

# PREHISTORIC TRADE ROUTES BETWEEN MESOAMERICA AND THE AMERICAN SOUTHWEST: A TENTATIVE ASSESSMENT

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There are many indications that cultural traits, both material and nonmaterial, were introduced into the American Southwest during prehistoric times. As these items coincide rather remarkably with traits found in Mexico, group lines of movement or trade routes are presumed to have existed during the prehistoric. This paper presents a tentative assessment of these early routes.

In analyzing this question, three general possibilities will be investigated. The first is the West Coast Route, following the Gulf of California coastal lowlands<sup>1</sup> into Sonora, then turning due north with the grain of the topography to enter what is now southeastern Arizona. The second possibility is to follow the grain of the topography within the Sierra Madre Occidental all the way into southeastern Arizona, following the north-south sections of the stream valleys. The last possibility is the route at the eastern base of the Sierra Madre Occidental, coinciding with the western margins of the interior basins. These three routes will be referred to as the western, central and eastern routes, as they are depicted in Figure 1.

## PHYSICAL GEOGRAPHY OF THE THREE ROUTES

Because of the primitive nature of the travel, by foot traffic, all three of the routes appear to be acceptable as possible on the basis of physical geography. Considering primitive foot travel for the American Southwest, Colton<sup>2</sup> postulated that the Indian routes tended to follow the rivers. In basin and range country the routes followed water resources available in the ranges, which in this area average about twelve miles apart. Also referring to Indian travel, Sauer<sup>3</sup> correlated travel with terrain, the need for food and drink, reasonable security, and the previous long-term experience. It is in these terms that the possibilities of three routes will be discussed.

The western route, generally following the edge of the coastal plain that merges with the basin and range, is inland from the swampy coastal spots. Along this route, the ranges are aligned north to south and thus were no barrier to foot traffic. The savanna climates in the south and the steppe and desert climates in the north yielded adequate sources of water even during the drier winters. The higher adjacent terrain provided the necessary watershed for the Culiacan, Sinaloa, Fuerte, Mayo, Yaqui and Sonora

<sup>1</sup> The coastal lowlands will include the coastal plain and the strip of basin and range topography adjacent to it.

<sup>2</sup> Harold S. Colton, "Prehistoric Trade Routes in the Southwest," *Scientific Monthly*, Vol. 52 (1941), pp. 308-319.

<sup>3</sup> Carl O. Sauer, "The Road to Cibola," *Ibero Americana*, Vol. 3 (1932), p. 1.

