohave had very little interest in trade. Instead they were "eager to know
the manners of other peoples as they were careful to hold aloof from adopting them" (Kroeber 1972:727). Just because the Mohave were aloof from adopting outside traits does not mean they were not interested in trading. Nevertheless, this aloofness may have been true in early contact times.

What did the Colorado River peoples gain from this extensive network? During prehistoric times this may be difficult to answer for the Mohaves. The scarcity of prehistoric artifact remains might be explained by the Mohave’s burial practice of cremation of not only the body, but also of the personal possessions of the individual. They also gave away or destroyed personal property to gain prestige (Kroeber 1972:745). In the ethnographic present during a cremation it was noted that the "close women relatives, who have on colorful and beautiful dresses (made for this purpose) will slip them off, and the new dresses are thrown on the fires" (Scrivner 1970:16). This practice would have created a continual, sustained market for beautiful, specialty items to be burned at funeral ceremonies.

The importance of trade placed the people along the Colorado River in contact with other people outside the Colorado River area. The Mohave propensity for travel exposed them to an assortment of new traits, from which they could integrate into their system what suited them. These
meetings also exposed the Mohave trading partners to new traits from the Mohave.

The pottery of the Cahuilla, Luiseno, and Diegueno apparently originated in the lower Colorado Valley (Kroeber 1972:702). Tempered with crushed rock this coiled and smooth unslipped pottery has designs in the typical Mohave style that are similar to face painting and tattoo designs.

While the archaeological record can reveal that trade existed between these areas, it cannot reveal what ideology may have been exchanged between trading partners. During this prehistoric period there appears to be no drastic changes occurring. With the exception of cultigens that were adopted, the items traded between groups in contact were not drastic innovations. Rogers' characteristics of diffusion are difficult to apply during the prehistoric period. While the Mohave's lifestyle was not static, it did not experience the drastic changes that came with the invading Europeans. When the Europeans arrived the law of cultural dominance comes into play. This is where one militarily better equipped group wants to, and can, dominate and subjugate another group of people.

The social complexity of the people coming in contact with one another during prehistoric and early historic times, at least in the Southwest and California culture areas, did not lend itself to the law of cultural dominance.
The strong culture groups could not, or did not want to, ordinarily dominate others. When disputes did arise over land, at least among the Colorado River area groups, they were settled by running somebody off the land, not by subjugation. Intense culture changes occur when groups have intense contact, usually forced.

During the times of European contact with the Mohaves, contact was not limited to trade. Disputes arose, and not just over land. There was more contact with the Anglo-Europeans as opposed to the Spanish. It is during these periods that Mohave life began to change drastically, with the introduction of new concepts and items.
COLORADO RIVER INDIAN RESERVATION
CULTURE CONTACT

It has been determined that the Mohave Indians in prehistoric and historic times were a link in a wide trade network. Throughout this period the Mojave influenced other cultures but were basically conservative in adopting traits from others. It is their trading practice that made contact less hostile for the Spaniards when they came through Mohave territory.

SPANISH CONTACT

There are no reports in the early Spanish explorers' accounts of any encounters specifically with the Mohaves. Both Francisco de Ulloa in 1539, and Hernando de Alarcón in 1540 made trips to the Colorado River. Ulloa never travelled past the mouth of the river because of the shoals. Alarcón, though, travelled at least as far as present day Parker, Arizona, but left no records of meeting the Mohaves (Stewart 1966 26-28).

Sixty-five years later the expedition led by Don Juan de Oñate were the first to mention the Mohaves. The Franciscans recorded the lifestyle of the Mohave people, which is remarkably similar to their lifestyle as described by later Anglo-Europeans.

The Franciscan padre Francisco Garces was the next Spaniard to definitely come in contact with the Mohaves.
During 1779 two missions were established, and in 1781 they were destroyed in a rebellion. The Spaniards retaliated they were forced out of the Colorado River area.

Relations with the Spaniards were not confined to the Colorado River region. Troubles did ensue between the Colorado River tribes and the Spaniards colonizing California. The Spaniards tried to disrupt the ancient trade network between the Indians and the neophytes in the Los Angeles Basin (Forbes 1965:240). The attempts to disrupt the trade were not fully successful. The Mohaves were able to maintain their independence during the Spanish period, in part because the Spaniards did not successfully establish missions in Mohave territory (Stewart 1983:56).

From the Spaniards, via the Quechans, though, the Mohaves did obtain wheat. Similar to corn, wheat "fit" into the existing Mohave lifestyle. Wheat was compatible with the environment, could be incorporated into their existing methods of agriculture, and added an advantage to their food getting strategies. Later they obtained horses, either through trading or by raiding. The Mohaves were able to incorporate those outside traits which "fit" into their existing value system.

**ANGLO-EUROPEAN CONTACT**

The law of cultural dominance had a greater effect on the Mohave with regards to Anglo-European contacts, because
it was more prolonged and intense. Anglo-European contact with the Mohaves followed a pattern of initial friendliness and later hostilities. The first Anglo-Europeans in the region were the trappers and traders. Jedidiah Smith made contact in 1826 with the Mohaves, traded with them, and was treated hospitably. The second time Jedidiah Smith and his men came through, in 1827, the contact ended in an attack upon Smith and his party.

This attack was possibly in retaliation for another encounter between the Mohaves and George Yount's party. Yount and his party had several encounters with Indian tribes, and the results were usually bad. Other Anglo-Europeans who had encounters with the Mohaves included A.W. Whipple, an explorer for the railroads, and Joseph C. Ives in 1858, a steamboat captain trying to determine the navigability of the Colorado River (Stewart 1983:57). The accounts of the parties that mentioned the Mohave Indians describe basically the same lifestyle as the Spanish accounts. However, when the Mohaves attacked a wagon train in 1858 the United States established a military post.

