



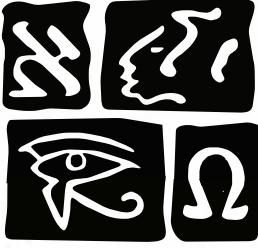
Type: Report

A Survey of Mesoamerican Bearded Figures

Author(s): Kirk A. Magleby

Published: Provo, UT; FARMS, 1979

Abstract: No abstract available.



Foundation for Ancient Research & Mormon Studies

Kirk A. Magleby

A Survey of Mesoamerican Bearded Figures

MAG-79

© 1979 Foundation for Ancient Research and Mormon Studies

This F.A.R.M.S. preliminary report reflects substantial research but is not ready for final publication. It is made available to be critiqued and improved and to stimulate further research.

Fair Use Copying Notice: These pages may be reproduced and used, without alteration, addition, or deletion, for any nonpecuniary or nonpublishing purpose without permission.

THE PROBLEM

American Indians constitute one of the world's principal racial groups. There is greater physical homogeneity among them than among the inhabitants of any other continental land mass. Some of the unifying characteristics of the race include a low incidence of male pattern baldness, general lack of body hair and scant growth of facial hair. According to conventional wisdom it is almost axiomatic that Indians do not grow beards.

Of course things are not really that simple. The Haida of the Pacific Northwest, the Pomo of northern California and certain tribes¹ in southern Chile are noteworthy for their beards and mustaches. Bernal Diaz described the Aztec emperor Moctezuma with a neatly trimmed chin beard. Fernandez de Oviedo wrote in the 16th century that some of the Nicaraos of Central America were bearded.² Captain James Cook was surprised to find the Nootka men he discovered on Vancouver Island wearing respectable beards. In the late 19th century beards were reported among the Yabipai, a tiny band of Apache in the American Southwest. These cases are clear exceptions to the rule, though. American Indians typically have little or no facial hair. Some individuals grow a wispy beard of a few stringy hairs when they reached advanced age, but Indians generally are genetically incapable of growing a full beard. Spanish chroniclers like Bernabe Cobo and Gregorio Garcia called the American natives "lampinos" or "imberbes" (beardless.) Early naturalists including Andres Rocha debated the cause of this beardlessness, usually attributing it to unique climatic conditions in the New World. Later centuries have brought a better understanding of this inherited physical trait, but the curious characteristic remains. American Indians generally lack facial hair altogether or they grow only very sparse beards and mustaches.³

This genetic beardlessness contradicts many native traditions and raises questions about the artistic portrayal of beards on ancient sculpted, carved or modelled human figures. Why do ancient figurines depict heavily bearded individuals when this trait is so rare among native populations? Did a race of bearded men once inhabit the Americas? This paper will attempt to shed light on those questions with their obvious Book of Mormon implications.

Vicente Palatino de Curzola in 1559 recorded a Yucatecan tradition attributing the construction of numerous ruins on the peninsula to a group of bearded strangers who at length had been exterminated in military confrontation with the indigenous Maya. The archaeological record lends credence to this story since the Toltecs, militaristic invaders from Central Mexico who dominated Chichen Itza and other Yucatan sites in post classic times, are frequently portrayed with long flowing beards. Pedro Cieza de Leon found similar traditions among certain mid 16th century Andean groups who claimed that ruins near Guamanga (modern Ayacucho) and Lake Titicaca were built anciently by obtrusive groups of bearded individuals. The Spaniards were also interested in native traditions about bearded deities like

Quetzalcoatl and Viracocha. These fragmentary hints of beards in ancient America fueled the imaginations of 16th and 17th century authors who invented any number of Indian origin theories as they struggled to place the native Americans into the traditional Biblical context of creation and post-diluvian population diffusion. Traditions and legends were supplemented with hard artifacts at least as early as the 17th century when the Peruvian bibliophile Leon Pinelo published an account about the discovery of some heavily bearded figures among the ruins at Copan, Honduras. According to Pinelo news of this discovery circulated widely throughout Spanish America since artifacts depicting bearded men were novel sensations among the Europeans. So many bearded artifacts have been discovered during the last 300 years, especially in Mesoamerica, that they are no longer much of a sensation. They remain controversial, though, since the experts aren't quite sure how they fit into conventional interpretations of Mesoamerican culture history.

One solution was advocated by George Vaillant in Natural History, volume 31, no. 3 (May-June, 1931.) He discussed the controversy surrounding a heavily bearded figure discovered in Guerrero (catalogue #243.) Vaillant concluded that possibly some heretofore unrecognized culture of bearded individuals intruded upon the ancient American scene and influenced the development of Mesoamerican civilization. Lawrence Feldman came to a very different conclusion writing in the Masterkey Volume 39, no. 4 (October-December 1965.) He refuted any diffusionist interpretations implying the presence of white, bearded individuals in ancient America. For Feldman, all beards represented in Mesoamerican artwork can be explained as stylized depictions of naturally occurring Indian facial hair rather than actual portrayals of individual physical attributes.

The Book of Mormon has a great deal at stake in this controversy since it describes several migrations of ancient Near Eastern populations to the New World. The original Jaredite, Mulekite and Nephite/Lamanite groups included individuals genetically capable of growing beards. As these groups were absorbed into the mainstream of Mesoamerican culture they exerted varying degrees of influence on the indigenous gene pool as well as on native art styles. This paper will investigate whether that influence as outlined in the Nephite record is consistent with patterns drawn from the archaeological record of Mesoamerican bearded figures.

The first discussion clarifies what the Book of Mormon text says or implies about beards. That is followed by a catalogue of bearded figures from pre-columbian America with emphasis on Mesoamerica. Several features of the beards listed in the catalogue are then tracked through time and space and this analysis is compared with the most widely accepted model of Book of Mormon/Mesoamerican correlations currently available. The catalogue is comprehensive, though not exhaustive. Many of the listed artifacts come from private collections and are poorly documented. Still, the sample is broad enough that the results are internally consistent and of some interest.

BEARDS IN THE BOOK OF MORMON

Beards are mentioned only once in our present text of the Book of Mormon, in an Isaiah passage quoted in 2nd Nephi. The Old Testament, though, has numerous references to beards and many of those would have been among the texts brought to the New World on the brass plates of Laban. The Jaredites, Mulekites and Nephites/Lamanites were caucasians, genetically capable of growing beards, who migrated from the ancient Near East to Mesoamerica in three separate ocean voyages. The Americas were already inhabited when the Jaredites arrived. The Book of Mormon certainly never claims to offer an explanation of all the people who anciently lived in the New World. It can best be described as a record of three distinct Near Eastern groups, three bearded populations, who imposed their foreign culture upon the native American landscape, then gradually were assimilated into it.

The Mulekite and Nephite/Lamanite groups were Israelites from Palestine who brought with them highly developed cultural traditions and ritual associated with beards. In Old Testament times men shaved their heads and beards as a sign of intense personal anguish or mourning. (Ezra 9:3, Isaiah 22:12, Jeremiah 7:29) It was commonplace for a conquering army to shave the heads and beards of subjugated peoples as a symbol of abject shame and servile submission. (Isaiah 3:24, 7:20, 15:2, Jeremiah 41:5, 48:37, Ezekiel 5:1) In Jewish culture a man's beard was highly regarded, a source of personal pride and honor. In one instance King David sent some of his servants south to confer with the king of the Ammonites. The Ammonites spurned the royal delegation and shaved off one-half of each man's beard in a mocking gesture designed to inflict personal shame and embarrassment. Sensitive to their utter humiliation, David instructed his servants to remain in Jericho until their beards grew back again so they could return to Jerusalem with dignity and honor. (2 Samuel 10:4,5) Beards were also associated with oaths and personal resolutions. (2 Samuel 19:24, Nehemiah 13:25) Hair had such important connotations that the phrase "not one hair shall be lost" became well established in vernacular expression. (1 Samuel 14:45, 1 Kings 1:52)

Hair and beards had religious significance to the Israelites as well. A messianic prophecy of Isaiah foretold the public shame the Savior would have to endure while persecutors plucked out his beard. (Isaiah 50:6) Shaving one's head and beard were part of the Levitical ritual prescribed for cleansing leprosy. (Lev. 14:9) Aaron, the founding high priest of the Levitical priesthood, was bearded. (Psalms 133:2) All priests, especially those making Nazarite vows, were given special instructions for the care of their hair. (Numbers 6:5, Ezekiel, 44:20) In addition, the Levitical code forbade the pagan practices of trimming or marring the corners of one's beard. (Lev. 19:27) This ancient injunction is still very much in evidence among male orthodox Jews around the world who take a sacred pride in their long, flowing beards.

Coming from a pre-exilic Old Testament background, then, it is not surprising to find vestiges of these attitudes showing up among the Nephites. While describing their savage antagonists, the Nephite historians mention the Lamanite's shaved heads in the same prejudicial manner as their wild, ferocious and bloodthirsty behavior. (Mosiah 10:8, Enos 1:20) The phrase "not one hair shall be lost" appears as well in a New World prophetic context. (Alma 11:44, 40:23)

In summary, then, we would expect to find beards among the Jaredites, Mulekites and Nephite/Lamanites but not necessarily among their indigenous American neighbors. In addition, among the Nephite adherents to the law of Moses, we would anticipate beards being a very important part of their culture as they were in Palestine among the Jews.

CATALOGUE OF BEARDED FIGURES

Each numbered entry represents one artifact or group of artifacts. Generally each number corresponds to a single beard or mustache. In cases where multiple beards are portrayed on a single artifact or groups of artifacts are taken together, that fact is noted. A brief generic description of each artifact is followed by its provenance, if known. Date, if known, is indicated by the broad horizons pre-classic, classic and post-classic. Of course, many of the artifacts can be dated precisely, but this general comparative grouping is sufficient for the present purpose. The numbers in parentheses refer to the fullness of the beard or mustache. (1) is a light growth, one that could reasonably be accounted for by the normal incidence of facial hair in the Meso-american native population. (2) is a moderately heavy growth, definitely not characteristic of Middle American Indians. (3) represents a heavy, full growth. These are beards that would exceed 4-6 inches on a real-life scale and cannot be reasonably accounted for given the present physical characteristics of the aboriginal population. There is no distinction of varying degrees of artificiality in the beard portrayals. A discussion of this problem is included in the body of the paper.

Bolivia

1. stone statuette, Tiahuanaco, ? , (2) Engel, p. 169.

Peru

2. two large polychrome urns, Nazca, pre-classic, both have a fullness of (2) Willey 1971, fig. 3-77.
3. effigy jar, Nazca, pre-classic, (1) Kelemen 1969b, pl. 161c.
4. Chimu double spout vessel, northern coast, post-classic, two beards, both are (2) Lapiner, fig. 612.
5. Mochica stirrup spout effigy jar, northern coast, classic, (2) Ashe, ill. 172.
6. eight Mochica effigy jars, Lambayeque and the Chicama Valley, one of the jars is from the Titicaca basin, classic, all eight are (2) Heyerdahl, plates 23 - 25.
7. Mochica stirrup spout effigy jar, Chicama valley, classic, (2) Leicht, pl. 30.
8. Mochica stirrup spout effigy jar, northern coast, classic, (2) Sawyer, fig. 41.
9. Mochica ceremonial water jug , Viru valley, classic, (2) Kosok, ch. 17, fig. 4.
10. Recuay terracotta figurines, northern coast, pre-classic, two beards, both (2) Lapiner, figures 436, 438.
11. Vicus stirrup spout vessel, northern coast, pre-classic, (2) Lapiner, fig. 445.

Ecuador

12. terracotta figurine, Manabi, ? , (2) von Wuthenau 1969, p. 180.
13. terracotta figurine, Esmeraldas, ? , (2) von Wuthenau 1969, p. 166h.
14. terracotta figurine, Esmeraldas, ? , (2) von Wuthenau 1969, p. 166f.

Mexico to Ecuador

15. terracotta figurine heads, ? , ? , this is the HUMANITAS AMERICANA poster, 169 heads from von Wuthenau's collection. Eight of the figures have beards ranging from (1) to (2) von Wuthenau 1975, color plates 2-5.

El Salvador

16. plumbate effigy vessel, ? , post-classic, (1) Bernal 1969b, pl. 89b

Honduras

17. jade carving, La Lima, Ulua valley, pre-classic, (1) Easby and Scott, no. 65.
18. terracotta figurine, ? , pre-classic, (2) Anton and Dockstader p. 98.
19. carved bone, Copan, classic, (2) Thompson 1966, pl. 31b.
20. pottery urn, Copan, classic, (2) Longyear, fig. 88e.
21. terracotta figurine, Copan, classic, (2) Longyear, fig. 87e.
22. carved bone, Copan, classic, (2) Robicsek, pl. 292.
23. carved peccary skull, Copan, classic, (2) Robicsek, pl. 295.
24. stone bas relief, Copan, classic, (2) Adamson, p. 65.
25. stelae B, C, and D, Copan, classic, (2) Hunter 1970, figures 109-112.
26. stela 11, Copan, classic, (3) Robicsek, pl. 222.

Belize

27. fresco, mound 1, Santa Rita, classic, (2) Carmichael, pl. 25.