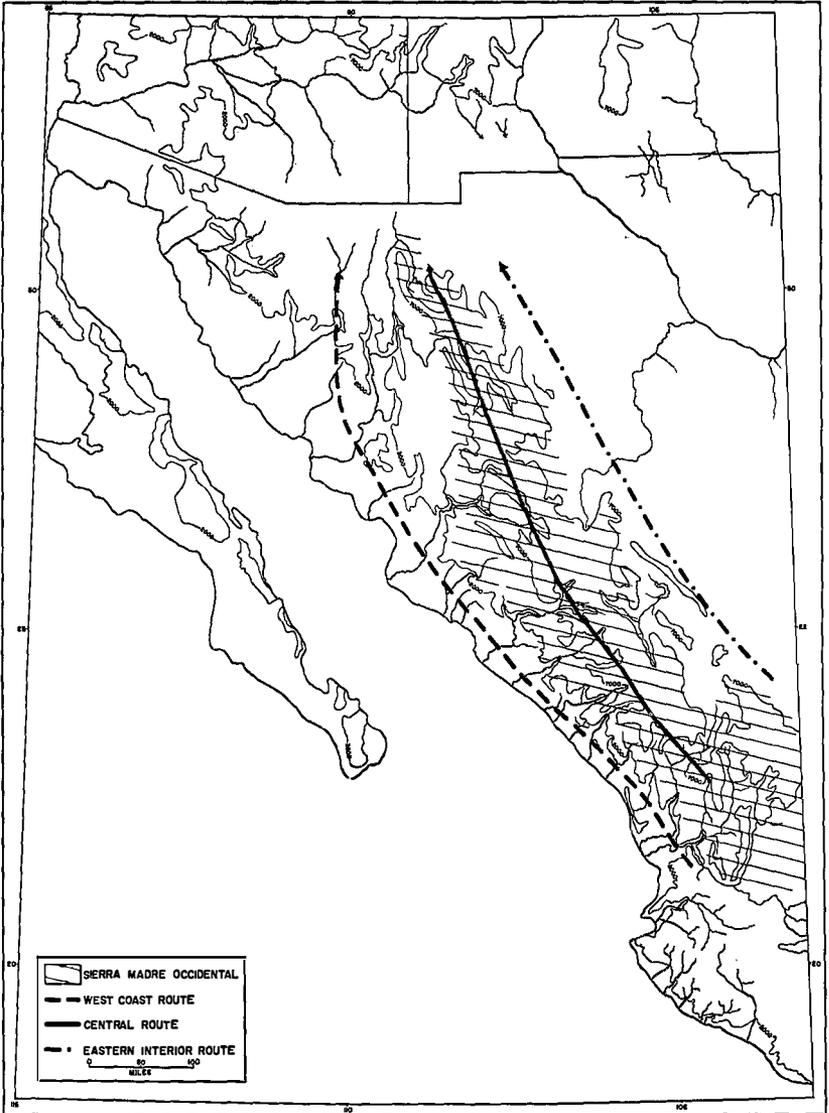


Figure 1. Postulated Trade Routes Between Mesoamerica and the Southwestern United States.

Rivers. Vegetation was generally of monte or scrub thickening to the south and merging into more xerophytic types in the north. The route veers inland where it was associated rather closely with the interfingering oak-grass and steppe vegetation. Both Sauer<sup>4</sup> and Carter<sup>5</sup> concluded that the natural requisites for travel were present here. As to seasonal differences, neither the winter dry season with occasional cyclonic precipitation nor the summer wet season with accompanying flooding are severe enough to prohibit traffic.

The central route covers a rather wide band. It could include the baranca country west of the divide, the crest line of the sierras generally following the divide, or the less rough area east of the divide. One problem is that the divide area has been cut from west to east, so that the quebradas actually infringe on the area east of the divide. As will be shown in the discussion of the eastern route, these two could be construed to mean the same route. Regardless of the exact alignment of this postulated route, it was cooler and wetter, consisting of patchy forests of pine, open grassy areas, and belts of oaks. Here also the gross patterns of the topography are aligned northwest to southeast. Major segments of the streams flow north and south for moderate distances before emerging from the escarpment zone to flow west toward the coast. This terrain analysis led Lister<sup>6</sup> to report that despite the present position of the Sierra Madre as a barrier to east-west travel, the chain is gashed by a series of north-south canyons. "Modern-day Indians move freely through the sierras on foot, avoiding both the humid coastal plain and the sere central plateau. It seemed highly possible, therefore, that in prehistoric days the well-watered elevated mountains would have provided a corridor rather than a blockade for movements of indigenes."<sup>7</sup> A recent appraisal was the group consensus reported by Nicholson,<sup>8</sup> which concluded that "the Sierra Madre Occidental by no means constituted a cultural barrier; the eastern slope region probably served as a major corridor of communication between Mesoamerica and areas to the north, along which axis moved raw materials, finished products, ideas, and perhaps groups of people."<sup>9</sup>

The eastern route was somewhat similar to the western in that terrain was generally built on Quaternary sediments, resulting mainly in smooth slopes between the localized rough pass areas. These passes within the basin and range are not difficult to travel, and the large stretches between the passes are easy to negotiate. Once again watersheds were present in the Sierra Madre, providing the sources for the eastward flowing streams like the Nazas, Conehos, Santa Maria and Casas Grandes. These streams