Hostilities ensued between the Mohave people and Anglo-Europeans. George Devereux recounts the leadership of Yarate:va during "contact between the Mohave and Americans" (Devereux 1951:34). This account was told to Devereux by Yarate:va's granddaughter Tcatc, and he believes there is no
reason to doubt its accuracy.

This account tells of contact and how the Mohave were defeated by the United States Army. Yarate:va realized after some of their land had been taken, that the Americans were doing to them what they had done to the "Pima"; Devereux notes at this point that "the allies of the Pima are meant" (Devereux 1951:39). To prevent the Americans from taking all Mohave land and exterminating them, Yarate:va needed to negotiate.

In 1865 the Colorado River Reservation was established. The Mohaves were divided into two factions at this time: one under the leadership of Yarate:va and another under the leadership of Hamose-k a ahot. This second group "refused to leave their ancestral homeland in the Mohave Valley" (Stewart 1983:55). This resulted in the development of two reservations, the Fort Mojave Reservation and the Colorado River Indian Reservation (CRIT) farther south. This division apparently has not caused a lot of animosity, as "there is considerable visiting between them and some intermarriage" (Ibid.).

CULTURE CHANGE

Early accounts of Spanish and Anglo-European contact with the Mohave Indians describe an unchanged lifestyle from Spanish accounts. Radical changes occurred with the establishment of Fort Mojave and the railroad.
While some of the changes experienced by the Mohaves were not as drastic as the split in the tribe, change did manifest itself in other areas of their lives. The Mohaves were part of a wider trade network in pre-contact times. A disruption in this trade network and the disruption to their mode of subsistence practiced before contact made them more reliant upon the use of money as a means of exchange for needed food. Beadwork and pottery items made to sell to the tourist trade supplied some individuals with a much-needed income.

The BIA (Bureau of Indian Affairs), has not been without influence in reservation politics. In an article from the Needles Desert Star, dated May 14, 1970 there are allegations that the BIA caused a tribal split by advising one faction within the tribe, and not the other, regarding the lease of land for cotton cultivation.

Despite an ideological split caused by the BIA and a terrestrial split in the reservation, the Mohaves are trying to keep their heritage alive. They still take a great deal of pride in their ability to run long distances, a holdover from pre-contact times. At the same time they are trying to take advantage of what the dominant culture has to offer them. Education is important, and so is the development of their land to increase revenues for the tribe.

The Mohave tribe at Fort Mojave prints a monthly
newsletter, edited by Ech Kwach Nyorr, called ECH*KAH*NAV*CHA. The newsletters contain myths each month such as "Mastamho teaches Mojaves how to build a shade and house," and "Mastamho teaches counting, direction and tribal names." Also included are important happenings that concern the people on the reservation, such as foot races. There are also meetings for dealing with alcohol abuse, one of the more unpleasant results of contact with European people. The importance of education for the Mohaves is stressed in these newsletters.

In a recent newspaper article in the Riverside Press-Enterprise of February 3, 1992, the Tribal Chief, Daniel Eddy Jr., would like to see the tribe become more self-reliant and active in its own affairs. Mr. Eddy mentions the Hydro-Electric plant they are building to help themselves become more independent. Also, the tribe is becoming more aggressive to obtain what they feel is due them economically and politically.

A new way of life was forced on the Mohave Indians. Major changes took place in subsistence, housing, and the artifacts that were produced. By examining artifacts from the late 1800's and early 1900's and comparing them to modern artistic expression some of these changes become apparent.
MOHAVE ARTIFACTS

Mohave artistic expression takes a wide variety of forms. The artifact remains in museums include: willow bark skirts, beadwork, pottery, effigy vessels, gourd rattles, bows and arrows, and cradle boards. Modern-day Mohaves are still producing basically the same items.

SAN BERNARDINO COUNTY MUSEUM ARTIFACTS

The artifacts in possession of the museum are varied. Many of them have been donated by Gerald Smith, and they do not possess any date of production. The collection consists of pottery, bark skirts, effigy pots, cradle boards, spoons, bows and arrows, a gourd rattle, and bead work. The bead work collection is made up of necklaces, belts, bags, and capes. The bead work purses were apparently made for the tourist trade that developed when the railroad came through. Colored beads (yellow, white, green, black, and red) were used in these purses.

In an article titled "Fort Mojave Beads, Dolls, and Tears," Mrs. Peterson, a Fort Mojave resident, says that specific colors are used for beadwork intended for babies in their cradles. Based on the colors "You can tell the boy and girl babies apart easily" (Odens 1971:24). In addition, when talking about patterns and inspiration for her designs,
she says she watched nature and "we Mojaves like the leaf of
the cottonwood tree, and we weave into our necklaces
dictures of Mojave men and women" (Ibid.,24).

Henrietta Peterson does beadwork for two reasons: some
of her capes are made for herself, and some for special
friends. She has made one for her "burial cape" (Ibid.,22).
This must be very special indeed, since the Mohave believed
that what was cremated with them went with them to the
afterlife. A second reason for her beadwork was because she
needed the money. These items shown to the authors
consisted of "several one-strand necklaces, a cigarette case
cover and a little purse" (Ibid.,22).

Beadwork is also present on the dolls in the collection
of the San Bernardino County Museum. One doll also has
human hair. The dolls at the museum (plates 1:A1900-59,
2:A4671) range in technique and adornment from simple to
elaborate. The doll with the bark skirt was possibly made
by Annie Fields, a Fort Mojave doll maker. All the dolls
are anatomically correct. In addition, they are all
decorated with representations of tattooing or face
painting. On the dolls are marks similar to drawings of
chin tattoos, which I discussed earlier, and according to
Taylor have "no symbolic meaning" (Ibid.,41); they were done
for aesthetic reasons. While tattoos on the dolls may have
no meaning, tattoos were important at one time for the
individuals' location in the afterlife. Face painting also occurred, for ritual observance or just every day decoration, before Indian Services voiced their opposition (Ibid., 21). Amelia Flores, an inactive potter at the Colorado River Indian Reservation suggests that the face painting that occurs on the effigy vessels could be representative of different clans.

