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A MODEL FOR THE DIFFUSION OF THE SHAFT TOMB COMPLEX
FROM SOUTH AMERICA TO WEST MEXICO

by

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Shaft tombs, or more correctly, deep-shaft-and-chamber tombs, are a distinctive form of funerary architecture in the New World. They are found archeologically throughout northwestern South America and in a small region of West Mexico, and were used well into the twentieth century for burial in some parts of Colombia and Ecuador. Close similarities in form between the shaft tombs of West Mexico and those of South America have been noted for quite some time in the literature, but most authors have gone no further than to suggest some form of pre-Columbian diffusion between the two areas. In keeping with the general aims of this volume, this article will attempt to move beyond simple comparison of traits and to suggest a plausible mechanism which could account for the great similarity of shaft tombs in these two regions.¹

I. THE SHAFT TOMB COMPLEX

In order to understand the full significance of shaft tombs for the problem of prehistoric contacts between Mesoamerica and South America, it is necessary to look beyond the simple description and distribution of the tombs. Specifically, we must consider certain features associated with the tombs as well as what we can reconstruct of the ideological and religious significance of the tombs. Only then can we begin to make sense of the observed geographical distribution of shaft tombs. Therefore, before turning to the distributional data, the physical and ideological components of what I am calling the "shaft tomb complex" will be discussed. This complex includes all known New World shaft tombs.

The two basic defining characteristics of a shaft tomb are the deep vertical shaft and the burial chamber located to one side of the shaft. Figure 1 illustrates a typical shaft tomb. The shaft may be anywhere from 17 meters (Restrepo Tirado 1929:93) to two meters deep, with the majority falling between two and ten meters (Long 1966:109). The chamber may vary from a small niche to a large cavern-like room several meters across. There are often two or more chambers associated with a single shaft. For a consideration of the range of variability of these two basic features the reader is referred to the typologies of Long (1967), Restrepo Tirado (1929; Cf. Seler 1961), and Matos Mendieta (1965/66). As these and the other sources reveal, the close correspondences in form between the West Mexican and the South American tombs are obvious. The typical form occurs extensively in both regions, as do several minor variations (tombs with more than one chamber; square and circular shafts; chambers not level with the floor of the shaft, etc.). The two areas cannot be distinguished in terms of tomb-form or size.

A third characteristic of shaft tombs that is repeatedly mentioned in the literature is their placement on hilltops, small natural rises, or artificial mounds. This topographic placement is quite widespread in both South America and West Mexico.² The fourth and final physical attribute of the shaft tomb complex is the existence of relatively narrow vertical shafts running parallel to the main shaft, connecting the burial chamber with the ground surface above (the bottom of one of these is shown in Figure 1). Furst (1966:69ff) calls these tubes claraboyas, and notes their wide occurrence in West Mexican shaft tomb cemeteries (ibid.). These features are also commonly associated with South American shaft tombs, both archaeologically (e.g. Colombia: Wassén 1936:51; Ecuador: Marcos 1973: fig. 4; Peru: Matos M. 1965/66:115) and ethnohistorically (Zuidema, this volume).

Zuidema (this volume) provides us with an interpretation of the meaning of claraboyas in the context of Inca shaft tombs from Peru; it is probably reasonable to project this interpretation back in time to cover the archaeological shaft tombs. Furst interpreted the West Mexican claraboyas similarly, linking them to