<sup>4</sup> *Ibid.*

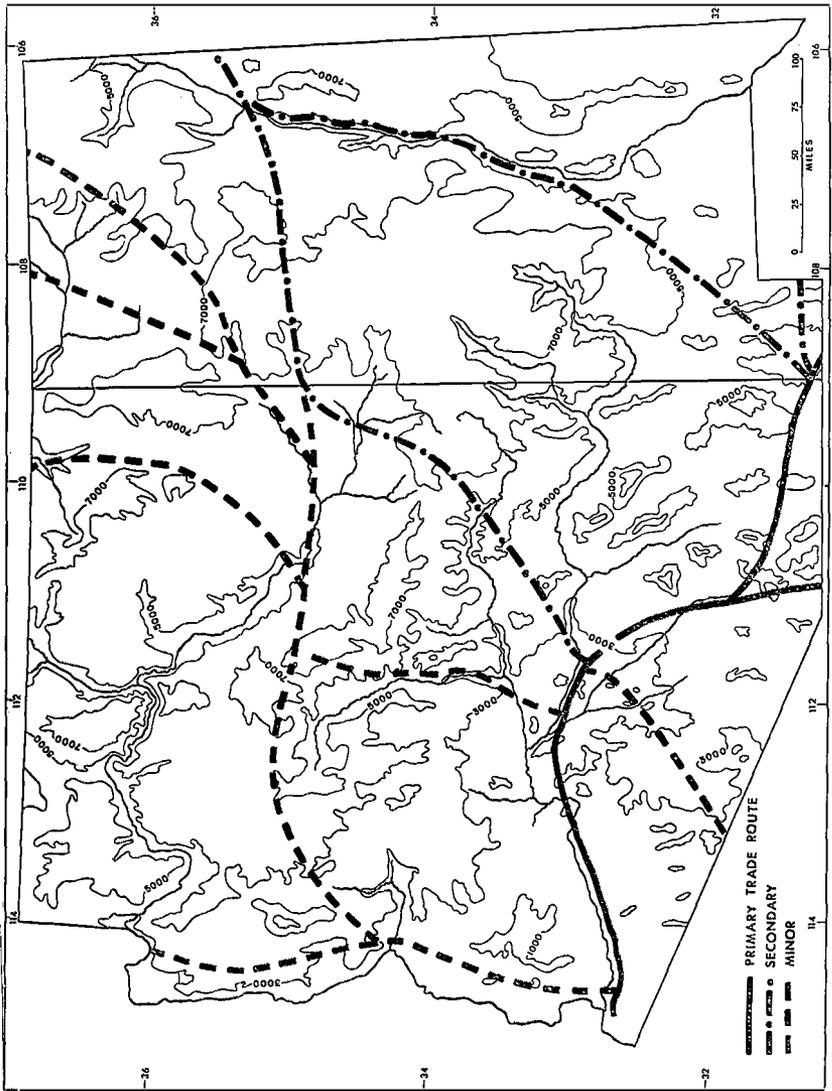
<sup>5</sup> George F. Carter, "Plant Geography and Cultural History in the American Southwest," *Viking Fund Publication in Geography Number Five*, New York (1945), pp. 105-108.

<sup>6</sup> Robert C. Lister, "Plugging the Cultural Gap," *Desert*, Vol. 23, No. 12, (December, 1960), pp. 8-11.

<sup>7</sup> *Ibid.*

<sup>8</sup> H. B. Nicholson, "Notes and News, Middle America," *American Antiquity*, Vol. 27, No. 4 (1962), pp. 617-624.

<sup>9</sup> *Ibid.*, p. 618.



fluctuated between the flood periods of summer and the occasional high water of winter following the passage of cyclonic storms. The vegetation was generally steppe in the middle elevations, desert in the lower parts of basins, and oak woodlands on the margins of the sierras. The route today presents no serious physical barrier.