In addition to ceramic dolls the museum has large ceramic pots. The large vessels I looked at were labeled as possible cooking vessels. One had no designs on it at all. The other two, however, had geometric designs. One vessel had red five pointed star patterns on it. There are four parallel circles around the neck. In addition, there are three parallel circles on the bottom with circles of dots alternating with rings the rim is painted red and inside the lip of the pot are additional red dots.

A second vessel had geometric designs running from the rim to the bottom. These designs were circles, circles with some fill-in, and curvilinear lines, one group which looks braided. There is apparently no meaning for these designs. These geometric designs, while having no meaning, are typical of Mohave art and are portrayed on other artifacts.

The smaller ceramics at the museum are an amalgam of bowls, ladles, cups, jars, effigy pots, and animals. Most of the ceramics have geometric designs painted on them. One
ladle (plate 2:A5-1065) has what has been described as cottonwood leaf and butterfly patterns, by Kroeber. In an article by Kroeber about pottery these designs are called "cottonwood leaf" and "rain" (Kroeber 1972:739). This same pattern exists on other items (plate 3:A 5981). Another ladle with a zig zag pattern (plate 4:A5-977) has a face at the tip of the handle.

Two pieces of ceramics have either five digit (plate 3:A5-298) or six digit (plate 4:A 1900-56) prints in them. This pattern has been called "raccoon hands" (Kroeber 1955:7). The cup (plate 5:A 1900-51) looks like a coffee cup complete with a handle: it has a roughly painted geometric design on it, and was probably made for the tourist trade. The geometric motifs are again present in these smaller ceramics, in addition to effigy vessels.

Other artifacts in possession of the museum are effigy pots which are quite interesting. One effigy pot (plate 5: A1900-46) has a multi-colored bead choker and earrings as adornment. In addition to eyelashes painted on the vessel there are dots on the cheeks and a line running down the length of the nose. These marks appear in Kroeber's drawings representing face paint for a female twin (Kroeber 1972:733).

The ceramic pipe (plate 6:A1900-58) designs could not be linked to any representations of face painting or
tattooing that I am familiar with. However, the effigy bowl (plate 6:A59-103) where the mouth is the opening has a design, again according to Kroeber, of hotahpave (Ibid.,732). I could not find a translation for the word, but it is a face painting design for women.

The ceramic pot with the raised frog design (plate 7:S30-A530) has been dated to the historic period. Also on this pot are rectangular representations of the cottonwood leaf design. The frog appears again as a figurine. This frog (plate 7:L-41) has geometric designs covering the body. Another figurine, which is roughly made, is a dog (plate 8:A5-1003). The dog has an inscription on its underside that includes a date of 1930.

The gourd rattle (plate 8:1900-62) has a unique painted design on it. The wings are geometric triangles and the tail feathers are represented by a diamond shape. The head of the bird is lightly sketched in; apparently it is unfinished. One of the holes in the gourd represents the eye of the bird.

Many of the designs that appear on Mohave ceramics are representations of flora and fauna in the environment such as raccoon hands and cottonwood leaf patterns. The simplification of forms into geometric designs is a technique used throughout Mohave art. These forms show up in a majority of the artifacts. It appears to be a hold-
over from pre-contact times. While at times tattooing and face painting were frowned upon, they are still being depicted on historic artifacts.

SAN DIEGO MUSEUM OF MAN ARTIFACTS

The artifact collection at the San Diego Museum of Man (SDMM) is a complement to the artifact collection at the SBCM. The collection also consists of beadwork, cradle boards, bows and arrows, gourd rattles (both traditional and contemporary), effigy pots, and additional ceramics.

The beadwork is of the same variety at the SBCM. Necklaces, sashes, and beaded collars are present in a variety of forms and made with a variety of different colored beads. The necklace (plate 9:1960-18-15) is a braided bead rope necklace made about 1900, from Needles, California. In addition, there is a flat web sash made of black and white braided beads (plate 9:1960-18-18) also from Needles.

The beaded collars are both made before 1930. Plate 20 1958-63-15 was made by Betty Barrackman, a Mohave from Fort Mojave, around 1929. Plate 20:1979-29-3 has been assigned a date of prior to 1915, and has the traditional cottonwood leaf design. These collars are examples of the typical geometric and motifs from nature that are used throughout Mohave art. These collars differ from the one at the SBCM
only in the colors of the beads used. At the SBCM the collar is made of white and black beads, while the ones at the SDMM are made of blue and white beads. They are very similar, though, in the care and intricacy with which the motifs are executed, and the cottonwood leaf motif has been executed on two of them.

The SDMM has in its possession a larger number of dolls than the SBCM. The dolls (plate 10:1955-40-2,1955-41-3) were both collected in Yuma in 1870, and are nice specimens of Mohave doll making. While I cannot find a pattern name for the face decoration, it probably is representational of face painting designs because it is done in red, a color traditionally used in face painting (Taylor, Wallace 1947:9). The chin decorations are probably tattoos. The doll (plate 10:1975-57-1) has a date of 1880-1920 assigned to it by the museum. The doll is clothed in the traditional bark skirt of the Mohaves, is adorned with a beadwork collar and earrings and looks very much pregnant. The doll (plate 10:1969-59-1) was made by Annie Fields, and is on loan to the SDMM from CRIT. This doll was made about 1960 and has the face painting for a female twin on her face. Her adornments include earrings, and a beaded collar.

Elmer Gates, a now deceased Mohave artisan, made the next two dolls (plate 12:1969-60-1,1971-41-1). The former was made in 1969, and the latter in 1971. Only figure 1969-
60-1 has tattooing on the chin. However, both have facial
designs, geometric body designs, and beaded collars. Unlike
the dolls from the 1870’s, these dolls and the Annie Fields
doll have hair, which is a change from the dolls
manufactured in the late 1800’s.