Guatemala

28. jade carving, Tamahu, Alta Verapaz, pre-classic, (2) Easby and Scott, no. 68
29. carved pottery altar, Chajcar, Alta Verapaz, classic, (1) the principal figure holds a ceremonial bar which also has a stylized beard, Rands and Rands, fig. 21b.

Guatemala cont.

30. plumbate effigy jar, Alta Verapaz, post-classic, (1)
Rands and Smith, fig. 18g.
31. orange plumbate effigy jar, Coban region, Alta Verapaz,
(1) Coe 1966, pl. 78.
32. bas relief pottery tablet, Coban, Alta Verapaz, ? , (2)
Seler III, p. 612.
33. incensario, Coban, Alta Verapaz, ? , (2) Seler III, p. 679.
34. stone statuette, San Jeronimo, Baja Verapaz, pre-classic,
(1) Navarrete, fig. 24.
35. carved stone head, Finca Pantaleon near El Baul, ? , (2)
von Wuthenau 1975, app. 7c.
36. monumental stone head, El Baul, ? , (1) Westheim, fig. 5.
37. clay rattle, El Baul, ? , (2) Vaillant, p. 252.
38. stone bas relief, Santa Lucia Cosumalhuapa, classic, two
beards are portrayed, both (1) Habel, pl. 1, no. 1.
39. stone bas relief, Santa Lucia Cosumalhuapa, classic, (2)
Habel, pl. 6, no. 14.
40. stone bas relief, Santa Lucia Cosumalhuapa, classic, (1)
Habel, pl. 6, no. 17.
41. monument 21, Bilbao, classic, (2) Pina Chan, lam. 76.
42. openwork stone hacha, Pacific slope, Cosumalhuapan style,
classic, (2) Easby and Scott, no. 152.
43. black stone bench figure, Villanueva, pre-classic, (2)
Easby and Scott, no. 66.
44. pottery figurine, Tikal, classic, (2) Thompson 1963b, ill. 42.
45. pottery figurine, Kamela, Rio Salinas, Chixoy, ? , (2)
Spinden 1957, pl. 17:6.
46. stela 11, Seibal, classic, (1) Spinden 1917, fig. 32.
47. plumbate effigy jar, Atotonilco-Quimistlan, Veracruz,
post-classic, Seler III, p. 624 and V, pl. 80.
48. stelae D and E, Quirigua, classic, (2) Hunter, p. 118 and
Thompson 1963b, ill. 24.
49. effigy vase, Quirigua, classic, (2) Kelemen 1969b, pl. 132a.
50. painted vase, Chama, classic, five of the seven figures are
bearded, four are (1) and the principal figure's beard
is (3) Thompson 1963b, ill. 40.
51. stela 12, Piedras Negras, classic, (2) Lothrop 1964 p. 103.
52. stela 4, Naranjo, classic, (1) Hunter 1959, fig. 10.
53. stela 3, Abaj Takalik, classic, (2) Miles fig. 9a.
54. painted vase, Nebaj, classic, (1) Groth-Kimball 1954, pl. 53.
55. terracotta head, Sesis, ? , (2) Seler III, p. 611.
56. pottery figurine, Lake Amatitlan, post-classic, (1) L'Art pl. 79.
57. plumbate effigy jar, Zacualpa, post-classic, (1) Lothrop 1936,
fig. 36d.
58. carved orange ware jar, Zacualpa, classic, (3) Lothrop 1936
fig. 24.
59. plumbate effigy jar, Joyabaj, post-classic, (1) Lothrop 1936,
fig. 35c.
60. monument 17, Kaminaljuyu, classic, (2) Miles, fig. 16a.

Guatemala cont.

61. terracotta figurine, Kaminaljuyu, pre-classic, (1)
von Wuthenau 1975, ill. 7b.
62. pottery figurine, Kaminaljuyu, pre-classic, (2)
Marshall, p. 386.
63. incensario, Kaminaljuyu, pre-classic, the principal figure
is (2) while the three prongs are (1) von Wuthenau 1975,
ill. 6.
64. stela 17, Kaminaljuyu, pre-classic, (3) Norman 1976, fig. 4.8.
65. stela 10, Kaminaljuyu, pre-classic, the upper right wind god
is (3) and the upper left rain god is (2) Easby and Scott
no. 60 and fig. 12.
66. covered vase, Kaminaljuyu, classic, (2) L'Art, pl. 18.
67. anthropomorphic incensario, Kaminaljuyu, ? , (2) Kidder
figures 89, 20le.
68. incensario prong, Kaminaljuyu, pre-classic, (1) Borhegyi,
fig. 5d.
69. pottery figurine, Quen Santo, ? , (2) Hunter and Ferguson,
fig. 42.
70. stone head, ? , pre-classic, (1) Hunter 1956, fig. 96.
71. carved vase, ? , classic, both figures have (1) beards,
Hunter 1956, fig. 20.
72. incensario, Iximche, classic, (2) von Wuthenau 1969, pp. 164,5.
73. incensario, Zaculeu, classic, (2) Rands and Smith, fig. 20a.

Yucatan

74. terracotta figurines, ? , ? , the eight figurines all have
beards, five are (1) and three are (2) Hunter 1956, fig. 97.
75. stela, Uxmal, classic, (2) Ruz 1959, fig. 24.
76. stela 9, Oxkintok, classic, (2) Thompson 1966, pl. 15a.
77. gold disc, Chichen Itza, post-classic, (3) Thompson 1963b, fig. 9.
78. gold disc, Chichen Itza, post-classic, (3) Morley, fig. 57b.
79. carved stone pillar, Chichen Itza, post-classic, (2)
Hunter, fig. 149.
80. atlantean figure sculpture, Chichen Itza, post-classic, (3)
Seler II, 847.
81. atlantean figures in bas relief, Chichen Itza, post-classic,
(3) Thompson 1963a, fig. 2 and 1966, fig. 13a.
82. stone bas relief, Chichen Itza, post-classic, (3) Hunter 1970,
fig. 148.
83. stone bas relief, Chichen Itza, post-classic, (3) Jakeman,
p. 228.
84. stone bas relief, Kabah, post-classic, (1) Morley, pl. 75a.
85. stone head, Kabah, classic, (1) Bernal 1969a, pl. 97.

Campeche

86. pottery figurine, ? , ? , (2) Webster, p. 177.
87. carved onyx bowl, ? , classic, (1) Lothrop 1957, pl. 86.

Campeche cont.

88. pottery figurine, Jaina, classic, (1) Morley, pl. 82.
 89. pottery figurine, Jaina, classic, (2) Morley, pl. 82.
 90. pottery figurine, Jaina, classic, (2) Rozaire, pl. 14a.
 91. pottery figurine, Jaina, classic, (2) von Wuthenau 1975,
 color plate 17.
 92. pottery figurine, Jaina, classic, (1) Lothrop 1957, pl. 72.
 93. pottery figurine, Jaina, classic, (1) Lothrop 1957, pl. 61.
 94. pottery figurine, Jaina, classic, (2) Bernal 1969a, pl. 90b.
 95. pottery figurine, Jaina, classic, (2) Bernal 1969a, pl. 89a.
 96. pottery figurine, Jaina, classic, (1) Stuart and Stuart, p. 23.
 97. pottery figurine, Jaina, classic, (1) Robiscek, pl. 22.

Tabasco

98. stone relief, Jonuta, classic, (1) Bernal 1969a, pl. 95.
 99. stela, La Venta, pre-classic, (1) von Wuthenau 1975, app. 5c.
 100. stela 3, La Venta, pre-classic, (3) Bernal 1969b, pl. 4.
 101. altar 3, La Venta, pre-classic, (3) Norman 1976, fig. 6.23.
 102. carved vase, Villahermosa, ? , (2) I. Nicholson, p. 23.
 103. terracotta head, ? , ? , (1) von Wuthenau 1969, p. 82b.
 104. sculptured stucco head, Comalcalco, classic, (1) Anton
 and Dockstader, p. 111.
 105. figurine mask, ? , pre-classic, (1) von Wuthenau 1969, p. 36.
 106. wooden statuette, ? , classic, (2) Kelemen 1969a, ill. 2.26.

Chiapas

107. openwork stone relief, lower Usumacinta valley, classic,
 (2) Easby and Scott, no. 174.
 108. stone carving, Usumacinta valley, classic, (1) Anton and
 Dockstader, p. 124.
 109. stone relief, Bonampak, classic, (2) Hunter 1956, fig. 22.
 110. stela 27, Yaxchilan, classic, (2) Hunter 1959, fig. 9.
 111. pottery figurine, Palenque, classic, (2) Rands and Rands,
 fig. 33.
 112. pottery figurine, Palenque, classic, (2) Rands and Rands,
 fig. 32.
 113. jade figurine, Palenque, classic, (2) Ruz 1960, fig. 20.
 114. stone tablet, Palenque, classic, (1) Anton and Dockstader,
 p. 109.
 115. stone altar relief, Kuna, classic, (1) the figure is holding
 a ceremonial bar which has a (3) beard on it. Cordan,
 ill. 36.
 116. pottery figurine, La Libertad-Comitlan, classic, (2)
 Easby and Scott, no. 179.
 117. carved bone, Chiapa de Corzo, classic, (2) Ferguson, ex. 108.

Chiapas cont.

118. pottery figurine, San Cristobal, classic, (2) von Wuthenau 1975, ill. 66b.
 119. carved vase, ? , classic, (2) Robiscek, pl. 19.
 120. stela 11, Izapa, pre-classic, (3) Norman 1973, plates 21, 22.
 121. stela 5, Izapa, pre-classic, (3) Norman 1973, plates 9, 10.

Maya area

122. carved onyx bowl, ? , classic, (3) von Wuthenau 1975, ill. 35.
 123. pottery figurine, ? , classic, (2) Groth-Kimball 1961, pl. 7.
 124. pottery figurine, ? , classic, (2) Groth-Kimball 1961, pl. 14.
 125. pottery figurine, ? , classic, (1) Groth-Kimball 1961, pl. 6.
 126. terracotta head, ? , pre-classic, (1) von Wuthenau 1975, ill. 20.
 127. stone tablet, ? , ? , (2) Honore, p. 33.
 128. Codex Dresden, ? , post-classic, several figures wearing animal masks have beards, but at least two anthropomorphic beards are portrayed. both are (2) Codex Dresden.
 129. pottery figurine, ? , ? , (2) von Wuthenau 1969, p. 162a.

Olmec area

130. stone sculpture, ? , pre-classic, (1) Westheim, fig. 86.
 131. stone carving, ? , pre-classic, (3) Kay, p. S-20.
 132. stone figurine, ? , pre-classic, (3) Coe 1965, fig. 14.

Veracruz

133. pottery head, Tres Zapotes, pre-classic, (2) Stirling, p. 227.
 134. stela D, Tres Zapotes, pre-classic, (2) Bernal 1969b, pl. 16.
 135. ceramic fire god figure, Cerro de las Mesas, pre-classic, (2) Stirling, p. 223.
 136. stone sculpture, Antonio Plaza, pre-classic, (1) Bernal 1969b, pl. 27.
 137. stone sculpture, ? , pre-classic, (2) Willey 1966, fig. 3-29c.
 138. pottery head, ? , classic, (2) von Wuthenau 1975, ill. 44b.
 139. pottery head, ? , classic, (2) von Wuthenau 1975, ill. 45.
 140. stela Alvarado, ? , pre-classic, (2) I. Nicholson, p. 64.
 141. pottery head, ? , classic, (2) von Wuthenau 1975, color plate 13a.
 142. pottery head, ? , classic, (2) von Wuthenau 1969, p. 135d.
 143. pottery head, ? , classic, (2) von Wuthenau 1969, p. 134a.
 144. pottery head, ? , ? , (2) von Wuthenau 1969, p. 119.
 145. pottery figurine, ? , ? , (2) von Wuthenau 1969, p. 118e.
 146. stone yoke motif, ? , pre-classic, Norman 1976, fig. 6.29c.
 147. Totonac hacha, ? , classic, (1) Rojas, pl. 35.

Veracruz cont.

148. Huastec pottery head, ? , classic, (2) von Wuthenau 1975, ill. 39b.
149. Huastec pottery figurine, ? , ? , (2) Westheim, fig. 114.
150. neck of a ceramic urn, Catemaco, classic, (2) Rojas, pl. 14.
151. pottery figurine, Remojadas, ? , (2) Reed, p. 220.
152. stone tablet, Cordoba region, classic, two figures, both have a (2) beard, Bernal 1969a, pl. 73.
153. slate disc relief, El Tajin area, classic, (2) Easby and Scott, no. 141.
154. pottery figurine, ? , classic, (1) von Wuthenau 1969, p. 46.
155. terracotta head, ? , ? , (3) this plate also shows two other heads, one with a (1) beard and the other with a (3) von Wuthenau 1969, p. 34.
156. pottery figurine, ? , ? , (2) von Wuthenau 1975, ill. 46a.
157. pottery head, ? , ? , (1) von Wuthenau 1975, ill. 46b.
158. pottery figurine, ? , ? , (1) von Wuthenau 1975, ill. 46c.
159. pottery mask, ? , ? , (2) von Wuthenau 1975, ill. 46d.
160. pottery figurine, ? , classic, (1) von Wuthenau 1975, ill. 50.
161. terracotta head, ? , classic, (1) von Wuthenau 1975, ill. 51.
162. terracotta head, ? , classic, (1) von Wuthenau 1975, ill. 52.
163. stela, Orizaba region, pre-classic, (2) Easby and Scott, no. 61.