On the basis of physical geography, a comparison of the three routes outlined above with aboriginal routes in the Southwest might help in determining the best possible routes. Brand<sup>10</sup> made a map of aboriginal routes based on the presence of shells, given here as Figure 2. In trying to correlate the shell routes with the physical environment, one can ascertain a general pattern to the one previously outlined by Colton.<sup>11</sup> On Figure 2, one of the major routes is between the Pacific coast and the confluence of the Gila and Salt Rivers. The section between the Colorado River and Phoenix follows the Gila, and beyond Phoenix it follows the Santa Cruz. These river transport lines correlate with Colton's water course routes. After leaving the Santa Cruz, this route crosses the high undissected basin and range country north of the Sierra Madre Occidental. This route roughly parallels the present international border as far as the Casas Grandes area of Chihuahua. It is similar in pattern to Colton's "range-to-range" routes. Another conclusion possible from the map is that the aboriginal peoples evidently traveled just about everywhere, even in deserts and extremely rough land. The suggestion is that a wide variety of physical landscapes could be coped with.

#### HISTORICAL SOURCES FOR THE ROUTES

Another means of probing for aboriginal trade routes is to investigate the routes taken by the Europeans at the time of contact. Sauer<sup>12</sup> noted that footpaths and packtrails rarely differ, and that the explorers followed main trails established by generations of Indian travel. Perhaps if the established routes of the Spanish could be found, some correlation with routes two centuries earlier could be established.

The first recorded travel between what is now the American Southwest and the Mesoamerican region was that of Cabeza de Vaca. Sauer,<sup>13</sup> as indicated on Figure 3, has traced this journey across the area in question. From the confluence of the Rio Grande and the Conchos River, the route starts on the great detour north rather than proceeding down the eastern route through the interior bolsons. The route enters Arizona in the San Simon Valley, crosses by the spring in Apache Pass, continues southward through the Sulphur Springs Valley and enters Mexico at Douglas. The connection with the Camino Real from Douglas is at Corazones II via Fronteras. Krieger<sup>14</sup> has recently revised the northern part of this route.

<sup>10</sup> Donald Brand, "Aboriginal Trade Routes of Sea Shells in the Southwest," *Yearbook of the Association of Pacific Coast Geographers*, Vol. 4 (1938), pp. 3-10.

<sup>11</sup> Harold S. Colton, "Prehistoric Trades Routes of the Southwest," *op. cit.*, p. 318.

<sup>12</sup> Carl O. Sauer, "The Road to Cibola," *op. cit.*, p. 1.

<sup>13</sup> *Ibid.*

<sup>14</sup> Alex D. Krieger, "The Travels of Alvar Nuñez Cabeza de Vaca in Texas and Mexico, 1534-1536" in *Instituto Nacional de Antropología e Historia, Homenaje a Pablo Martínez del Río* (1961), pp. 459-474.