The effigy pots also have facial painting and tattoo
designs (plate 13:8946,3006). Both pots have four spouts.
The number four has significance in that it represents the
four directions. Both have beaded necklaces and earrings.
3006 was obtained in Needles, California sometime during
1890-1900. It has coffee-bean eyes reminiscent of earlier
works and dots painted on the body of the pot, which could
be "rain". This design has apparently been around for a
long time. In a photograph of a Mohave captive, Olive
Oatman, the same design appears on her chin (Stewart
1983:62). She was a captive of the Mohaves from 1852-1856.

Plate 13:8946 also has dots on the body of the pot and
triangular shaped areas filled with paint. These designs
also appear on the effigy pot at the SBCM. However, the
forms on that effigy pot are more simplified than on the
pots at the SDMM. This may be indicating a simplification
over time of the older traditional geometric patterns.
While the same care was used in executing these designs, the
enlargement of the dots and simplification of the triangles
would have reduced the time in painting the design.
A small olla (plate 14:1973-41-1) was assigned a period of around 1900 by the museum. It has the traditional cottonwood leaf motif on the outside. The triangular areas are filled in with paint which Kroeber calls an hourglass figure. The shape of the cottonwood leaf pattern lends itself to this kind of fill-in work around the motif.

There are two cups in the collection (Plate 14:1971-2-7, 1979-2-11). The former is dated late 18th century, the latter 1880-1920. 1971-2-7 is a repeat of the cottonwood leaf design and the hourglass figures. 1979-2-11 has the fish back bone design.

The fish backbone design is also present on a globular jar (plate 15:3005). This jar was obtained at Needles, California between 1890-1900. The design on the inside rim is the coyote teeth design.

Seventy years later Elmer Gates, a Mohave from Parker, Arizona was also making pottery. The bowl (plate 16:1971-41-3) and figurine (plate 16:1971-41-4) were both made by Mr. Gates during 1971. The technique of paddle and anvil is the traditional method of pottery making among the Mohave. The single band fret design is not. Amelia Flores, a student of Mr. Gates, told me Mr. Gates was not only interested in preserving Mohave traditional art but was also interested in other cultures and their designs. I believe this is evident in the design executed on this pot. The
Another dramatic change that occurred is in the production of rattle gourds. Plate 17:1967-77-89, 1928-15-293, are examples of traditional rattle gourds made by the Mohave. Both of these gourds were received by the SDMM in 1928. Both are made in the traditional way with mesquite root handles, attached with sap from either the arrowweed or mesquite bush. An informant at CRIT when showed these pictures said that is how they used to be made. A contemporary rattle maker made the rattles in plates 18 and 19:1991-8. There are four gourd rattles in this numbered sequence. These rattles are, in part, made from different materials, such as redwood handles. However, the traditional colors prevail. Another informant told me that he makes the gourds for singers in the traditional way, and the singer is the one who paints his own designs on them. Women, while participants in some ceremonies, do not use the rattles.

The choices of colors used to paint these gourds are the traditional Mohave colors of black, white and red (and sometimes blue is also used). However, when I asked an informant about the design names given at the SDMM, he said he had never heard of some of the design names. The design on the light blue gourd was called "Four logs caught in a whirlpool" by the maker. It is reminiscent of the
traditional design called the mesquite. While design names may change or be lost, the designs appear to be variations on the traditional motifs.

Again, as in the collection at the SBCM, the collection at the SDMM consists of artifacts with environmental motifs. However, the modern artifacts do show the results of culture contact and the effect it has had on the Mohave artisan. These changes will be discussed after exploring current artistic production by Mohave artists.

INTERVIEWS WITH MOHAVE ARTISANS

CRADLE BOARD PRODUCTION

I interviewed Mohave artisans at the Colorado River Indian Reservation at Parker, Arizona. The first interview was with Garrick Booth, a cradle board maker. The technique he described to me is the way his grandfather taught him, and he noted that variation occurs in methods of cradle board making.

Mr. Booth uses mesquite root for the outside piece of the cradle board. Traditionally, arrowweeds were used for the cross pieces. However, Mr. Booth purchases wooden dowels to use as the cross pieces. Instead of using sap to secure the pieces he uses finishing nails.

The first step in making a cradle board is to dig up a mesquite root that has a diameter of approximately one and
The desired length of mesquite root is 84"-85" long. He used to use a length of 35" for each cradle board, but has increased the length to 42"-43" because the children are bigger now. Digging the mesquite root can be quite a chore, with the roots running either downward or outward, sometimes through the layer of caliche clay. This unearthing can be dangerous, since Mr. Booth has dug up snakes and other reptiles that inhabit the desert.

If work is begun in the summer, the root is left until the next morning before Mr. Booth begins to shape it. In the winter the root can be left two or three days before bending is begun. He uses a vise to bend the root approximately eight to nine inches. Shaping the root is done a little at a time or it will break. He then ties it with a piece of wire to maintain its U shape while it is drying. This wire is tightened during shaping so the board will retain this U shape. The skin of the root is left on for two reasons: first, to keep moisture in the root, so it will not dry too fast and secondly, to prevent the wire from biting into the root. He also uses weights, one of which is a 2 inch by 12 inch piece of iron, to keep it flat while it is drying. He leaves the root to dry for one day. He then reshaples it again, makes adjustments, and then leaves it to dry for one to one and one-half days.

The cross pieces are located one and one-half inches
apart. He marks the cradle on one side, lays the pieces across and "eyeballs" the location on the other side to ensure they are straight. After drilling the holes he files down the inside to insure that it is smooth. He hammers the pieces in one at a time in groups of three. After sanding the inside again he uses a file to shape and round the outside, then sands it again to get it smooth. He then nails the cross sticks in and lets the sun dry it more. Altogether it takes about three days to dry. He flips it occasionally to dry evenly. His grandfather told him it is not supposed to be perfect. It takes about one week from start to finish to make a cradle board.