Oaxaca

164. pottery figurine, Teotitlan del Camino, ? , (2) Seler II, p. 886.
165. gold pendant, Coixtlahuaca, post-classic, (2) Soustelle, pl. 175.
166. gold pendant, Coixtlahuaca, post-classic, (2) Lothrop 1964, p. 86.
167. funerary urn, Santa Magdalena Etla, classic, (1) Boos, fig. 129.
168. pottery figure, Santa Magdalena Etla, classic, (1) Easby and Scott, no. 159.
169. stucco carving, Lambityeco, classic, (2) Whitecotton, p. 115.
170. plaster frieze, Lambityeco, post-classic, (2) Adams, p. 189.
171. plaster frieze, Lambityeco, post-classic, (2) von Wuthenau 1975, ill. 55c.
172. pottery figure, Lambityeco, classic, (2) von Wuthenau 1975, ill. 57.
173. olla, Miahuatlan, classic, (1) Boos, fig. 426.
174. funerary urn, San Lorenzo Albarradas, classic, (1) Boos, fig. 130.
175. urn, Huajuapán de León, ? , (1) Kelemen 1969a, ill. 3.19.
176. lapida 1, Zachila, classic, (1) Museo Nacional p. 167.
177. fresco, Mitla, ? , (2) Whitecotton, p. 105.
178. funerary urn, Monte Alban, classic, (1) Boos, fig. 80.
179. funerary urn, Monte Alban, classic, (2) Groth-Kimball, pl. 42.
180. funerary urn, Monte Alban, classic, (2) Smith p. 51.
181. gold ring, Monte Alban, classic, (2) Anton, ill. 142.
182. danzantes figures, Monte Alban, pre-classic, two of the figures have beards, both are (2) Rojas, pl. 43.

Oaxaca cont.

183. funerary urn, Monte Alban, pre-classic, (2) Bernal 1969b, fig. 30.
184. anthropomorphic vase, Monte Alban, pre-classic, (1) Museo Nacional, p. 152.
185. clay tablet, Monte Alban region, classic, (1) von Wuthenau 1975, ill. 4c.
186. pottery figure, Oaxaca valley, ? , (1) Leigh, fig. 9.
187. jade head, ? , ? , (1) Heyerdahl pl. 22.4.
188. clay tablet, ? , classic, (1) Boos, fig. 360c.
189. funerary urn, ? , ? , (1) Boos, fig. 131.
190. funerary urn, ? , ? , (1) Boos, fig. 133.
191. Codex Cospi, western Oaxaca, post-classic, (1) Burland, p. 100.
192. Codex Fejervary-Mayer, western Oaxaca, post-classic, (2) Burland, p. 95.
193. pottery head, Tlacolula, classic, (1) Boos, fig. 137.
194. funerary urn, ? , classic, (1) Boos, fig. 134.
195. funerary urn, ? , classic, (1) Boos, fig. 135.
196. funerary urn, ? , classic, (1) Boos, fig. 136.
197. funerary urn, ? , classic, (2) Boos, fig. 176.
198. funerary urn, ? , classic, (2) Boos, fig. 257.

Puebla

199. pottery figure, ? , pre-classic, (2) von Wuthenau 1969, p. 10.
200. pottery drum, southern Puebla, post-classic, (1) Rozaire, p. 33.
201. pottery figurine, Las Bocas, pre-classic, (2) von Wuthenau 1975, ill. 12b.
202. stone sculpture, ? , pre-classic, (1) Easby and Scott, no. 43.

Central Mexico

203. Codex Nuttall, Texcoco, post-classic, a diverse array of beard styles and types are portrayed. most are (2) Codex Nuttall.
204. stone sculpture, post-classic Aztec, (2) Burland, p. 26.
205. jadeite head, ? , ? , (1) Heyerdahl, pl. 19.
206. pottery head, ? , ? , (1) von Wuthenau 1969, p. 82i.
207. stone relief, ? , post-classic Aztec, (2) Westheim, fig. 65.
208. stone altar, Tenochtitlan, post-classic Aztec, (2) Smith, p. 149.
209. stone sculpture, Tenochtitlan, post-classic Aztec, (2) H. Nicholson, fig. 31b.
210. stone tablet in relief, ? , post-classic, (2) Seler II, 726.
211. stone relief, ? , post-classic, (2) Seler II, p. 732.
212. ceramic mask, ? , post-classic, (2) Seler II, p. 956.
213. stone sculpture, ? , pre-classic, (2) Spinden 1917, pl. 7a.

Central Mexico

214. terracotta head, ? , ? , (2) Ferguson, ex. 143.
 215. pottery figurine, ? , ? , (2) Smith, endpages.
 216. stone relief, ? , post-classic Aztec, (1) Burland, p. 103.
 217. stone relief, Chalcatzingo, ? , (2) von Wuthenau 1975, app. 6d.
 218. pottery mask, Tlatilco, pre-classic, (2) von Wuthenau 1969, p. 33.
 219. pottery head, Tlatilco, pre-classic, (1) von Wuthenau 1975, ill. 14b.
 220. pottery head, Tlatilco, pre-classic, (1) von Wuthenau 1969, p. 181d.
 221. pottery figurines, Tlatilco, pre-classic, one beard is (2) and the other is (1) von Wuthenau 1969, p. 90.
 222. pottery mask, Tlatilco, pre-classic, (1) von Wuthenau 1975, ill. 69d.
 223. pottery figurine, Tlapacoyan, pre-classic, (1) von Wuthenau 1969, p. 105.
 224. pottery figurine, Tlapacoyan, pre-classic, (1) von Wuthenau 1969, p. 91.
 225. fresco, Teotihuacan, classic, (2) von Wuthenau 1975, color plate 19b.
 226. plumbate effigy jar, Teotihuacan, post-classic Toltec, (1) Coe 1967, fig. 35a.
 227. effigy jar, Teotihuacan, ? , (2) Seler V, pl. 81 and p. 578.
 228. effigy jar, Teotihuacan, ? , (2) Seler V, pl. 78 and p. 581.
 229. stone sculpture, Tula Hidalgo, post-classic Toltec, (3) Acosta, fig. 18.
 230. carved vase, ? , post-classic Toltec, (3) Anton and Dockstader, p. 86.
 231. stone pillar, Tula Hidalgo, post-classic, (3) Acosta, fig. 14.
 232. pottery head, ? , post-classic Toltec, (1) von Wuthenau 1969, p. 98.
 233. pottery drinking vessel, ? , post-classic Toltec, (3) Anton, ill. 192.

Guerrero

234. terracotta head, ? , ? , (1) von Wuthenau 1969, p. 82g.
 235. terracotta head, ? , pre-classic, von Wuthenau 1969, p. 61.
 236. stone figurine, Mexcala, pre-classic, (2) von Wuthenau 1975, color plate 11.
 237. stone figure, Mexcala, pre-classic, (2) Easby and Scott, no. 86.
 238. pottery figurines, ? , pre-classic, both are (2) von Wuthenau 1969, p. 54.
 239. pottery figurine, Xochipala, pre-classic, (2) von Wuthenau 1975, ill. 10b.
 240. pottery figurines, ? , pre-classic, three beards, all (1) von Wuthenau 1969, p. 53a.
 241. pottery heads, ? , ? , both are (2) von Wuthenau 1969, p. 48.
 242. pottery figurines, ? , pre-classic, (2) and (1) von Wuthenau 1969, p. 47.
 243. pottery figurine, Rio Balsas valley, ? , (3) Vaillant, p. 243.

Colima

244. pottery figurine, ? , ? , (3) Bell, fig. 35b.

Jalisco

245. pottery figurine, Autlan area, ? , (2) Bell, fig. 28a.

Nayarit

246. chinesco figure, ? , classic, (1) von Wuthenau 1975, ill. 75c.

247. chinesco figure, ? , pre-classic, (1) von Wuthenau 1969, p 59.

248. chinesco figure, Compostela region, pre-classic, (1)
Easby and Scott, no. 100.

249. chinesco figure, ? , ? , (1) von Wuthenau 1969, p. 171.

250. pottery figure, ? , pre-classic, (2) Smith, p. 60.

CATEGORY IDENTIFICATION

The numbered entries correspond to the items in the Catalogue. All artifacts marked "old" portray individuals with sunken cheeks, hollow sunken eyes, severe wrinkling, or other facial distortions clearly characteristic of advanced age. Headdresses, nose plugs, ear spools, pectoral medallions, tattooing or heavy ornamentation identify an individual of high social standing, and any artifact portraying these or related symbols is marked "rank." There seems to be an especially close relationship between ear ornaments and beards. If the bearded figure has ear spools, plugs or pendants, that fact is noted under "ear." If the beard looks clearly false by its unusual shape or separation from the face, it is categorized as "artificial." Beards that appear strikingly life-like are called "natural." Of course, the majority of the beards are not clearly differentiated into either one of the extreme categories but are portrayed with differing degrees of stylism or naturalism. "Deity" indicates that the bearded figure is commonly identified as a god rather than a human. "M,b" is a mustache-beard combination, while "m" is a mustache alone. Some of the beards conform to certain stylistic patterns in their portrayals. Refer to the body of the paper for a fuller description of the various beard types. The general chronological horizon of each artifact, if known, is given in abbreviated form.

	old	rank	ear	artificial	natural	deity	m,b	mustache	<u>type</u>
<u>Bolivia</u>									
1.									band beard
<u>Peru</u>									
2. pre									
3. pre									
4. post		x							band beard
5. classic		x	x						
6. classic		x	x						
7. classic		x	x				x		
8. classic		x	x						
9. classic		x	x						
10. pre		x	x	x					shaggy lobe beard
11. pre		x							disc wafer beard

	old	rank	ear	artificial	natural	deity	m,b	mustache	<u>type</u>
<u>Ecuador</u>									
12.		x							
13.		x	x						
14.		x							double strand beard
15.									
<u>El Salvador</u>									
16. post	x	x	x						cowcatcher beard
<u>Honduras</u>									
17. pre		x	x	x					
18. pre		x							
19. classic		x	x						
20. classic		x	x						heart beard
21. classic		x	x						wide fan beard
22. classic		x	x		x				
23. classic						x			
24. classic		x	x	x					heart beard
25. classic		x	x						pharaonic
26. classic		x	x						
<u>Belize</u>									
27. classic		x	x	x					wire filigree
<u>Guatemala</u>									
28. pre							x		
29. classic		x	x						chin tuft
30. post	x	x	x						cowcatcher
31. post	x	x	x				x		
32.		x	x						chin tuft
33.		x	x						
34. pre		x							
35. pre		x	x		x				
36. pre	x	x							
37. pre									disc wafer
38. classic	x	x	x						
39. classic	x	x	x	x					
40. classic	x	x	x	x					
41. classic	x	x	x	x					spike beard
42. classic		x		x					
43. pre	x				x		x		
44. classic		x	x			x			band beard
45.	x				x				
46. classic		x	x		x			x	
47. post		x	x						cowcatcher
48. classic		x	x						pharaonic
49. classic	x	x	x						

	old	rank	ear	artificial	natural	deity	m,b	mustache	type
Guatemala									
50. classic		x		x					
51. classic					x				several weeks growth
52. classic		x	x						stubby chin beard
53. classic		x	x						
54. classic		x	x		x			x	
55.					x			x	
56. post		x	x						
57. post	x	x	x						
58. classic		x	x	x					
59. post		x	x						
60. classic		x							adorned rounded chin
61. pre		x	x		x				
62. pre		x	x						
63. pre		x	x						
64. pre		x	x						full forward swept
65. pre		x				x			adorned rounded chin
66. classic								x	
67.		x	x						pharaonic
68. pre		x							
69.		x							band beard
70. pre		x							
71. classic		x	x						stubby chin beard
72. classic		x	x		x				
73. classic		x	x						disc wafer
Yucatan									
74.		x	x	x					
75. classic		x	x						wide chin tuft
76. classic		x	x						spike beard
77. post		x		x					
78. post		x	x						
79. post		x	x						
80. post		x				x			
81. post		x	x						
82. post									
83. post		x	x						full vertical
84. post		x	x						
85. classic		x						x	
Campeche									
86.		x	x	x					
87. classic		x	x						
88. classic		x	x		x		x		
89. classic				x					
90. classic		x	x		x		x		

	old	rank	ear	artificial	natural	deity	m,b	mustache	type
Campeche									
91. classic	x	x	x						
92. classic	x	x	x						
93. classic		x	x		x		x		
94. classic		x	x	x					
95. classic		x	x						
96. classic		x	x	x					
97. classic		x	x		x			x	
Tabasco									
98. classic		x	x						double strand beard
99. pre									
100. pre		x		x					full forward swept
101. pre		x	x						full forward swept
102.		x	x						
103.					x				
104. classic		x							stubby chin beard
105. pre		x	x		x			x	
106. classic									
Chiapas									
107. classic		x			x				pharaonic
108. classic		x							
109. classic		x			x				
110. classic		x	x						
111. classic		x		x					
112. classic		x	x						band beard
113. classic		x				x			
114. classic		x	x	x			x		wafer beard.
115. classic		x	x		x		x		chin tuft
116. classic		x							
117. classic		x							three strand beard
118. classic	x	x	x		x		x		
119. classic	x	x							
120. pre		x		x					
121 pre	x	x	x						full forward swept
Maya area									
122. classic		x	x		x				full forward swept
123. classic		x	x			x			
124. classic		x	x						
125. classic		x	x		x		x		
126. pre									
127.		x	x				x		
128. post		x	x						
129.		x	x						