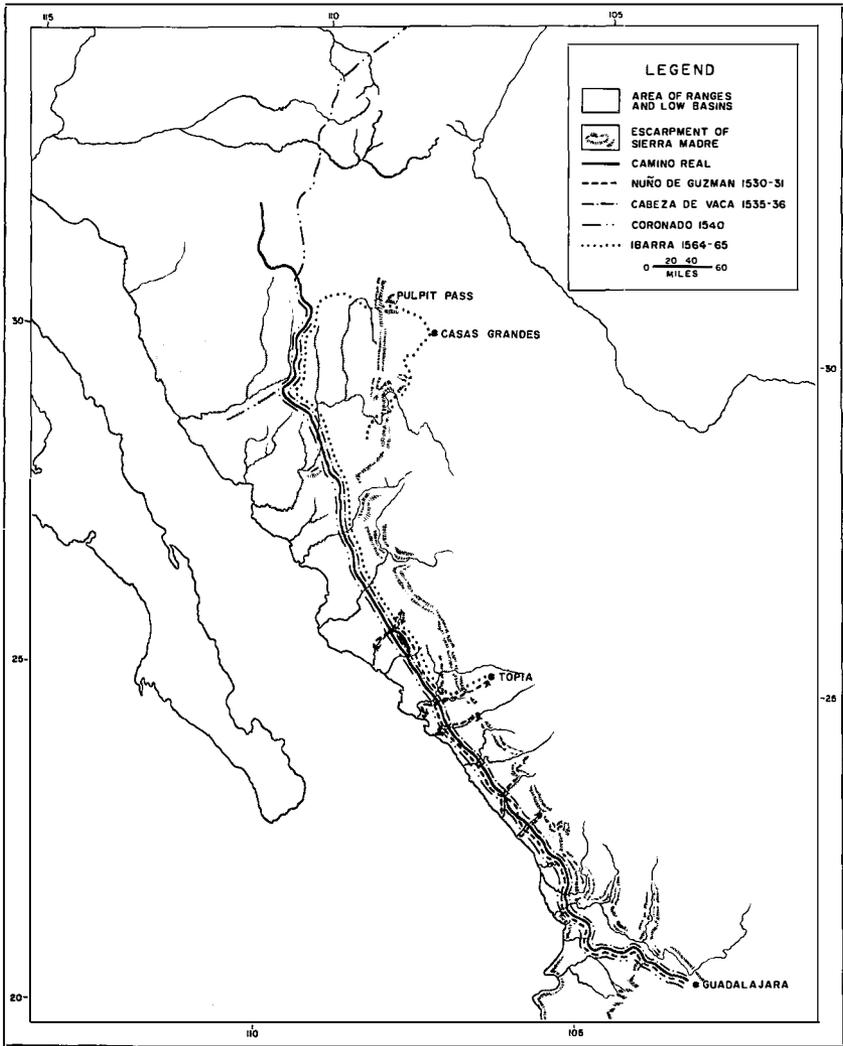


Figure 3. The Western Corridor (Source: Carl O. Sauer, "The Road to Cibola," *Ibero Americana*, Vol. 3, 1932).

Rather than having it pass into New Mexico and Arizona, he favors a route through northern Mexico passing perhaps through Casas Grandes, but north of the Sierra Madre.<sup>15</sup>

The route of the Camino Real down the west coast was the established colonial route that linked the Southwest with Mexico. In the sixteenth century it was used by Fray Marcos, Coronado, and Ibarra. The outline of this route is not only based on the positive acts of the explorers coming up from Mexico, but also on the fact that if alternate routes were readily available to the east, it seems likely that Cabeza de Vaca would surely have chosen them as he had approached from that direction.

For a more comprehensive picture of the routes taken during historical times, Figure 4 is presented as a summary of the colonial routes. Two patterns of note are present. The routes within Arizona are east-west, across northern Arizona through the Hopi villages and through southern Arizona along the Gila and its tributaries. The north-south routes along the Rio Grande and along the international border follow the structural alignment of the basins and ranges. These two patterns form a knot in the Hohokam country, where the east-west and north-south routes intermingle. Further observation of the map reveals that the Conchos-Rio Grande route came later in the sixteenth century (Espejo 1583, Onate 1598). It was in a sense exploration over "new" territory in search of possible colonization and mining sites, rather than in seeking dense populations that might already have acquired mineral wealth. Despite this kind of exploration, the predominant role of modern Pueblos, (Zuni, Rio Grande and Hopi villages) indicates the importance of previously settled areas in establishing the routes of travel. Terrain, the need for food and drink, and existing patterns were of utmost importance across the intervening areas.

According to West,<sup>16</sup> the main line of travel during the colonial period east of the sierra went north from Mexico through Durango. Extensions from this main route went north into New Mexico, west to the coast, and east into the basin floors, all as secondary lines of travel. This main road was harassed by Indian raids and sometimes floods, but grass and water for livestock and people were plentiful.

West also delimited the east-west lines of travel that connect the eastern and western routes. North of the main route through Guadalajara was the Topia Road,<sup>17</sup> connecting the plateau with Sinaloa. This significant road was used in the sixteenth century, and by inference probably had been an Indian line of travel, despite its rugged route. The last east-west route, through Pulpit Pass, connected the plateau with Sonora via the northern end of the Sierra Madre Occidental. This was also used in the sixteenth century, and it follows somewhat the east-west flow of traffic shown by Brand<sup>18</sup> for aboriginal routes in the Southwest.

<sup>15</sup> *Ibid*, p. 463.