Mr. Booth used to go with his grandfather when he made cradle boards and dug the root for him. When he was younger he would put the cross pieces in after his grandfather had bent the root, but really had no interest in making them. When he became a father, he made one for his little girl. Eventually a demand for cradle boards returned, and people would come to his grandfather to have them made. He continued with this tradition after the death of his grandfather. He has made cradle boards for sale, in addition to gifts for a family member. He has also repaired his grandfather's work.

**BEADWORK PRODUCTION**

Fayth B. Wilson is a Mohave beadworker on the Colorado
River Indian Reservation. She makes a wide variety of items with beads. These items include: head bands, wrist bands, keychains, barrettes, key chains, earrings, and banana clips. Her necklaces exhibit the widest variety.

The more modern patterns and items she picked up from other beadworkers on the reservation. She learned some of the older patterns from an elderly man for whom she had cared. She was originally taught as a child by her grandmother. Mrs. Wilson did not do any beadwork during her teens, but picked it up later after she retired from Parker Hospital. She is the first Mohave to become a Registered Nurse.

There are no pattern names for her beadwork. She gets her beads from her niece in Needles, or a cousin on the CRIT. She enjoys making the keychains (plate:21), which she has been doing for about ten years, and they sell the fastest.

The women's necklaces (plate 21) are approximately 27" before joining. She also takes into consideration the height of the woman when determining length. The necklace should hang between the breasts to avoid getting it caught. In a headband she made, the pattern came from her brother, and was used at least in the early 1930's. Color choices of the bead work are a personal preference. The beadwork that is put on the barrettes and banana clips have a chamois
backing because deer skin is reported to have an unpleasant odor. She has added to her repertoire of beadwork with non traditional items such as barrettes and banana clips. Her necklaces have experienced changes also. She continues to make traditional types, but has added variations in designs.

Mrs. Wilson has not made a cape for herself, but she does have one. Capes are not made only for funeral ceremonies but also for children for dress up on Indian Day.

Sale is not of primary importance to Mrs. Wilson. The items are basically priced the same by everyone. She has given keychains to the church for sale at bazaars, and sometimes just gives the items away. She has also sold through the museum but feels others need the money more than she and does not want to take away from them. She does beadwork basically to keep her mind active.

Another individual who does beadwork at CRIT is Cynthia Moses, a secretary at the museum. She produces a wide variety of beadwork and has experimented on her own with applying beadwork to deck shoes. Ms. Moses began doing beadwork when she started working at the museum, and purchases her beads through the museum.

The colors of beads are the traditional Mohave colors of red, white, black, and blue. In addition to making earrings and necklaces she also produces beaded bags, reminiscent of bags from the early 1900’s, and pens with
beaded sheaths with the geometric diamond design. Non-traditional items with traditional geometric patterns are also produced. The earrings and miniature beaded bags that are on the end of necklaces were made for a tour group.

The designs that she uses come from herself. She feels that it is important to maintain Mohave tradition, which is why she is producing the beaded bags. She makes these items mostly for her own enjoyment, not to supplement her income. In addition, she has entered her beadwork in competition at the county fair and has won first and second place awards.

**GOURD RATTLE PRODUCTION**

Delano Carter is a gourd rattle maker and beadworker who is director of the Maintenance Department at CRIT. His father taught him gourd making in the traditional method, which he has been doing for 20 years. Each clan has songs, and different size gourds go with each song. The gourd rattles are made to go along with Mohave musical tradition. If the rattle does not come out perfect, he will sell it for decoration. A gourd is usually given as a gift if it is for a singer. Sale is not a concern with Mr. Carter; rather, it is more or less a hobby. He began making gourds because he wanted one for himself and remembered how his father made them.
The gourds are planted around the first of September when it is not too hot. The round stem of the gourd usually determines the handle length. If the gourd is resting on the ground, it shapes better. The paint for the gourds is bought. The handles are usually mesquite root because it is strong and lasts longer than redwood. There is no color significance that he knows of or has heard. Perhaps years ago there was. He will paint designs on them if requested, but usually the singer does it himself. Mohave women sing to accompany the head singer, but they do not handle the gourds.

When the gourd comes off the vine there is a yellow shaded area on top. It is desirable to leave the gourd on the vine to dry. However, it cannot be left in the sun or it will crack. After drying the gourd the stem is removed and the seeds and fruit are cleaned out down to the shell. Then the gourd is boiled to get the remains out to get them nice and smooth. Next he usually sands the outside of the gourd.

The redwood handle is not traditional; the traditional handle is mesquite (plate 22). He whittles the handle to the size of the gourd and then uses non-traditional wood glue to fasten it. The traditional method of attaching the handle is with sap from the greasewood plant. The sap is melted down to make it pliable. When it is almost gel like,
it can be used.

The rattles come from the seed of the palm tree. The outer skin is peeled off the seeds. The number of seeds in each gourd is determine by sound. It usually takes him fifteen hours to make a gourd rattle, and he can complete one in approximately one week. There has been a great demand for gourd rattles among the singers. He has made gourd rattles for other tribes, such as the Walapais, if they request it.

Mr. Carter was taught beadwork by his aunt. He has been doing beadwork for about thirty years. He has made belts, necklaces, and hat bands. Most of his beadwork exhibits contemporary motifs. There is no color significance; it is just what is appealing to his eye. He spends very little time on beadwork, and does it for people who request it. He did note, however, that the colors navy blue, white, black and red are basic Mohave colors.

In addition to gourd making and beadwork Mr. Carter has expressed himself in other ways artistically. He has worked in charcoal and chalks with mostly Indian cultural themes, not specifically Mohave. In addition, he has worked with pen and ink doing animals, with an emphasis on waterfowl.