	old	rank	ear	artificial	natural	deity	m,b	mustache	type
<u>Olmec area</u>									
130. pre		x	x						
131. pre									
132. pre		x	x		x				
<u>Veracruz</u>									
133. pre		x	x				x		
134. pre		x							
135. pre	x	x	x			x			
136. pre							x		
137. pre					x				
138. classic		x	x						double strand beard
139. classic	x								band beard
140. pre		x	x						
141. classic		x	x		x		x		
142. classic	x	x	x		x		x		several weeks growth
143. classic		x	x						
144.		x	x		x				
145.		x	x						pharaonic
146. pre		x	x						
147. classic		x			x			x	
148. classic		x	x						
149.		x	x						
150. classic	x	x	x		x		x		
151.		x	x						three strand beard
152. classic		x	x	x					rounded chin
153. classic		x	x	x					
154. classic									
155,	x								full vertical
156.	x	x	x						
157.		x							
158.		x							
159.		x	x	x					
160. classic		x							
161. classic	x	x	x		x				
162. classic		x	x		x		x		
163. pre		x	x	x					
<u>Oaxaca</u>									
164.		x	x						
165. post		x	x						wire filigree
166. post		x				x			wire filigree
167. classic	x	x	x	x		x			
168. classic	x	x	x	x					
169. classic	x	x	x						
170. post	x	x	x						
171. post		x	x						
172. classic		x	x	x					
173. classic	x								
174. classic	x	x	x	x					

	old	rank	ear	artificial	natural	deity	m,b	mustache	<u>type</u>
Oaxaca									
175.	x	x	x						
176.classic	x	x	x						
177.		x	x	x					heart beard
178.classic	x	x	x			x			
179.classic	x	x	x						
180.classic	x	x	x			x			
181.classic		x	x						wire filigree
182.pre									
183.pre	x	x	x			x			
184.pre									band beard
185.classic	x	x	x						
186.		x			x				
187.		x	x				x		
188.classic	x	x	x			x			
189.	x	x	x			x			
190.	x	x	x			x			
191.post		x	x			x			
192.post		x	x			x	x		
193.classic	x	x	x	x		x			
194.classic	x	x	x			x			
195.classic	x	x	x			x			
196.classic	x	x	x			x			
197.classic	x	x	x			x			
198.classic		x	x			x			
Puebla									
199.pre		x			x				several weeks growth
200.post		x	x	x					
201.pre									
202.pre					x		x		
Central Mex									
203.post		x	x	x			x	x	heart beard, shaggy lobe
204.post		x	x		x	x	x		
205.		x	x			x	x		
206.		x	x						
207.post		x	x						
208.post		x	x	x					heart beard
209.post		x	x	x					
210.post		x	x						
211.post		x	x						
212.post.		x	x				x		
213.pre									fan beard
214.	x	x	x						stubby chin beard
215.	x	x	x	x					
216.post		x	x		x	x	x		

	old	rank	ear	artificial	natural	deity	m,b	mustache	<u>type</u>
<u>Central Mex</u>									
217.		x							
218. pre									
219. pre		x							
220. pre		x	x						
221. pre		x	x		x				
222. pre									
223. pre		x	x						
224. pre					x				
225. classic		x	x	x					
226. post		x					x		
227.									
228.		x			x		x		
229. post		x	x						
230. post		x	x				x		
231. post		x	x				x		
232. post		x			x		x		
233. post		x	x		x		x		
<u>Guerrero</u>									
234.		x	x						
235. pre		x	x				x		
236. pre		x							band beard
237. pre									band beard
238. pre		x	x		x				
239. pre		x							
240. pre					x				
241.		x	x						
242. pre	x								
243.							x		double strand beard
<u>Colima</u>									
244.		x	x						
<u>Jalisco</u>									
245.		x	x						
<u>Nayarit</u>									
246. classic		x							
247. pre		x							
248. pre		x							
249.		x							
250. pre	x	x	x		x		x		
TOTALS	49	209	165	35	45	26	35	9	

ANALYSISGeographical Distribution

The general geographical distribution of bearded figures is remarkably even. All of Mesoamerica is represented from Nayarit and northern Veracruz to Honduras and El Salvador. The beards from Peru and Ecuador are included for comparison purposes, although they do not figure in the analysis. Beards are far less frequent in the Andean countries than they are in Mesoamerica. There is also more mass production of stylized art forms in the South American artifacts which would make any kind of frequency analysis much more error prone than it would tend to be with Mesoamerican data.

The Mesoamerican beards in the catalogue distribute geographically this way:

<u>Location</u>	<u>Number of Bearded Figures</u>	<u>Percent of Total</u>
Guatemala	45	20
Central Mexico	38	16
(includes everything north of Guerrero, Puebla & Veracruz)		
Oaxaca	35	15
Veracruz	31	13
Chiapas	15	6
Yucatan	12	5
Campeche	12	5
Guerrero	10	4
Honduras	10	4
Tabasco	9	4
Maya area	8	3
Puebla	4	2
Olmec area	3	1
Belize	1	1
El Salvador	1	1
Total	234	100

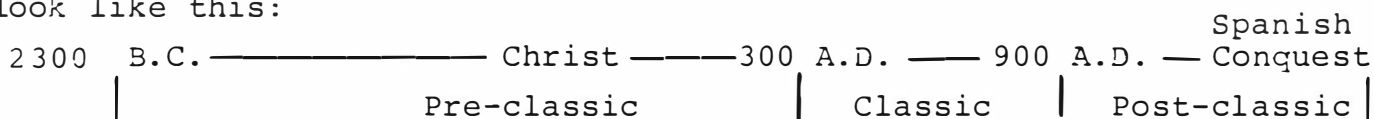
There is obviously some rounding error in the percentage calculations.

The picture that emerges is interesting but inconclusive. There is general correspondence between the incidence of bearded figures and the location of high culture in Middle America. Southern Mesoamerica (all locations except Central Mexico) predominates with 84% of the total. Still, no region particularly stands out. The artistic portrayal of bearded figures was a cultural characteristic widespread throughout all of Mesoamerica. The distribution is precisely even around the isthmus of Tehuantepec. 50% of the beards originate from Veracruz and Oaxaca north, while 50% come from Chiapas and Tabasco south.

Chronological Distribution

Many of the figures surveyed are poorly documented which dictates a rather loose correlation of artifacts with time periods. 206 of the figures can be confidently dated to one

of the three broad time horizons (pre-classic, classic, post-classic) generally used by Mesoamericanists. On a time line the horizons look like this:



More precise dating of course would yield more accurate results, but the trends observable in this rudimentary analysis are illuminating.

The Mesoamerican beards in the catalogue distribute chronologically in this manner:

<u>Time Horizon</u>	<u>Number of Bearded Figures</u>	<u>Percent of Total</u>
Pre-classic	57	28
Classic	111	54
Post-classic	38	18
Total	206	100

The obvious conclusion is that bearded portrayals were absolutely more frequent in pre-classic than post-classic times by a factor of 50% (38 X 150% = 57.) The relative frequency is probably much more important, though. There is a great deal more post-classic material available for study than pre-classic material since relatively few sites have been excavated down to their pre-classic levels. Archaeological digs are expensive, so many projects have taken a site down to classic and post-classic remains, but only a few well funded projects have had the resources to excavate into pre-classic material. Add to this the fact that post-classic material is generally better preserved than the earlier artifacts, and it makes the higher incidence of pre-classic beards even more significant. Pre-classic bearded figures are relatively far more numerous than post-classic portrayals.

Additional insight comes when the 206 dated beards are plotted geographically. They distribute this way:

<u>Location</u>	<u>Pre-classic</u>	<u>Classic</u>	<u>Post-classic</u>
Guatemala	13	21	6
Central Mexico	11	2	15
Oaxaca	3	19	6
Veracruz	8	14	
Chiapas	2	13	
Yucatan		3	8
Campeche		11	
Guerrero	7		
Honduras	2	8	
Tabasco	4	3	
Maya area	1	4	1
Puebla	3		1
Olmec area	3		
Belize		1	
El Salvador			1
Total	57	111	38

During Pre-classic times beards were evenly distributed throughout Mesoamerica except in the Yucatan peninsula where there is a noticeable gap. Southern Mesoamerica (all locations except Central Mexico) predominates with 81% of the total and the ratio around the Isthmus of Tehuantepec is skewed toward the north. 61% of all beards were from Oaxaca and Veracruz north during the Pre-classic.

Beards were similarly evenly distributed during Classic times except in Guerrero and Puebla. Southern Mesoamerica predominated with 98% of the total and the ratio around the Isthmus of Tehuantepec skewed back toward the south. 58% of all beards were from Chiapas and Tabasco south during the Classic.

The even geographical distribution that had characterized Mesoamerica prior to 900 A.D. vanished during the Post-classic. Almost all beards during this period came from the Toltecs in Central Mexico and Yucatan, the Mixtecs in Oaxaca, and the Guatemalan plumbate figures in that area. Trends between northern/southern Mesoamerica or around the Isthmus of Tehuantepec are meaningless during the Post-classic since the geographical distribution of beards during that era had become so tightly regionalized.

Fullness

Mesoamerican Indians are occasionally bearded. In these uncommon instances, the growth is generally light, but any growth of facial hair could serve as a model for an artistically detailed bearded figure. For that reason the catalogue indexes each entry for fullness on a scale of one to three. (1) beards are light growth, something that could reasonably be expected given the naturally occurring facial hair incident to the native Mesoamerican population. This growth would not exceed one inch on a life size scale. (2) beards are moderate growth, one to four inches in real life scale, and (3) beards are heavy, full, spectacular growth that would exceed four to six inches life size. The Mesoamerican beards in the catalogue distribute this way:

	<u>Light</u>	<u>Moderate</u>	<u>Heavy</u>	<u>Total</u>
Number of beards	89	123	27	239

Plotted geographically, the various fullness levels distribute in this manner:

<u>Location</u>	<u>Light</u>	<u>Moderate</u>	<u>Heavy</u>	<u>Total</u>
Guatemala	19	26	4	49
Central Mexico	15	19	5	39
Oaxaca	17	16		33
Veracruz	9	21	2	32
Chiapas	3	10	3	16
Yucatan	3	3	6	12
Campeche	6	6		12
Guerrero	3	6	1	10
Honduras	1	8	1	10

<u>Location (continued)</u>	<u>Light</u>	<u>Moderate</u>	<u>Heavy</u>	<u>Total</u>
Tabasco	5	2	2	9
Maya area	2	5	1	8
Puebla	2	2		4
Olmec area	1		2	3
Belize		1		1
El Salvador	1			1
Total	<u>89</u>	<u>123</u>	<u>27</u>	<u>239</u>

All fullness levels are remarkably consistent in their spatial distributions. The patterns correlate well with the general geographical distribution produced by all beards taken together. Southern Mesoamerica accounts for 83% of light beards, 85% of moderate beards, and 81% of heavy beards. Around the Isthmus of Tehuantepec, light beards distribute 54% north and 46% south. Moderate beards are extremely close with 51% north and 49% south. Only heavy beards show a major deviation from this equanimity. They distribute 70% south of the isthmus and 30% north of it. That pattern is even more significant given the fact that most of the heavy beards north of the isthmus come from only one site, Tula Hidalgo. In the south they appear at Izapa, Kaminaljuyu, La Venta and other sites in the Olmec heartland, the classic Maya sites of Copan, Zacualpa, Chama, Kuna, etc. and at Toltec Chichen Itza.

206 bearded figures can be confidently dated. Among that number the fullness levels distribute like this:

<u>Fullness</u>	<u>Pre-classic</u>	<u>Classic</u>	<u>Post-classic</u>	<u>Total</u>
Light	21 (37%)	43 (39%)	13 (34%)	77
Moderate	28 (49%)	63 (57%)	16 (42%)	107
Heavy	8 (14%)	5 (4%)	9 (24%)	22
Total	<u>57(100%)</u>	<u>111(100%)</u>	<u>38(100%)</u>	<u>206</u>

The table demonstrates a shift toward lighter beard growths during the classic era as the percentage of heavy beards dropped and the percentage of moderate beards swelled. There is a shift to the other direction during post-classic times with the percentage of heavy beards rising sharply. The post-classic trend should be placed in its proper perspective, though, before any unwarranted conclusions suggest themselves. All nine post-classic heavy beards are Toltec. They represent only one cultural manifestation and are clearly not typical of Mesoamerica generally during this time period. In contrast, the pre-classic and classic heavy beards cross cultural and geographical lines so their ratios are more representative of Mesoamerica as a whole during those eras.

Old Age

Some Mesoamerican Indians begin to grow facial hair only when they reach their declining years. This observed physiological trait has prompted the suggestion that beards were a symbol of age in Mesoamerica and that bearded figures portray old men. Indeed, there does appear to be a substantial correlation between beards and other stylistic portrayals of advanced age.