<sup>16</sup> Robert C. West, "The Mining Community in Northern New Spain: The Parral Mining District," *Ibero Americana*, Vol. 30 (1949).

<sup>17</sup> R. C. West and J. J. Parsons, "The Topia Road: A Trans-Sierran Trail of Colonial Mexico," *Geographical Review*, Vol. XXXI (1941), pp. 406-413.

<sup>18</sup> Donald Brand, *op. cit.*



On the basis of historical evidence at the time of contact, it seems that the western route, veering inland through Sonora, was the main line of traffic between Arizona and Mesoamerica during the sixteenth century. Other routes, like the postulated eastern route and the two or three routes crossing the sierra, were also present. They were probably present for some extended period prior to contact.

#### LINGUISTIC CONSIDERATIONS

Kroeber<sup>19</sup> recently stated that linguistic considerations might be important in linking the Southwest with Mexico, depending on whether or not the present Pima and Papago of southern Arizona are descendants of the Hohokam. To use Kroeber's words,

"If the Hohokam<sup>4</sup> culture was replaced by Pima and Papago culture, particularly if it turned into it, the fact that these two tribes today possess rather close linguistic relatives as far south in Mexico as Durango and Jalisco is almost certain to have relevance to Hohokam history, either at its beginning or its end."<sup>20</sup>

one finds it possible to link these two areas by any one of the three postulated routes.

Taylor<sup>21</sup> has also made recent studies of language as a tie between the two areas. One of his conclusions was that the highlanders could very easily have passed cultural influences back and forth between the high cultures of the Southwest and Mesoamerica. As to the meaning of highlanders, this may not be a restrictive term in relation to the three routes.

#### ARCHAEOLOGICAL CONSIDERATIONS

Although the eastern route has long been mentioned as a vague line of trade,<sup>22</sup> very little has been done to archaeologically pinpoint the route until recent years. Lister<sup>23</sup> accepted the possibility of the eastern route but rejected it owing to lack of evidence. Pendergast<sup>24</sup> found the northern portion of this route feasible, although he gave it secondary importance. Ferdon<sup>25</sup> perhaps was the main advocate of a Central Mexican-Southwestern route after 1050 A.D. His evidence came from architectural traits that he traced into the Southwest via Zacatecas and Durango. The exact route was not traced, but the implication was that the most direct one would be the eastern one.

<sup>19</sup> A. L. Kroeber, *A Roster of Civilizations and Culture*, (Chicago: Aldine Publishing Co., 1962).

<sup>20</sup> *Ibid.*

<sup>21</sup> Walter W. Taylor, "Archaeology and Language in Western North America," *American Antiquity*, Vol. 27 (1961), pp. 71-81.

<sup>22</sup> Donald Brand, et al., *Tseh Ho, A Small House in Ruin*, (Albuquerque: University of New Mexico Press, 1937), p. 57, mention that copper as a general supposition is traded into the Southwest from the south, possibly from Durango or Zacatecas.

<sup>23</sup> Robert H. Lister and A. N. Howard, *op. cit.*, p. 129.

<sup>24</sup> David M. Pendergast, "Metal Artifacts in Prehispanic Mesoamerica," *American Antiquity*, Vol. 27, No. 4 (1962), pp. 520-545.

<sup>25</sup> Edwin N. Ferdon, "A Trial Survey of Mexican-Southwestern Architectural Parallels," *Monograph of the School of American Research*, No. 27 (1955).