**POTTERY PRODUCTION**

Amelia Flores is an inactive potter on the CRIT. She
was taught by Elmer Gates, the last active potter. Ms. Flores made her pottery in the traditional way. The clay deposits are found on and off the reservation, and she used natural rock from the fine deposits along the river for temper. She produced traditional effigies, frogs, and ladles.

First the clay was pounded with a pestle into a fine texture; then temper and water were added. All the amounts were measured. She was inspired by nature for her patterns and also used traditional patterns and designs such as the cottonwood leaf, fish backbone, and mesquite designs. She, like other Mohaves, were continuing with the traditional patterns. The clay had to have a sweet taste that meant it was good, pure.

The paint in its raw form is yellow ocher, and when it was fired turned red. The ocher in its raw form came in cake form from deposits in the Needles area. The pottery was painted before firing and after drying. The drying time depended on the season. If the clay dried too fast it cracked.

She fired her pottery using the traditional fuel of mesquite wood, because it burned hot. She placed her pottery in a galvanized barrel that was then placed in a shallow pit. Then a galvanized lid was placed on top, and then covered with mesquite. A shield was placed around the
pit on windy days.

She liked making bowls the best, and the patterns she preferred were the mesquite, cottonwood, and fish. The cottonwood design may be significant because of the importance of the cottonwood tree in Mohave life. The cottonwood was used to make bark skirts, for fuel, and at one time for cremations. The mesquite design may be a relatively new design or perhaps an old design enhanced by Elmer Gates. In addition, Mr. Gates used a substance from the mesquite that produced the black color.

She was not aware of any Mohave names for designs. She did however suggest that the face painting designs on some of the effigies are perhaps associated with different clans, but that information is perhaps lost now. Also, since clans are named after natural phenomena, it may be reasonable to assume some motifs could have been clan designations at one time. Ms. Flores also did at one time do beadwork, but preferred working with clay because it was more expressive as there are not standardized patterns like beadwork.

At one time she took a night class on throwing pottery on the wheel and a sculpture class. She did not like working on the wheel: she felt it was too commercial, and she does not like to sculpt. Ms. Flores has made about fifty pots, most of which have been sold.
BOW PRODUCTION

Thurlow F. Stanley is an individual who produces, in addition to bows, gourd rattles, lancers, war clubs, drawings and paintings.

He makes bows according to how his grandfather taught him and produces two types. One type of bow is functional, which he called a sportsman’s bow, a thirty-five to forty-five pound bow. This bow measures five to six feet long. In addition, he makes a ninety pound bow. He wraps the bow in wet gunny sacks and heats it with hot sand, then bends it to produce a very strong bow. Willow tree is the traditional wood for making bows, and Mr. Stanley continues with this tradition.

Nowadays, in addition to the functional bows, he also makes bows strictly for decoration. These decorative bows cannot be used for hunting as they will snap and break. The differences in the time spent on the production of these bows is reflected in the price of them, with the functional bows being more expensive.

Mr. Stanley not only produces bows, but also gourd rattles. He stated that years ago the gourds were not painted but were plain gourds with handles attached. Later, when they were painted, it was with a powdered substance from the mountains that produced the colors white, red, and black. The gourds are used for a variety of songs. Most of
the songs today are for mourning, sadness, and illness.

Lancers or standard bearers are also made by Mr. Stanley. There are eighteen feathers to a lancer. Each of these feathers has a story. Some stories are about the beginning of life and nature, or Mohave traditions and culture. Eagle feathers are preferred for the lancers. Next in preference are white chest hawk feathers. Since these birds cannot be killed, the feathers have to be gathered in the mountains. Mr. Stanley continues in a traditional manner with most of his art work.

MISCELLANEOUS ITEMS FOR SALE

The jewelry for sale at the museum consists of items made by the Mohave as well as Chemehuevi, Navaho, and Hopi. In the beadwork usually the Mohave items have geometric designs, while the Chemehuevi have animal and flower designs. The contemporary items include keychains and beadwork that includes silver. The coiled necklaces, an innovation, have been produced for approximately the past five years.

ADDITIONAL MOHAVE ART AT CRIT

Some of the art work on display at the museum is on loan from Lavina Nopah. Included is a painting of a Mohave woman at a metate done in a semi-abstract style, with what
looks like acrylic paint. The colors used are green, red, blue, yellow, pink, and it looks like it was applied with a palette knife.

Artifact remains at the museum consist of an arrowshaft straightener, an incised stone, a rabbit skin blanket with strips tied together with cloth or sinew, a willow bark skirt, pottery, bows and arrows, and dolls. Prior to the coming of the Europeans, beads were made of shell, stone, turquoise, and pottery.

Between the two museums I received a good idea of Mohave art produced between the late 1800's and early 1900's. In addition, interviews conducted at CRIT provided me with a look at contemporary articles made by Mohave artists. There has been a change, and that is to be expected. I do not believe that the production of art is an unchanging endeavor, nor should it be. The only thing that concerns me is the stifling of artistic preference to insure that a person can make a living. Encouraging the "traditional" and shunning the innovations that do not apply themselves to the "traditional" may be limiting artistic expression. There is some evidence of artists testing the waters with innovations. Elmer Gates is one such individual who, while maintaining tradition, experimented with new motifs in his work.

I shall next address these changes and what has
remained unchanged in Mohave art. These changes and continuity will be explored in the context of Mohave culture traits that may have encouraged or discouraged the adoption of artistic innovations.


CHANGE AND CONTINUITY

The Mohave people during times of early contact were basically a conservative group, curious to know of something different, but aloof from adopting strange ways. There were specialist shamans who cured illness caused by contact with aliens, scalps, or the enemy (Stewart 1974:6-7). Care had to be taken in contact with outsiders as it was believed they could cause illness. I believe it is this belief in illness as a result of contact with outsiders that made the Mohaves aloof from outside groups. However, when contact did occur, their cultural beliefs gave them cures, which allowed for contact. In addition, rituals were held to make captives Mohave.