A figure in the catalogue is identified as an old man if it displays hollow sunken eyes, sunken cheeks, severe wrinkling or other facial distortions characteristic of physical decline. In some cases this judgement is very subjective. Wrinkles, for instance, are sometimes difficult to distinguish from depictions of energetic facial expressions. Conversely, some figures like the old men gods of Oaxaca display these characteristics along with sagging breasts and missing teeth. It is a tribute to the skill of Mesoamerican artists that 49 (20%) of the figures in the catalogue portray clear signs of advanced age. The actual number of figures intended to represent old men should undoubtedly be higher since wrinkles, sunken cheeks, etc. are subtle features that can only be detected on detailed images rendered with considerable realism. Many of the figures in the catalogue are crude or highly stylized in their depiction of the human form. Some of them were probably intended to represent aged individuals although that representation is now impossible to detect.

The bearded figures showing signs of advanced age distribute geographically in this manner:

<u>Location</u>	<u>Total Beards</u>	<u>Old Age Beards</u> (percent of total)
Guatemala	45	11 (24%)
Central Mexico	38	3 (8%)
Oaxaca	35	21 (60%)
Veracruz	31	7 (23%)
Chiapas	15	3 (20%)
Yucatan	12	
Campeche	12	2 (17%)
Guerrero	10	1 (10%)
Honduras	10	
Tabasco	9	
Maya area	3	
Puebla	4	
Olmec area	3	
Belize	1	
El Salvador	1	1 (100%)
Total	234	49 (20%)

Obviously the percentage figure for El Salvador is invalid due to the inadequate sample size. The other ratios, though, tell a clear story. The association between beards and old age was highest in Oaxaca where the old men gods were common. Next was Guatemala where post-classic plumbate figures were prominent. The beard/old age relationship was highly regionalized with just three areas, Oaxaca, Guatemala and Veracruz, accounting for 80% of the incidence. This characteristic was little known over a wide portion of Mesoamerica, notably Central Mexico and the Yucatan peninsula.

It is equally instructive to plot the beard/old age phenomenon over time. 41 of the advanced age beards can be adequately dated. They distribute this way:

<u>Time Horizon</u>	<u>Total Beards</u>	<u>Old Age Beards</u> (% of total)
Pre-classic	57	7 (12%)
Classic	111	29 (26%)
Post-classic	<u>38</u>	<u>5</u> (13%)
Total	206	41 (20%)

The increased incidence of the beard/old age relationship during classic times is obvious from the table. There is an alternative explanation, though, for that shift. The general quality of art improved during the Mesoamerican classic, then deteriorated again during post-classic times. Much of the increase in the ratio of old age beards detected during the classic horizon must be attributed to this improvement in artistic detail which allows subtle features like wrinkles and sunken cheeks to be identified. Any substantial population will contain a certain percentage of aged individuals. Depending on the life expectancy and mortality rates associated with a given population, the percentage of individuals in the 60 to 90 year old age category could vary from five percent to thirty percent. We do not know what the life expectancy nor mortality rates were in ancient Mesoamerica. It is not entirely clear at what age a Mesoamerican male would have begun showing signs of physical decline incident to age. It is clear, though, that the 26 percent old age/total beards ratio observed during classic times is higher than one would reasonably expect from a typical biological population in antiquity. A cultural rather than merely biological explanation for the beard/old age relationship is implied. In other words, the tendency of bearded figures to be old men is higher than one would expect in nature. This tendency obviously is heavily influenced by the disproportionate incidence of old age beards from the state of Oaxaca.

Social Rank

Some observers have suggested that beards were symbols of high social position in ancient Mesoamerica. Headdresses, nose plugs, ceremonial bars, tattooing, pectoral medallions, elaborate clothing or ornate jewelry were symbols of rank widely used throughout Mesoamerica to distinguish an individual of the upper class. 209 (89 percent) of the Mesoamerican figures surveyed display symbols or ornamentation indicative of high social position. The single element associated most frequently with beards is the ear plug. 139 (66 percent) of the figures in the catalogue have ear plugs, spools or pendants. The conclusion is unmistakable. Portrayals of bearded figures were almost exclusively an elite class phenomenon in Mesoamerica.

It is possible that human portraits in general were the province of the elite class in Mesoamerica. Perhaps the lower classes typically did not produce self-depicting art. It would be necessary to catalogue representations of the human form in general in order to ascertain the relative frequency of elite versus lower class portrayals. That would put the 89 percent beard/social rank correlation figure (which is so high that it almost strains credulity) in perspective.

The bearded figures displaying elite class trappings distribute geographically in this way:

<u>Location</u>	<u>Total Beards</u>	<u>Social Rank Beards</u> (% of total)
Guatemala	45	38 (84%)
Central Mexico	38	33 (87%)
Oaxaca	35	32 (91%)
Veracruz	31	26 (84%)
Chiapas	15	15 (100%)
Yucatan	12	11 (92%)
Campeche	12	11 (92%)
Guerrero	10	6 (60%)
Honduras	10	9 (90%)
Tabasco	9	6 (67%)
Maya area	8	7 (88%)
Puebla	4	2 (50%)
Olmec area	3	2 (67%)
Belize	1	1 (100%)
El Salvador	<u>1</u>	<u>1</u> (100%)
Total	234	209 (89%)

This distribution is extremely even. Only Guerrero, Tabasco, Puebla and the Olmec area fail to conform to the Mesoamerica-wide pattern. The distribution is equally as even between northern and southern Mesoamerica. The association between beards and social rank is extremely strong in all regions.

The distribution of social rank beards across time horizons reveals an interesting pattern. Of the 206 beards that can be accurately dated, 172 show evidences of social rank. They distribute in this manner:

<u>Time Horizon</u>	<u>Total Beards</u>	<u>Social Rank Beards</u> (% of total)
Pre-classic	57	40 (70%)
Classic	111	95 (86%)
Post-classic	<u>38</u>	<u>37</u> (97%)
Total	206	172 (84%)

A pre-classic bearded figure is likely to belong to the elite class. That likelihood increases during the classic and by post-classic times beards are almost exclusively an elite class phenomenon.

Artificiality

It is well known that some Mesoamerican Indians on occasion wore ceremonial false beards, the "barbas postizas" mentioned in the Spanish chronicles. This has led some scholars to conclude that any beard portrayal not accounted for by the natural incidence of facial hair in the native American population must be depicting a false beard.

A beard is labeled "artificial" in the catalogue if it is very unnaturally shaped or if it is separated from the smooth contour of the face in some regular discernible manner. 35 (14 percent)

of the beards in the catalogue fit these criteria for artificiality. The heart shaped beards common in the Mixtec codices are the most prevalent stylistic type.

On the other end of the spectrum are those beards labeled "natural." Many of them are textured like the figure's hair. They blend in quite naturally with a figure that is portrayed realistically. A handful of the figures show a new beard growth as it would appear on a man who hasn't shaved for several weeks. These portrayals are so anatomically accurate and true to life that they demand to be viewed as actual portraits of real people. A chin beard can be easily faked or synthetically imitated, but heavy growths covering the entire lower cheek and sideburns that blend in naturally with the hairline should be considered realistic depictions of natural beards. 45 (19 percent) of the beards in the catalogue fit these criteria for naturalism.

Obviously the majority of the beards in the catalogue resist being neatly categorized as "artificial" or "natural." Most of them have plausible shapes but appear on figures that are crudely modelled or poorly detailed. We will never know whether many of the figures were originally intended to portray natural or artificial beards.

The geographical distribution for artificial and natural beards looks like this:

<u>Location.</u>	<u>Total</u> <u>Beards</u>	<u>Artificial</u> <u>Beards</u>	(% of total)	<u>Natural</u> <u>Beards</u>	(% of total)
Guatemala	45	6	(13%)	9	(20%)
Central Mexico	38	5	(13%)	8	(21%)
Oaxaca	35	6	(17%)	1	(3%)
Veracruz	31	4	(13%)	8	(26%)
Chiapas	15	3	(20%)	5	(33%)
Yucatan	12	2	(17%)		
Campeche	12	4	(33%)	4	(33%)
Guerrero	10			2	(20%)
Honduras	10	1	(10%)	2	(20%)
Tabasco	9	1	(11%)	2	(22%)
Maya area	8			2	(25%)
Puebla	4	1	(25%)	2	(50%)
Olmec area	3			1	(33%)
Belize	1	1	(100%)		
El Salvador	1				
Total	234	35	(14%)	45	(19%)

This distribution is extremely even. Only natural beards in Oaxaca deviate significantly from the Mesoamerican-wide pattern. This internal consistency lends credibility to the natural/artificial identification proposed by the selection criteria outlined above. Both natural and artificial beards were known throughout all of Mesoamerica. Furthermore, natural beards were more prevalent than artificial portrayals in every region except Oaxaca and the Yucatan peninsula.

The distribution of artificial and natural beards through time provides additional insights. That distribution looks like this:

<u>Time Horizon</u>	<u>Total Beards</u>	<u>Artificial</u> <u>Beards</u>	(% of total)	<u>Natural</u> <u>Beards</u>	(% of total)
Pre-classic	57	4	(7%)	13	(23%)
Classic	111	21	(19%)	21	(19%)
Post-classic	<u>38</u>	<u>5</u>	(13%)	<u>4</u>	(11%)
Total	<u>206</u>	<u>30</u>	(15%)	<u>38</u>	(18%)

Keep in mind that these totals differ from the geographical distribution totals since some of the natural and artificial beards cannot be confidently dated. Artificial beards were rare in pre-classic times. They became much better known during the classic when they constituted 19 percent of all beards. That frequency fell during post-classic times, but still in the later period a beard was approximately twice as likely to be artificial as it was during the pre-classic.

Natural beards display an entirely different trend. They were relatively frequent during earlier pre-classic times, but their frequency diminished regularly until the post-classic when natural beards were relatively rare.

This artificial/natural relationship through time can be expressed in a slightly different manner. During the pre-classic a beard was 3.25 times as likely to be natural as it was to be artificial. By classic times that ratio had moderated until a beard was just as likely to be artificial as it was to be natural. During the post-classic, though, a beard was more likely to be artificial than it was to be natural. (The post-classic beard count would be much more heavily skewed toward artificiality had the numerous beards portrayed in the Mixtec codices been treated individually rather than being consolidated into a single catalogue entry.)

Another relationship evident from the table above involves the quality of art produced during each of the three time horizons. During the pre-classic era 30 percent of all bearded figures were rendered realistically enough to allow their classification as either "artificial" or "natural." During the classic that proportion rose to 38 percent before falling to 24 percent during the later post-classic period. It is evident that the highest quality art was produced during the classic period and the lowest quality came during the decadent post-classic age. This is an additional point of internal consistency lending credibility to the basic natural/artificial classification system employed in the catalogue.

Still another point of consistency becomes apparent when artificial and natural beards are plotted according to fullness levels. Of the 239 beards that can be classified as light, moderate or heavy growth, 35 are labeled artificial and 45 are natural. They distribute in this manner:

<u>Fullness</u>	<u>All Beards</u>	<u>Artificial Beards</u>	<u>Natural Beards</u>
Light	89 (37%)	12 (34%)	20 (44%)
Moderate	123 (51%)	20 (57%)	22 (49%)
Heavy	27 (11%)	3 (9%)	3 (7%)
Total	<u>239</u> (100%)	<u>35</u> (100%)	<u>45</u> (100%)

The distributions of artificial and natural beards across the three fullness levels are so strikingly similar to the distribution of all beards across those same levels that confidence in the data is obviously enhanced. While there is still some degree of subjectivity in classifying a given bearded figure as either "natural" or "artificial," this kind of internal data consistency lends considerable credibility to the classification scheme.

One more dimension of the natural/artificial relationship is clarified by plotting both classes of beards according to social rank. They distribute like this:

<u>Social Rank</u>	<u>All Beards</u>	<u>Artificial Beards</u>	<u>Natural Beards</u>
Yes	209 (89%)	34 (97%)	36 (80%)
No	25 (11%)	1 (3%)	9 (20%)
Total	<u>234</u> (100%)	<u>35</u> (100%)	<u>45</u> (100%)

Beards in general were associated with the upper class in Mesoamerica but false beards were almost exclusively an elite class phenomenon. Fully 97 percent of all those beards classified as artificial are from figures displaying at least one other symbol of rank. Actually, the role of beards as symbols of social standing in Mesoamerica offers the most plausible explanation for the high incidence of artificial beards noted in the catalogue. A high ranking individual genetically incapable of growing a beard would be forced to wear an imitation one.

Deities

Prominent Mesoamerican deities were occasionally described as bearded. Departing from this premise, it has been suggested that pre-columbian beards were symbols of deity. This would help explain the unusually high correspondence between beards and social rank. Priests or gods would obviously belong to the elite class. It also suggests a convenient alternative explanation for the practice of wearing artificial beards. It is plausible that a priest would don a false beard to impersonate or officiate on behalf of his patron deity. 26 figures in the catalogue can be positively identified as deities. Most are from Oaxaca where the old men gods were common. Others include the old fire god from Veracruz, the long nose god from Copan, and the wind and rain gods from Kaminaljuyu. 25 of the 26 deity bearded figures show symbols of social rank, precisely as one would expect. Only 2 of the deity beards, though, are classified as artificial while 2 are classified as natural. That suggests a very minor correlation between deity figures and the practice of wearing artificial beards.