For over a decade, Lister<sup>26</sup> advocated the central route through the Sierra Madre Occidental. He was led to this conclusion partly on negative evidence from both the west coast (because of Sonora) and the plateau. Archaeologically, he postulated three waves of influence passing through the mountain corridor. The first was that of agricultural techniques based on corn. The earliest corn of Bat Cave in New Mexico and other highland strains seems to strengthen this assumption. The second wave was based on pottery, presumably coming into the Southwest at about 1 A.D.<sup>27</sup> The third wave, beginning in the tenth and eleventh centuries, includes most of the items listed in Table 1. Lister<sup>28</sup> has been doing field work in the moun-

**TABLE 1**  
**ITEMS POSSIBLY LINKING MEXICO AND THE AMERICAN SOUTHWEST**

Item
1. Architecture — adobe cell construction, compounds, house mounds, square gallery fronts, temple structures, towers.
2. Ball Courts.
3. Burial Patterns, urns and pit cremations.
4. Canal Irrigation.
5. Clay, dippers and figurines.
6. Corn.
7. Macaw-Parrots.
8. Potters — animal jars, baking griddles, band designs, basket handles, bossed decoration, effigy vessels, footed pots, pictorial elements, repeated designs, ticked lines.
9. Religion.
10. Shell Artifacts.
11. Stone Artifacts — crescents, crosses, figurines, mano and metate shapes, mosaics, nose plugs, pendants, three-quarter axes.
12. Textiles — cotton and loom, gauze weave, spindle whorls.
13. Turquoise mosaics.

tain area to find the evidence. Nicholson<sup>29</sup> reports that the consensus now is that the Sierra Madre was no cultural barrier, and that the eastern slope of the mountains may have been a corridor.

The west coast route has been most recently advocated by Meighan<sup>30</sup> and Pendergast,<sup>31</sup> primarily on the basis of metalworking at Amapa, Nayarit. The specific evidence is the typology of the bells, mentioned as being similar in type and earlier in time than those from either the Southwest or

<sup>26</sup> Robert H. Lister, "The History of Archaeologic Field Work in Northwest Mexico," *El Palacio*, Vol. 67, No. 4 (1960), p. 21.

<sup>27</sup> Gordon R. Willey, "Developments in the Archaeology of Nuclear America, 1935-1960," *American Antiquity*, Vol. 27, No. 1 (1961), p. 49, notes that the missing link between red on buff pottery in the Valley of Mexico and the Hohokam area is presumed to lie on a pre-Chalchihuites horizon in northern Mexico.

<sup>28</sup> Robert H. Lister, "Plugging the Cultural Gap," *Desert*, Vol. 23, No. 12 (1960), pp. 8-11.

<sup>29</sup> H. B. Nicholson, *op. cit.*

<sup>30</sup> Clement W. Meighan, "Prehistoric Copper Objects from Western Mexico," *Science*, Vol. 131, No. 3412 (1960), p. 1534.

<sup>31</sup> David W. Pendergast, *op. cit.*

northern Mexico. Ferdon<sup>32</sup> has also recognized a west coast corridor, but the evidence led him to believe that the western route had its main importance in the period prior to 1050 A.D. Root<sup>23</sup> suggested the western route not only on the typology of bells in the two areas, but also on the basis of impurity similarities in the metals used for casting. Meighan<sup>34</sup> lists many items that are found along the west coast of Mexico, such as ball courts, construction types, shell bracelets, pottery, and many types of stone artifacts. Kelley<sup>35</sup> also concluded that Mesoamerican influence spread to the classic Hohokam via Sinaloa rather than through the Chalchihuites.

All three routes discussed appear as possibilities for prehistoric utilization, but the importance of the east-west line of travel north of the Sierra Madre Occidental cannot be overemphasized. As part of a tentative assessment, it may be the northern counterpart of the east-west movement across the volcanic belt in the densely populated area of Mesoamerica.

<sup>32</sup> Edwin N. Ferdon, *op. cit.*

<sup>33</sup> W. C. Roots, in James B. Griffin (ed.), "Essays on Archaeologic Methods," *Anthropological Papers, Museum of Anthropology, University of Michigan*, No. 8 (1951).

<sup>34</sup> Clement W. Meighan, "New Findings in West Mexican Archaeology," *Kiva*, Vol. 25, No. 1 (1959), pp. 1-7.

<sup>35</sup> J. Charles Kelley, "North Mexico and the Correlation of Mesoamerican and outwestern Cultural Sequences," in Wallace, Anthony F. (ed.), *Men and Cultures* Philadelphia: University of Pennsylvania Press, 1960), p. 571.