The environment they inhabited also played a role in culture contact. The Spaniards never established missions along the Colorado River. While Anglo-European trappers and traders traversed the ancient trade routes, the environment was not hospitable to large-scale farming, making it undesirable for early European settlers.

These factors, while not providing barriers to contact, helped limit it. Consequently very little change occurred in Mohave lifestyle and art during early contact. However, there have been major changes in Mohave material culture in the last ninety years or so. These changes have occurred as
a result of the availability of new materials that were
easily integrated into their lifestyle. In addition, the
destruction of the traditional Mohave lifestyle forced them
to rely on the cash economy of the dominant culture as a
replacement to their mode of subsistence.

While adapting to Anglo-European ways of life, the
Mohaves, with respect to their art, incorporated new
materials and techniques. Cradle boards were used
traditionally to care for children. While the use of these
boards remains and some of the materials are the same, there
are changes of some materials in their construction. The
mesquite root is still primarily used for the outside frame.
However, wooden dowels are now used to replace the arrowweed
cross pieces. Finishing nails are used to secure the cradle
boards instead of sap. Modern devices, such as vises,
drills, and lead weights, are used during production today.
These new materials "fit" into the existing Mohave
lifestyle. These items are not complex and are fairly easy
to incorporate. In addition, these items have some very
important advantages: they can be easier to obtain than the
comparable items in the natural environment and can make
construction easier and faster. Vises and drills also add
to the ease of production.

Gourd rattles are still made for the traditional use of
accompaniment to Mohave songs. Rattles used for this
purpose more closely resemble those made traditionally, with the exception of using store-bought paints and wood glue. However, when gourd rattles are made for sale, there is not as much emphasis on the use of traditional materials, and redwood will be substituted for mesquite root as the handle. When items are made for sale to the public there is more of a tendency to deviate from the traditional.

Pottery made today closely parallels the type made traditionally. The types produced (effigies, bowls, and dolls) are the same types produced in the late 1800's and early 1900's. The geometric designs produced by some artists are renditions of traditional motifs. However, there has been some experimentation with other motifs. While materials and motifs are basically traditional, during some phases of production modern items are again used, such as galvanized tubs for the firing of pottery. Again, there is the use of modern equipment during the production phase of traditional items.

Beadwork has shown a great deal of innovation since European contact times. The materials have changed from shell beads to glass and plastic beads. Traditional items are still produced but some have a modern flair. Beads of non-traditional colors are now used. Earrings now have fishhook attachments for pierced ears. Capes are still made, but those for sale are not as elaborate as those for
personal use. The availability of beads has allowed for the expansion of beadwork. Added to the repertoire of beadwork are beadwork sheaths for pens and salt and pepper shakers, beaded barrettes, and even a pair of beaded deck shoes. These items are primarily made for sale at the museum, church bazaars, and other similar events.

When an item is made for a functional use, there is more of a tendency to stay with traditional methods. Bows made to hunt with or gourd rattles made to use are more traditional than these same items made for sale to outsiders.

All these changes in the art were integrated into the existing culture. Barnett discusses in his book why innovations are rejected or accepted. Two factors involved are the acceptance or rejection of an advocate of change, and whether the changes are viewed as a deviation from traditional ways. The adoption of new ideas and items by the Mohave may have been more acceptable because they were not necessarily viewed as deviations from the traditional and did not need advocates who may have been unacceptable to the Mohaves.

The change in the materials was a result of diffusion of these items from European cultures. These materials are not that different from the traditional ones. Wooden dowels for cradle boards, store-bought paint for rattle gourds and
glass and plastic beads can be more easily obtained than arrowweed shafts, pigments from nature, and sea shells for beads.

When applying the characteristics of diffusion to changes in Mohave art, we can see these characteristics aided in the rate of adoption, especially with regards to beadwork. The availability of modern beads produced a relative advantage over sea shells, which had to be imported and modified to become a bead. These new types of beads were compatible with existing artistic expression. It was very simple to substitute modern beads for shell beads, since there were no complex methods of substitution to learn. The substitution of modern beads occurred at an early stage of culture contact. However, the traditional motifs are maintained, and the method of expressing motifs in geometric forms is retained.

Other imported items, "fit" into the existing Mohave lifestyle. Wooden dowels and store-bought paint have a relative advantage over arrowweed and pigments from nature, as they are easier to obtain. These items are also compatible with the existing Mohave lifestyle. These new materials are not complex, and they can be tried with relative ease. Finally, they are apparently observed as an advantage, especially during the production phase of items for sale to the tourist trade.
Major changes occur with the finished bead products. Items such as pen sheaths and keychains are changes that were encouraged by the production of items for sale, sometimes to supplement income. The store-bought materials for the production of items makes the production of items for sale easier and faster. Less time is invested in gathering raw materials and more items can be produced.