Bearded deity figures distribute geographically in this manner:

<u>Location</u>	<u>Total Beards</u>	<u>Deity Beards</u> (percent of total)
Guatemala	45	2 (4%)
Central Mexico	38	3 (8%)
Oaxaca	35	16 (46%)
Veracruz	31	1 (3%)
Chiapas	15	1 (7%)
Yucatan	12	1 (8%)
Campeche	12	
Guerrero	10	
Honduras	10	1 (10%)
Tabasco	9	
Maya area	8	1 (13%)
Puebla	4	
Olmec area	3	
Belize	1	
El Salvador	1	
Total	234	26 (11%)

While deity beards were known throughout Mesoamerica, Oaxaca clearly dominated all other regions.

Mesoamerican bearded deity figures distribute chronologically like this:

<u>Time Horizon</u>	<u>Total Beards</u>	<u>Deity Beards</u> (percent of total)
Pre-classic	57	3 (5%)
Classic	111	14 (13%)
Post-classic	38	5 (13%)
Total	206	22 (11%)

Bearded deity figures became relatively much more frequent in the classic and post-classic eras than they had been during the earlier pre-classic period.

Beard Styles

Mesoamerican beards and mustaches appear on figures worked from a diverse array of artistic media. They are found on ceramic figurines, stone tablets, stelae, carved ceramic vases, wooden carvings and fully round stone sculpture. Beards show up in codices, on jade carvings, on bone carvings and on gold discs. Across all these various media, however, there are certain Mesoamerican art styles that are characterized by a high frequency of beard portrayals.

This phenomenon is clear in Andean art as well. Most of the Peruvian beards come from one style of Mochica stirrup spout effigy jars. They show an individual commonly known as the "old man" with round headgear and a long pointed beard. This figure is sometimes labeled "Viracocha" since that deity is often described with a beard in the Andean ethnohistorical sources.

Pre-classic "chinesco" figurines from Nayarit and the northwest Mexican coast are frequently shown with wispy chin beards.

The Cosumalhuapan art style from the Pacific coast of Guatemala commonly includes representations of bearded figures.

Plumbate effigy vessels from post-classic Guatemala show beards quite frequently.

Classic Maya stelae from Palenque, Piedras Negras, Naranjo, Oxkintok, Yaxchilan, Kuna, Abaj Takalik, Seibal, Copan and Quirigua often depict beards. Beards apparently were not uncommon among the elite class persons portrayed on the stelae.

Classic Maya figurines from Jaina island show an extremely high incidence of beards.

Funerary urns from Oaxaca depicting the various old men gods often have beards. A beard is characteristic of the god "2 tiger."

Toltec representations of their culture hero Quetzalcoatl typically show a beard. The Atlantean figures found throughout Chichen Itza are characteristically bearded.

"8 deer" from the codex Nuttall is often bearded. Beards are fairly common in the Mixtec codices and they appear in the Maya Dresden codex.

There are doubtless many other art styles or culture heroes throughout Mesoamerica that typically portray beards. This sample is based simply on the limited number of bearded figures surveyed in the catalogue. It demonstrates that besides being prevalent in Mesoamerica, bearded figures were characteristic of a number of art styles.

Beard Types

Certain Mesoamerican beard depictions frequently conform to stylistic patterns. These patterns are noted in the category identifications and seem to represent standard, stereotypic ways of portraying beards.

The most common beard type in the catalogue is the goatee or chin beard. Usually pointed, chin beards vary considerably in fullness and most are quite naturalistic in their portrayal. Texture is generally indicated by vertical lining or incising.

Mustaches appear alone 9 times in the catalogue. In combination with beards, mustaches are depicted 35 times. One would naturally expect that figures depicting mustaches would be quite realistically rendered, and that is in fact the case. 78 percent of mustaches alone are rendered realistically enough to allow a natural/artificial classification. 51 percent of the mustache/beard combinations are executed in sufficient detail to allow such classification. What may be a little more surprising is that almost all mustaches are classified "natural." Of the 25 mustaches that can be classified, 23 (92 percent) are natural while only 2 (8 percent) are artificial. The Mesoamerican practice of wearing artificial beards very seldom extended to include mustaches.

The "cowcatcher" beard is prevalent on post-classic plumbate effigy jars from southern Mesoamerica. It is confined to the chin, squared on the bottom, and swept forward to a sharp edge in front.

"Heart" beards are regularly shaped, full at the cheeks and rounded to a sharp point at the bottom. In some cases they circle around the mouth to form a mustache/beard combination. Typically though the beard begins at the sides of the mouth. Heart beards figure prominently in the codices and are usually labeled artificial.

"Fan" beards form a regular semi-circle around the bottom of the chin. They are represented in various widths.

The beards labeled "pharaonic" are long slender chin beards reminiscent of Egyptian royal style. The classic examples are on stelae at Copan and Quirigua.

Wire filigree beards are formed by several parallel loops of wire surrounding the face. They come from Mixtec gold pendants and one is found on a figure from a Mixtec style fresco at Santa Rita, Belize.

The chin tuft beard is very common and generally portrayed as a few strands of hair hanging down in a narrow bundle from the chin. It is usually slanted sharply forward as it tapers to a point. This beard type is especially frequent in classic Maya art. Many of the smaller chin tuft beards can easily be accounted for by the natural incidence of facial hair among the Maya.

"Wafer" beards come in varying shapes. Most are disc shaped and quite small. They are very thin and planar. They typically project prominently from the chin, angling forward.

The "spike" beard is long and slender. It comes to a sharp point and usually juts out from the chin at a pronounced angle.

One interesting type is labeled the "band" beard. It covers the bottom of the chin and then follows the base of the jaw back to terminate or join with the hairline near the base of the ear. Band beards project sharply from the contour of the face, but they are limited to a narrow strip that follows the crest of the jawbone.

A stubby chin beard is a small rounded extension of the chin. It is sometimes textureless and often looks like a bulbous knob on the end of the chin.

Two figures from Kaminaljuyu have rounded chin beards that are ornamented. Unadorned rounded chin beards are known from other sites. They are wide, covering the entire chin, with no sharp corners or edges.

The most dramatic beards in the catalogue are the large full sweeping ones. Two stylistic patterns are the full forward swept beard typified by the figure on stela 3 at La Venta and the full vertical beard typified by Toltec representations of Quetzalcoatl at Tula and Chichen Itza.

The shaggy lobe beard is similar to the heart beard, but instead of smooth regular lines it has jagged hanging lobes. These give it a very artificial notched appearance.

Some beards divide into double or triple strands. Others represent several weeks growth of facial hair. These beards are not long, but depict a man who has not shaved for a period of weeks.

57 of the beards in the catalogue conform to these described types. They tend to be artificial except in the case of chin tuft beards, full forward swept beards, and of course, several weeks growth. The types distribute quite evenly among the three major Mesoamerican time horizons. As one would expect of an art style, the types cluster within limited chronological ranges. No type spans from the pre-classic to the post-classic. No type is contained entirely within the pre-classic either. Stylistic beard types began to be commonplace during later pre-classic times.

SYNTHESIS

In summary, what is this analysis of Mesoamerican bearded figures really saying? How does the big picture fit together across Mesoamerican time and space? The following are the major conclusions supported by this study.

First, there were a large number of bearded figures produced. The catalogue documents over 250 Mesoamerican beard portrayals in 234 entries. (Some individual catalogue entries represent multiple bearded figures.) Since the catalogue representation hardly begins to exhaust the number of Mesoamerican artifacts known from antiquity, the true number of bearded figures in Mesoamerican art must be very large. Beards and mustaches cannot be casually dismissed as anomalies or aberrations among Mesoamerican cultural remains. They were in fact rather prevalent. A thorough systematic survey of bearded artifacts would certainly produce a beard count numbering in the thousands.

Bearded figures were well known in every region of Mesoamerica. There are no glaring gaps or omissions. They show up much more frequently in central and southern Mesoamerica (Guerrero, Puebla and Veracruz south) than they do in northern Mesoamerica (Michoacan, Mexico, Morelos and Tlaxcala north.) The pivotal center of their geographical distribution is approximately the Isthmus of Tehuantepec. 50 percent appear south of Veracruz and Oaxaca. The density of bearded figures (in number per square kilometer) is greatest in Veracruz, followed by Guatemala, Oaxaca and Tabasco in that order. The density in those four regions is very close, and those four are considerably ahead of the next most dense region.

Bearded figures were also well known throughout all time periods in Mesoamerica. They were relatively much more frequent during the pre-classic and their frequency diminished gradually until by Aztec times they were relatively rare. During pre-classic and classic times they were quite evenly distributed geographically but by post-classic times their spatial distribution had become tightly regionalized with Central Mexico and Yucatan predominant.

During pre-classic times the only glaring gap was the Yucatan peninsula where not a single bearded figure was found in the survey. The density of beards per square kilometer during this early period was highest in Tabasco, followed by Guatemala, Veracruz, Guerrero and Puebla in that order.

During the classic era southern Mesoamerica predominated and the only glaring gap was in Central Mexico northwest of Oaxaca and Veracruz. This changed completely during the post-classic period when Central Mexico was the dominant region.

Most of the beards in Mesoamerica were light to moderate growth (up to 4-6 inches in real life scale.) Only 11 percent of the figures surveyed portray heavy beards (exceeding 4-6 inches.) Light and moderate beards are very evenly distributed throughout all regions in Mesoamerica with no significant gaps. Heavy beards, though, are essentially from southern Mesoamerica. The only substantial concentration of heavy beards in central or northern Mesoamerica was at Tula Hidalgo during Toltec times.

Light and moderate beards were evenly distributed through the three major Mesoamerican time horizons. Heavy beards, though, were relatively much more frequent during the pre-classic and post-classic eras than they were during the classic period. When one considers that all of the post-classic heavy beards are from a single culture, the Toltecs, the Mesoamerica-wide pattern becomes a trend toward lighter beard growths during the classic; a trend that continues during the post-classic with the notable Toltec exception.

There is a conscious cultural association of beards with old men in Veracruz, Guatemala and especially Oaxaca during the classic horizon. At most other times and places the portrayal of aged bearded figures is consistent with what one might expect naturally from a biological population in antiquity. Beards are typically not associated with old age in Central Mexico and Yucatan.

The quality of art produced in Mesoamerica was good during the pre-classic. It improved significantly during the classic and then deteriorated to its lowest level during the post-classic.

Bearded figures represent elite class individuals almost universally throughout Mesoamerica. This is less true of Olmec culture than of later civilizations. There is a strong trend toward elite class portrayals that continues regularly through the classic and into the post-classic. By post-classic times beards were almost exclusively an elite class phenomenon.

14 percent of the figures surveyed probably represent artificial or imitation beards. 19 percent probably represent natural beards while 67 percent cannot be adequately classified. Both natural and artificial beards distribute evenly throughout Mesoamerica except in Oaxaca where natural beards are rare. Natural beards as a percentage of all beards were highest in Puebla followed by Chiapas, Campeche and the Olmec heartland. Artificial beards were more prevalent than natural beards only in Oaxaca and the Yucatan peninsula during the classic era.

There is a fundamental trend away from natural beards and toward artificial imitations over time. During the pre-classic a beard was three times more likely to be natural than to be artificial. By classic times that ratio had fallen to 1:1. By post-classic times, in contrast, a beard was more likely to be artificial than to be natural.

Almost all bearded figures represent elite class individuals. That tendency is less among natural beards than among beards in general, however. Artificial beards, on the other hand, are even more extreme in the tendency. Artificial beards are almost exclusively an elite class phenomenon.

Bearded deities appear primarily in Oaxaca during the classic period. They are very rare during pre-classic times, but they become much more frequent during the classic and post-classic eras.

There are various cultural artistic styles from Mesoamerica that frequently portray bearded individuals. Almost one-fourth of the beards in the catalogue belong to one of several beard types that are typically portrayed in certain stereotyped ways. This indicates that beards had cultural significance in Mesoamerica in addition to their natural biological role.

Add to these conclusions the fact that Mesoamerican Indians by the time of the Spanish Conquest were genetically incapable of growing beards, and a consistent picture begins to emerge. Mesoamerican folk culture, genetically beardless, experienced at least one immigration of bearded individuals at some time during the pre-classic. These individuals soon dispersed over much of Mesoamerica until by 300 A.D. they had influenced every region except the Yucatan peninsula. Probably due to some cultural superiority, this bearded group generally dominated the native population and established themselves as the elite class. This began a cultural connection between beards and social standing that was to persist until the Conquest. By the end of the pre-classic period this bearded group had become assimilated both culturally and biologically into the native Mesoamerican scene. More accurately stated, by 300 A.D. this intrusive foreign element either through intermarriage or military annihilation had largely lost its separate identity. Culturally it had fused with the native American civilization. This hybrid, full of vigor, was poised to blossom into the splendid Mesoamerican classic culture of 300 to 900 A.D.

As the classic era progressed the gene pool brought over by the original bearded immigrants became more and more dilute. Beards became less full and artificial beards came into popular use. Cultural tradition associated beards with the upper class, so a noble person genetically incapable of growing a natural beard was forced to wear an imitation one. This trend continued during post-classic times when the frequency of beards in general declined, beards became even more exclusively the province of the upper class, and the frequency of artificial beards remained high.

By the Time of the Spanish Conquest, few Mesoamerican natives remained who could grow a natural beard although beards were still important cultural elements in many societies. Well established tradition associated beards with earlier culture heros and gods. Certain native rituals required a person to wear an imitation beard of metal, fabric or animal fibers. Only fragmentary vestiges and figures buried in the archaeological record remained of the foreign bearded race that once played a lead role upon the Mesoamerican stage.

The Spaniards brought their gene pool and their superior culture to the Americas and the ancient pattern began once more. In contemporary Latin America beards are once again associated with the elite class. If a man can grow a beard or mustache he publically demonstrates the existence of European blood in his veins. Beards are an integral part of the machismo that has developed from the curious fusion of European and indigenous cultures.

Questions for Additional Research

A number of questions naturally come to mind as a result of the analysis just described. They bear directly on the issue of significance of Mesoamerican bearded figures, but they are beyond the scope of this study.

First of all, are any Mesoamerican figures bald? Male pattern baldness is rare among native American populations just as beards are. Geographical and chronological distributions of bald figures could shed light on the question of intrusive foreign genetic elements in Mesoamerica.

Are any beards depicted on female figures? This could help illuminate the Mesoamerican practice of wearing artificial beards.

What portion of the results of this analysis could be incorrect due to sampling error? Would any of these results change measurably if the sample size were increased substantially?

How many of the Mesoamerican figures surveyed were mass produced? The distribution of figures produced from molds would obviously not be representative of the physical characteristics of the population being portrayed.

What percent of all human portrayals are bearded? The catalogue documents a large number of Mesoamerican bearded figures and allows one to determine the relative frequency of beards among pre-classic, classic and post-classic figures. It does not allow one to determine the absolute incidence of bearded figures as a percentage of total human figures. The same logic applies to figures displaying signs of social rank. It would be instructive to know the percentage of total human figures that display signs of high social standing. It is highly likely that most human portrayals represent social elites.

The depiction of a natural beard does not necessarily imply the portraiture of a living human being. It merely implies that the artist was familiar with real beards, that he knew how to portray anatomically correct beards. It is conceivable to produce a "natural" portrayal of an abstract idea as easily as one could produce a stylized portrait of a living human seated in an artist's studio. More detailed study of the natural/artificial classification outlined in the catalogue may help clarify the relationship between natural beards and real people.

A BOOK OF MORMON MODEL

Where does all this put the Book of Mormon? It is impossible to attempt a detailed correlation between Mesoamerican bearded figures and the Book of Mormon until one firmly establishes the Book of Mormon peoples in time and space. First, however, it is important to define the scope of the Nephite record.

The Book of Mormon is the religious chronicle of a small group, descendents of a common ancestor, who migrated to Mesoamerica and flourished for nearly 1000 years before being culturally assimilated and then militarily annihilated by the larger and more powerful native civilization. Other groups figure in the narrative from time to time and the Book of Mormon excerpts from the history of the Jaredites, but surrounding cultures are clearly not important to the central focus of the book. Its divine mission is to record the spiritual witness and sacred history of the descendents of Nephi who remained faithful to Christ's church. The book frequently digresses into secular history and records cultural data, but these minor details merely provide the vehicle through which ancient prophets can bear their moving testimony of Jesus Christ. The Book of Mormon never purports to be and certainly is not a history of the American Indian. It does not claim to account for all the ancient inhabitants of Mesoamerica. In fact, the Book of Mormon scarcely touches upon the history of the Nephites who are its primary concern. (Jacob 3:13, Words of Mormon 1:5, Helaman 3:14, 3 Nephi 5:8) It deals briefly with the history of the kings descended from Jared, but what of the descendents of the brother of Jared or of any other tribal chieftain who may have migrated in one of the Jaredite barges? What of the Mulekites who never allied themselves with Mosiah in the land of Zarahemla? What of the Lamanites who do not happen to figure in any of the narratives recorded by the Nephite scribes? On all these counts the Book of Mormon is silent. It is not an inclusive history. That is not its intent. The Book of Mormon is the sacred record of a small group of people who lived in a very large and populous land.

Two common misconceptions need to be cleared up before one can appreciate the Book of Mormon in its historical setting. First is the notion that every person who was living in the Americas at the time of Columbus was a descendent of peoples mentioned in the Book of Mormon. Actually there were people inhabiting Mesoamerica before the Jaredites came and descendents of those natives were still inhabiting Mesoamerica after the final battle at Cumorah. The Nephite record only accounts for a portion of the people who anciently inhabited this land. Second, when the Book of Mormon talks of final battles and complete destructions, it refers to the end of specific civilizational traditions and not to the death of every individual who was a biological descendent of a given ancestral progenitor. After the final battle of the Nephites at Cumorah, for instance, there were still Nephites in the land. (Moroni 1:2) Nephite society and civilization came to an abrupt end and within a few generations any remaining Nephites would be absorbed into the mainstream of Mesoamerican life and lose their cultural identity, but not all biological Nephites perished

at Cumorah. The same was true of the collapse of Jaredite civilization at the Hill Ramah. A cultural tradition met its demise, but many individuals lived on to pass both biological and cultural elements to succeeding civilizations.

There is a model of the Book of Mormon historical setting that has gained wide acceptance among serious students of the text. It places the Book of Mormon in Mesoamerica during pre-classic and early classic times. It correlates the Isthmus of Tehuantepec with the narrow neck of land, the states of Oaxaca and Veracruz north to central Mexico with the land northward, and the states of Tabasco and Chiapas south to El Salvador with the land southward. Specific site locations are still tenuous, but most scholars of the Book of Mormon now embrace the hypothesis that the events recorded in the book occurred in central and southern Mesoamerica within a several hundred mile radius around the Isthmus of Tehuantepec. Assuming that this was the land of the Book of Mormon, many remarkable correlations follow.

The Jaredites correlate well with the civilization known to archaeologists as Olmec culture. The Olmecs flourished from the third millenium B.C., reaching their cultural apex shortly before 1000 B.C. Their civilization disintegrated between 600 and 550 B.C., just as the Mulekites were coming on the scene. The Olmecs inhabited the states of Guerrero, Puebla, Veracruz, Oaxaca and Tabasco although their trade and influence extended much further. This agrees nicely with the Book of Mormon description of the Jaredites primarily in the land northward.

The Mulekites landed on the Gulf coast of Mexico. They actually landed twice, moving inland the second time to settle the land of Zarahemla where they were eventually joined by the faithful Nephites under King Mosiah. Zarahemla correlates well with the state of Chiapas in southern Mexico. Some of the Mulekites were absorbed into Nephite society and figure in the Nephite record. Most of them were probably dispersed throughout Mesoamerica and therefore lost to the Nephite record keeping tradition.

The Nephites and Lamanites landed on the southern Pacific coast of Mesoamerica. The Lamanites rather quickly mixed with the Mesoamerican natives and formed a new hybrid culture. The Nephites were remarkably successful at maintaining their racial and cultural identity for nearly 1000 years. They benefitted from written records and a strong religious tradition. They began in the land of Nephi, probably highland Guatemala, and then migrated to Zarahemla somewhere in Chiapas. In the first century B.C. Nephite migrations into the land northward opened up that country to their civilizational influence. From the time of Christ to the end of the Mesoamerican pre-classic Nephites inhabited sizeable regions on both sides of the Isthmus of Tehuantepec. During the fourth century A.D., though, Lamanite aggression forced them further and further north until they capitulated in a bloody battle at Cumorah in southern Veracruz. This conflict ca. 385 A.D. marked the end of Nephite culture and promptly terminated their record keeping tradition.

CONCLUSIONS

The Book of Mormon describes three migrations of transplanted Near Eastern populations to Mesoamerica during pre-classic times. The Jaredites, Mulekites and Nephites/Lamanites were bearded. Each of these groups intruded on the Mesoamerican scene, dominated the existing peasants, and established themselves as the elite class with kings, formal governments and various degrees of empire. In time each of these civilizations collapsed and the survivors were gradually absorbed into the native population that had preceded them. Their impact though was lasting. Each of these Book of Mormon groups left a strong cultural influence that affected succeeding Mesoamerican civilizations. Each left survivors and deserters who perpetuated their genetic traits. The gene pool that had produced beards in pre-classic times was gradually diluted so by the time of the Spanish Conquest a wispy beard was atypical and a full beard was a rarity.

The following points are consistent between the Book of Mormon record as interpreted in the Mesoamerican model and the archaeological record of bearded figures as analyzed in this study.

1. The Book of Mormon describes large populations numbering in the hundreds of thousands and even in the millions. (Ether 15:2, Mormon 6: 10-15) The number of bearded figures discovered to date in Mesoamerica is large. A thorough study would produce bearded artifacts numbering in the thousands.

2. The Book of Mormon peoples eventually dispersed through all parts of Mesoamerica. The Jaredites, Mulekites, Nephites and Lamanites (specifically the biological Lamanites. The term "Lamanite" to the Nephites was all-inclusive similar to the term "gentile" in contemporary L.D.S. usage. Any non-Nephite was a Lamanite) eventually inhabited all of Mesoamerica from Central Mexico to El Salvador. They were not the sole inhabitants, but they were widely dispersed throughout the area. (Helaman 3:8) Bearded figures were well known in all parts of Mesoamerica anciently.

3. The extreme northern fringe of the Book of Mormon area was a land of large bodies of water and many rivers. (Helaman 3:4) It was an exceeding great distance from the center of Nephite population. Dissenters fled to this area to escape from justice and build personal empires. (3 Nephi 7:12) Nephite influence was limited here and communication was poor. (Alma 63:8) The Book of Mormon peoples were a minority in this part of the land and the Church was never as strong as it was in the south where Nephite population was more concentrated. (Helaman 7:1-3) Bearded figures appear much more frequently in central and southern Mesoamerica than they do in northern Mesoamerica (Michoacan, Mexico, Morelos and Tlaxcala north.) Central Mexico, this extreme northern area at an exceeding great distance from the major Nephite population centers, shows some bearded figures but they are not as frequent as they are in the area from Guerrero, Puebla and Veracruz south.

4. The central point of geographical reference in both Jaredite and Nephite times was the narrow neck of land dividing the Land Southward from the Land Northward. The Jaredites lived primarily north of this narrow neck. The Lamanites lived essentially south of it and the Nephites and Mulekites lived on both sides of it during Book of Mormon times. (Alma 22:32, Ether 10:19-21) The generally accepted Mesoamerican model of the Book of Mormon correlates this narrow neck with the Isthmus of Tehuantepec in southern Mexico. The geographical distribution of Mesoamerican bearded figures is quite even on both sides of the Isthmus. Approximately 50 percent of all bearded figures are found north of it and 50 percent originate south of the Isthmus.'

5. According to the Book of Mormon model, the greatest concentration of Book of Mormon peoples would have been in the regions of Guerrero, Puebla, Veracruz, Oaxaca, Tabasco, Chiapas and Guatemala. The density of bearded figures (in number per square kilometer) is greatest in Veracruz followed by Guatemala, Oaxaca and Tabasco. The density of bearded figures during pre-classic times (approximately equivalent to the Book of Mormon time period) was highest in Tabasco followed by Guatemala, Veracruz, Guerrero and Puebla in that order.

6. The Book of Mormon indicates that the Nephite civilization collapsed around 385 A.D., during the first century of the Mesoamerican classic era. That means that the highest concentration of Near Eastern genetic traits would have been during the pre-classic and those traits would have become more and more diluted within the Mesoamerican population as the classic era progressed. Bearded figures were much more frequent during the Mesoamerican pre-classic than they were during the later classic period. That trend continued until bearded figures were relatively rare during the post-classic.

7. Book of Mormon peoples inhabited large areas of Mesoamerica during the pre-classic and early classic periods. After Nephite society disintegrated it would likely have taken only a few hundred years for all surviving individuals to be thoroughly integrated into the native Mesoamerican population. Thereafter Near Eastern genetic traits would tend to appear only in isolated spotty areas where that process of mixture and intermarriage was less than complete. In fact, by post-classic times, the spatial distribution of Mesoamerican bearded figures had become tightly regionalized and limited to just a handful of areas.

8. The commonly accepted Mesoamerican model of the Book of Mormon places the people of that Book in virtually every part of Mesoamerica except the Yucatan peninsula. During the Mesoamerican pre-classic beards were found in every region except the Yucatan.

9. The Book of Mormon model locates the major Book of Mormon population centers in southern Mesoamerica. That is where the dilution of Near Eastern genetic traits would conceivably be the lowest. Big heavy full beards are found primarily in southern Mesoamerica.

10. This genetic dilution should be the lowest during the pre-classic. Big full beards were much more frequent during pre-classic times than they were during the later classic era.

11. When the Nephites were destroyed their cultural identity ceased and the process of biological assimilation into the native Mesoamerican population would logically have begun immediately. There is in fact a trend toward lighter beard growths during the classic era.

12. The Book of Mormon peoples established themselves as social elites in Mesoamerica. They had kings and formal governments, various social classes and a culture materially superior to that of the native Mesoamerican peasantry. Beards are closely associated with other symbols of high social rank everywhere in Mesoamerica.