From the introduction of wheat and horses to a split in the Mohave tribe, culture contact, whether Spanish or Anglo-European, resulted in changes for the Mohave Indians. They, like other American Indians, are trying to retain aspects of their pre-contact way of life while trying to come to terms with the dominant American culture. One important aspect is the retention of traditional artistic expression with acceptable innovations.
<table>
<thead>
<tr>
<th>PLATE NUMBER</th>
<th>ACCESSION NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A1900-59</td>
<td>Male ceramic doll human hair, white bead choker. 24 cm length, 10 cm. width.</td>
</tr>
<tr>
<td>1</td>
<td>A5-1061</td>
<td>Doll, human hair, red skirt, blue bead necklace. H:8 1/2&quot;.</td>
</tr>
<tr>
<td>2</td>
<td>A 4671</td>
<td>Doll on left. Probably made by Annie Fields. H:6&quot;.</td>
</tr>
<tr>
<td>2</td>
<td>A5-1065</td>
<td>Ladle irregular &quot;butterfly&quot; and &quot;cottonwood leaf&quot; pattern. L:20.5 cm., W:10 cm., D:4.5 cm.</td>
</tr>
<tr>
<td>3</td>
<td>A 5981</td>
<td>Large red solid hourglass figures separating tan hexagon border with lines and dots, smoke stains on bottom. H:38 cm., D:44 cm., Rim:27.5 cm.</td>
</tr>
<tr>
<td>3</td>
<td>A5-298</td>
<td>Bowl with handle, red designs, red prints inside. D:13 cm., H:18 cm.</td>
</tr>
<tr>
<td>4</td>
<td>A5-977</td>
<td>Spoon or ladle, tan with red zig zag, triangular cross lines, face at top. L:18 cm., W:16.5 cm.</td>
</tr>
<tr>
<td>4</td>
<td>A1900-56</td>
<td>Bowl, hands on bottom red dot circles. W:10.5 cm., L:17 cm., D:6 cm.</td>
</tr>
<tr>
<td>5</td>
<td>A1900-51</td>
<td>Cup with &quot;v&quot;s on outside. H:8.5 cm., D:14 cm.</td>
</tr>
<tr>
<td>5</td>
<td>A1900-46</td>
<td>Mohave ceramic bowl with effigy figure with glass beads, red paint, four spouts. H:18 cm., D:13 cm.</td>
</tr>
<tr>
<td>6</td>
<td>A1900-58</td>
<td>Ceramic pipe with face. L:20 cm., D:4 cm.</td>
</tr>
<tr>
<td>----</td>
<td>----------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>A59-103</td>
<td>Effigy pot, 3 legs, face sculpted on top, opening is mouth. D:4 1/2&quot;, H:3 1/2&quot;.</td>
</tr>
<tr>
<td>7</td>
<td>S30-A530</td>
<td>Historic jar, handle overneck 2 raised and painted frog figures on sides. H:10.5 cm., W:13 cm., Neck:8 cm.</td>
</tr>
<tr>
<td>7</td>
<td>L-41</td>
<td>Pottery frog. L:15 cm., H:10 cm., W:13 cm.</td>
</tr>
<tr>
<td>8</td>
<td>A5-1003</td>
<td>Dog figurine, underneath marked &quot;Dug of So. Blythe of 1930's&quot; L:14 cm., H:11 cm.</td>
</tr>
<tr>
<td>8</td>
<td>A1900-62</td>
<td>Gourd rattle with painting (modern) bird's head not painted. L:30 cm., D:11 cm.</td>
</tr>
</tbody>
</table>
PLATE 1

A 1900-59

A5-1061

66
## APPENDIX B
### SAN DIEGO MUSEUM OF MAN ARTIFACTS

<table>
<thead>
<tr>
<th>PLATE NUMBER</th>
<th>ACCESSION NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>1960-18-18</td>
<td>16 strand black and white beaded web sash, braided ropes at end to tie with tassels. L: 96&quot;</td>
</tr>
<tr>
<td>10</td>
<td>1955-41-3</td>
<td>Collected in 1870. Pottery doll body painted ochre, pink loin cloth, blue and white bead collar and earrings. H: 6 1/2&quot;.</td>
</tr>
<tr>
<td>13</td>
<td>8946</td>
<td>Effigy pot with four spouts, loop handle, beaded necklace and earrings. H: 6 1/2&quot;, D: 1 1/2&quot;.</td>
</tr>
<tr>
<td>13</td>
<td>3006</td>
<td>Effigy pot with four spouts, loop handle, beaded necklace and earrings. Ca. 1890-1900. H: 9 1/2&quot;, D: 6 5/8&quot;.</td>
</tr>
<tr>
<td>14</td>
<td>1973-41-1</td>
<td>Ca. 1900, clay olla, paddle and anvil technique. H:11.4 cm., D:12.7 cm., Handle:17.3 cm.</td>
</tr>
<tr>
<td>----</td>
<td>----------</td>
<td>-------------------------------------------------------------------</td>
</tr>
<tr>
<td>14</td>
<td>1971-2-7</td>
<td>Late 19th century. Fired clay pitcher, paddle and anvil technique. H:3&quot;., D:3 1/4&quot;.</td>
</tr>
<tr>
<td>17</td>
<td>1967-77-89</td>
<td>Unknown date, but collected in 1928. Mesquite handle attached to gourd. L:11 1/2&quot;, D:5 1/2&quot;.</td>
</tr>
<tr>
<td>20</td>
<td>1979-12-1</td>
<td>Commercial glass beads, cotton thread, diamond shaped pattern. D:26cm., Span:65 cm.</td>
</tr>
</tbody>
</table>
PLATE 15

3005

Rim of 3005
PLATE 17

1967-77-89

1928-15-293
### APPENDIX C
COLORADO RIVER INDIAN TRIBES ART

<table>
<thead>
<tr>
<th>PLATE NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Keychain: white, green, red, chevron pattern beadwork, with dark brown latigo. Beadwork: 3 3/4&quot; X 3/4&quot;, latigo strips: 9&quot;, overall length: 10&quot;.</td>
</tr>
<tr>
<td>21</td>
<td>Right: red and gold beads, L: 30&quot; X D: 1/4&quot;. Left: white and blue beads, L: 30&quot; X D: 1/4&quot;. Center: white, blue, red beads, L: 17&quot; X D: 2 1/4&quot;, oval: 3&quot; X 3&quot;.</td>
</tr>
<tr>
<td>22</td>
<td>Gourd Rattle: painted white with redwood handle. Circumference: 18 1/2&quot;, Handle: 6 7/8&quot;. Overall dimensions: 14 1/2&quot; X 5 1/4&quot;.</td>
</tr>
</tbody>
</table>
Modern Mohave Beadwork
Modern Mohave Gourd Rattles
BIBLIOGRAPHY


Forbes, J. Warriors of the Colorado. Norman: University of