13. During the Book of Mormon time period entire populations maintained their Near Eastern racial identity and resisted wholesale intermarriage with the native Mesoamericans. During this time when beards were a common natural occurrence one would expect to find beard portrayals reflecting more biological traits common to the population and fewer cultural characteristics bearing no relationship to natural biological traits. For instance, during Book of Mormon times one would expect to find fewer bearded elites since all members of the population, upper class and lower class, would be bearded. Beard portrayals during this early period would tend to more faithfully represent real physical traits in the population than they would during later periods when biological traits had become more obscure. Several phenomena support this proposition.

a) During the Mesoamerican pre-classic the percentage of bearded figures portrayed as old men was consistent with what one could reasonably expect to find in an actual biological population from antiquity. During the classic, though, this percentage jumped dramatically. Obviously by the classic era old age had become culturally associated with beards.

b) During the pre-classic elite class portrayals were much less frequent than during later periods. The beard/social position relationship obviously began to acquire more cultural significance during later time periods when the biological trait was less prevalent.

c) This association of beards with high social standing probably inaugurated the practice of wearing artificial beards. Artificial beards are almost exclusively found on figures representing elite class individuals.

d) There is a shift over time away from natural beard depictions and toward artificial beards.

e) During the Book of Mormon time period few bearded figures represent deities. During later periods, though, bearded deities become more and more frequent.

All of these trends through time (toward elite class portrayals, toward old men portrayals, toward artificial beards and toward bearded deities) point to a gradual shift away from natural biological traits depicted by the bearded figures. Purely cultural characteristics clearly became more significant during the later periods as the genetic ability to grow a beard became less common.

14. The Mesoamerican model of the Book of Mormon places it principally in southern and central Mesoamerica. Naturally rendered beards as a percentage of all beards were highest in Puebla, Chiapas, Campeche and the Olmec heartland.

15. Coming from an Israelite background, the Mulekites and Nephites/Lamanites would have attached a great deal of religious and cultural significance to beards. The various artistic styles represented in the catalogue indicate that beards had cultural significance in Mesoamerica as well.

Where then does all this put the Book of Mormon? Precisely where it has always been - in central and southern Mesoamerica during pre-classic and early classic times. The fit between the Book of Mormon model and the bearded figures is remarkable. In all this complex and at times convoluted analysis there is not a single glaring inconsistency with the picture described in the Book of Mormon. The archaeological data and the text correlate well on point after point. While this doesn't necessarily authenticate or document the Book of Mormon account, it does establish a setting into which the Nephite record seems to fit rather well.

NOTES

¹Encyclopaedia Britannica, 15th edition, 1978, volume 14,
article "Populations, Human."

²Doris Stone, "Synthesis of Lower Central American Ethnohistory,"
Handbook of Middle American Indians, volume 4, 1966, p. 223.

³Hooton, p. 137; Morley p. 23

BIBLIOGRAPHY

- Acosta, Jorge R., Tula, Official Guide, Mexico: 1968, Instituto Nacional de Antropología e Historia.
- Adams, Richard E. W., Prehistoric Mesoamerica, Boston: 1977, Little Brown and Company.
- Adamson, David G., The Ruins of Time, New York: 1975, Praeger Publishers.
- Anton, Ferdinand, Ancient Mexican Art, London: 1969, Thames and Hudson.
- Anton, Ferdinand and Dockstader, Frederick J., Pre-Columbian Art and Later Indian Tribal Arts, New York: n.d. Abrams Inc.
- L' Art Des Mayas Du Guatemala, n.p. (catalogue of a collection exhibited in five French cities 1967-1968.)
- Ashe, Geoffrey et. al., The Quest for America, London: 1971, Pall Mall Press.
- Bell, Betty, "Archaeology of Nayarit, Jalisco, and Colima," in HMAI, vol. 11, 1971.
- Bernal, Ignacio, 1969a, 100 Great Masterpieces of the Mexican National Museum of Anthropology, New York: Abrams Inc.
- 1969b, The Olmec World, Berkeley: University of California Press.
- Boos, Frank H., The Ceramic Sculptures of Ancient Oaxaca, New York: 1966, A.S. Barnes and Co.
- Bornegyi, Stephen F., "Rim-Head Vessels and Cone-Shaped Effigy Prongs of the Pre-Classic Period at Kaminaljuyu, Guatemala," CIW Notes on Middle American Archaeology and Ethnology #97, July 28, 1950.
- Burland, C.A. and Forman, Werner, Feathered Serpent and Smoking Mirror, New York: 1975, G.P. Putnam's Sons.
- Carmichael, Elizabeth, The British and the Maya, London: 1973, The British Museum.
- Codex Dresden, Schrift und Buchmalerei der Maya-Indianer, Leipzig: 1965, Im Insel Verlag.
- Codex Nuttall, The Codex Nuttall, New York: 1975, Dover Publications.
- Coe, Michael D., 1965, "The Olmec Style and its Distributions," in HMAI, vol. 3.
- 1966, The Maya, New York: 1966, Praeger Publishers.
- 1967, Mexico, Mexico: 1967, Ediciones Lara.
- Comas, Juan, "History of Physical Anthropology in Middle America," in HMAI, vol. 9, 1970.

- Cordan, Wolfgang, Secret of the Forest, Garden City: 1964, Doubleday.
- Davidson, Marshall B., et. al., The Horizon Book of Lost Worlds, New York: 1962, American Heritage Publishing.
- Easby, Elizabeth Kennedy and Scott, John F., Before Cortes, Sculpture of Middle America, New York: 1970, The Metropolitan Museum of Art.
- Encyclopaedia Britannica, 15th edition, 1978.
- Engel, Frederic Andre, An Ancient World Preserved, New York: 1976, Crown Publishers.
- Feldman, Lawrence H., "Bearded Gods in Mesoamerica and Peru," in The Masterkey, vol. 39, no. 4, (Oct.-Dec., 1965)
- Ferguson, Thomas Stuart, One Fold and One Shepherd, San Francisco: 1958, Books of California.
- Gallenkamp, Charles, Maya, The Riddle and Rediscovery of a Lost Civilization, New York: 1959, David McKay Co.
- Groth-Kimball, Irmgard, 1954, The Art of Ancient Mexico, London: Thames and Hudson.
- 1961, Mayan Terracottas, New York: Praeger.
- Habel, S., The Sculptures of Santa Lucia Cosumalwahuapa in Guatemala, Washington: 1878, Smithsonian Contributions to Knowledge no. 269.
- Heyerdahl, Thor, American Indians in the Pacific, London: 1952, George Allen and Unwin Ltd.
- Honore, Pierre, In Quest of the White God, London: 1963, Hutchinson of London.
- Hooton, E. A., "Racial Types in America and their Relation to Old World Types," in The American Aborigenes, Diamond Jenness editor, New York: 1972, Russell and Russell.
- Hunter, C. Bruce, A Guide to Ancient Maya Ruins, Norman: 1974, University of Oklahoma Press.
- Hunter, Milton R., Archaeology and the Book of Mormon, Salt Lake: 1956, Deseret Book Co.
- 1959, Christ in Ancient America, Salt Lake: Deseret Book.
- 1970, Great Civilizations and the Book of Mormon, Salt Lake: Bookcraft Inc.
- Hunter, Milton R. and Ferguson, Thomas Stuart, Ancient America and the Book of Mormon, Oakland: 1950, Kolob Book Co.
- Irwin, Constance, Fair Gods and Stone Faces, New York: 1963, St. Martin's Press.
- Jakeman, M. Wells, Discovering the Past, Provo: 1954, University Archaeological Society.

- Kay, Jane H., "The Newest Ancient Art," in Americas, vol. 23, nos. 6,7, (June - July, 1971)
- Kelemen, Pal, 1969a, Art of the Americas, Ancient and Hispanic, New York: Thomas Y. Crowell Co.
- 1969b, Medieval American Art, 2 vols., 3rd revised edition, New York: Dover Publications.
- Kidder, Alfred V., et. al., Excavations at Kaminaljuyu, Guatemala, Washington: 1946, CIW Publication 561.
- Kosok, Paul, Life, Land and Water in Ancient Peru, New York: 1965, Long Island University Press.
- Lapiner, Alan, Pre-Columbian Art of South America, New York: 1976, Abrams Inc.
- Leicht, Hermann, Pre-Inca Art and Culture, New York: 1960, The Orion Press.
- Leigh, Howard, "Head Shrinking in Ancient Mexico," in Science of Man, vol. 2, no. 1, (Dec., 1961)
- Longyear, John M. III, Copan Ceramics, Washington: 1952, CIW Publication 597.
- Lothrop, Samuel K., 1936, Zacualpa, a Study of Ancient Quiche Artifacts, Washington: CIW Publication 472.
- 1957, Robert Woods Bliss Collection, Pre-Columbian Art, London: Phaidon Publishers.
- 1964, Treasures of Ancient America, Geneva: Editions d'Art Albert Skira.
- Miles, S. W., "Sculpture of the Guatemala-Chiapas Highlands and Pacific Slopes, and Associated Hieroglyphs," in HMAI, vol. 2, 1965.
- Morley, Sylvanus G., The Ancient Maya, third edition, revised by George W. Brainerd, Stanford: 1968, Stanford University Press.
- Museo Nacional de Antropologia, numeros 66, 67 of Artes de Mexico, 8th edition, 1965.
- Navarrete, Carlos, The Olmec Rock Carvings at Pijijiapan, Chiapas, Mexico and other Olmec Pieces from Chiapas and Guatemala, Provo: 1974, NWAf Paper 35.
- Nicholson, Henry B., "Major Sculpture in Pre-Hispanic Central Mexico," in HMAI, vol. 10, 1971.
- Nicholson, Irene, Mexican and Central American Mythology, London: 1967, Paul Hamlyn.
- Norman, V. Garth, Izapa Sculpture, Part 1: Album, Provo: 1973, NWAf Paper 30.

- Norman, V. Garth, Izapa Sculpture, Part 2: Text, Provo: 1976, NWAFF Paper 30.
- Pina Chan, Roman, Historia, Arqueologia y Arte Prehispanico, Mexico: 1972, Fondo de Cultura Economica.
- Rands, Robert L. and Rands, Barbara C., "Pottery Figurines of the Maya Lowlands," in HMAI, vol. 2, 1965.
- Rands, Robert L., and Smith, Robert E., "Pottery of the Guatemalan Highlands," in HMAI, vol. 2, 1965.
- Reed, Alma M., The Ancient Past of Mexico, New York: 1966, Crown Publishers.
- Robicsek, Francis, Copan, Home of the Mayan Gods, New York: 1972, The Museum of the American Indian Heye Foundation.
- Rojas, Pedro, The Art and Architecture of Mexico, Feltham, Middlesex: 1968, Paul Hamlyn.
- Rozaire, Charles E., Ancient Civilizations of Latin America, Los Angeles: 1966, Los Angeles County Museum of Natural History.
- Ruz, Alberto, 1959, Uxmal, Official Guide, Mexico: Instituto Nacional de Antropologia e Historia.
1960, Palenque, Official Guide, Mexico: Instituto Nacional de Antropologia e Historia.
- Sawyer, Alan R., Ancient Peruvian Ceramics, The Nathan Cummings Collection, New York: 1966, The Metropolitan Museum of Art.
- Seler, Eduard, Gesammelte Abhandlungen Zur Amerikanischen Sprach- und Altertumskunde, 5 vols., Graz: 1960 - 1962, Akademische Druck - U. Verlagsanstalt.
- Smith, Bradley, Mexico, a History in Art, New York: 1968, Harper and Row.
- Soustelle, Jacques, L'Art Du Mexique Ancien, Paris: 1966, Arthaud.
- Spinden, Herbert J., 1917, Ancient Civilizations of Mexico and Central America, New York: American Museum of Natural History.
1957, Maya Art and Civilization, Indian Hills, Colorado: The Falcon's Wing Press.
- Stephens, John L., Incidents of Travel in Central America, Chiapas and Yucatan, 2 vols., New York: 1969, Dover Publications.
- Stirling, Matthew W., Indians of the Americas, Washington: 1955, The National Geographic Society.
- Stuart, George E., and Stuart, Gene S., The Mysterious Maya, Washington: 1977, The National Geographic Society.

J. Eric S. Thompson, 1963a, Maya Archaeologist, Norman: University of Oklahoma Press.

1963b, "The Gods That Failed," in Vanished Civilizations of the Ancient World, Edward Bacon editor, London: McGraw Hill Book Co.

1966, The Rise and Fall of Maya Civilization, 2nd edition, Norman: University of Oklahoma Press.

Vaillant, George C., "A Bearded Mystery," in Natural History, Vol. 31, no. 3, (May - June, 1931)

Webster, Edna Robb, Early Exploring in the Lands of the Maya, Sherman Oaks, California: 1973, Wilmar Publishers.

Westheim, Paul, Ideas Fundamentales del Arte Prehispanico en Mexico, Mexico: 1957, Fondo de Cultura Economica.

Whitecotton, Joseph W., The Zapotecs, Princes, Priests and Peasants, Norman: 1977, University of Oklahoma Press.

Willey, Gordon R., 1966, An Introduction to American Archaeology Vol. 1, North and Middle America, Englewood Cliffs: Prentice Hall.

1971, An Introduction to American Archaeology Vol. 2, South America, Englewood Cliffs: Prentice Hall.

Wuthenau, Alexander von, 1969, The Art of Terracotta Pottery in Pre-Columbian Central and South America, New York: Crown Publishers.

1975, Unexpected Faces in Ancient America, New York: Crown Publishers.