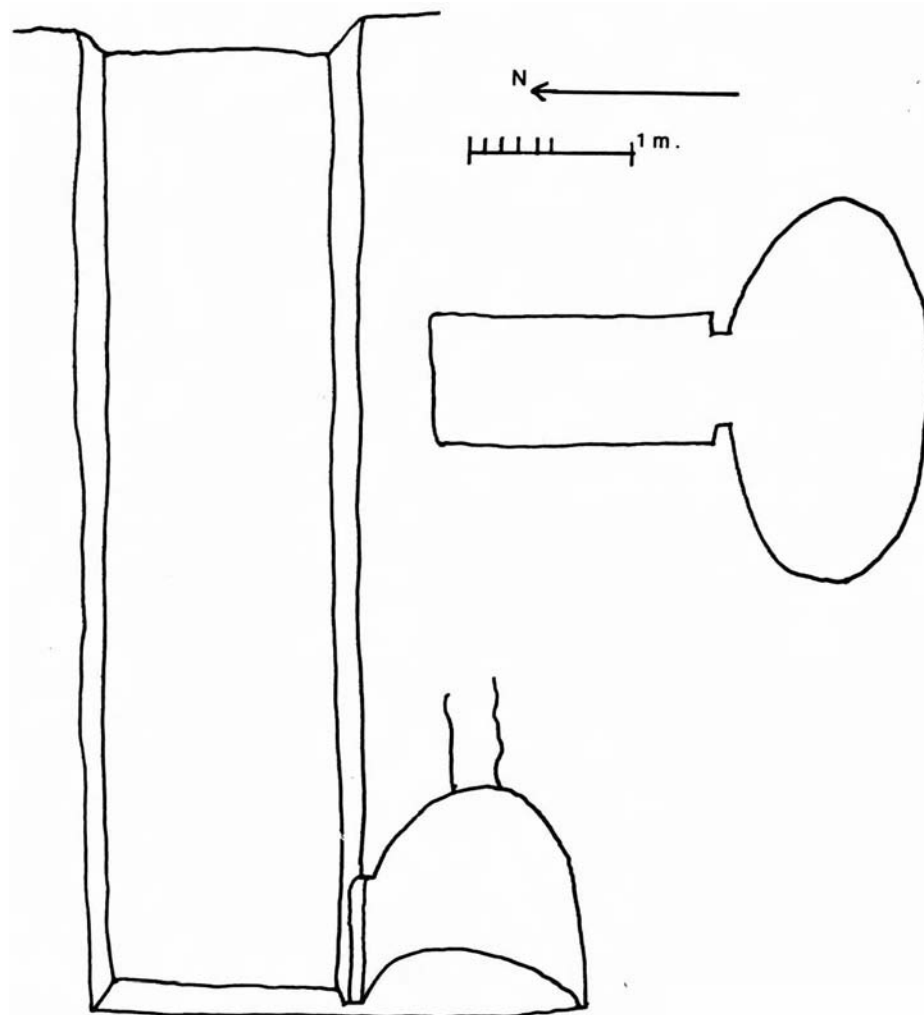


FIGURE 1. Typical Shaft Tomb: tomb II at El Dorado, Colombia (after Wassén 1936: 51).

. . . a belief in the continued material existence of the deceased, from which follows the idea of communication and interchange between the living and the dead at the graveside or elsewhere (Furst 1966:273).

It is perhaps significant that Furst was presumably unaware of the Peruvian ethnohistorical data when he wrote the above. As for the topographic placement of the tombs on small hills, we have no direct evidence bearing upon its meaning. Furst suggests that this feature relates to a pattern of ancestor veneration combined with the numinous qualities of hilltops in general (1966: 68).

The four physical traits discussed above (deep vertical shafts; chamber(s) off the side; claraboyas; hilltop placement) are consistently associated with one another in both South America and West Mexico and provide the justification for speaking of a pan-New World shaft tomb complex. Support for this concept is provided when the ideological associations of shaft tombs are considered. Because of basic limitations on the nature of the evidence (archaeological in West Mexico; archaeological and limited ethnohistorical in South America), we of course cannot hope to fully reconstruct the entire cultural milieu of the tombs. However, detailed study of the elaborate figurines found in West Mexican shaft tombs has enabled Furst to develop a convincing interpretation of their meaning (Furst 1965a; 1965c; 1966:292ff, 425ff; 1974). Whereas previous students had interpreted the figures as being primarily secular in orientation with ball-players and warriors frequently depicted (e.g. Covarrubias 1957: 87ff), Furst shows that many of the features of the figures are best viewed as shamanistic attributes. For example, many of the tomb figures have a horn projecting from their forehead; Furst notes that "almost universally the horn has been the insignia of supernatural power--especially shamanic power" (1974:135). The combative, warrior-like stances of the figures are interpreted as shamanistic based on the observation that "shamans in general, as defenders of the community or its individuals against supernatural enemies, are expected to be combative and are frequently so depicted in shamanic lore" (ibid.). Furst discusses many other such traits and provides extensive ethnographic

analogies for the tomb figures; the reader is referred to Furst's (1965c and 1974) articles for a full discussion of the matter.

This interpretation of shamanism as a primary referent of West Mexican shaft tomb art is paralleled by the consistent association of shaft tombs with shamans and shamanistic practices in the ethnohistorical accounts from South America discussed by Zuidema (this volume). In the Peruvian data, there are cases of shamans (usually called "sorcerers" by the Spanish writers) buried in shaft tombs as well as shamanistic rites accompanying the burial of other persons in the tombs (ibid.).

Conch shells (often material manifestations of shamanistic practices) are often found in shaft tombs. Furst recovered 125 complete or fragmentary conch shells from Tomb I at Las Cebollas, Nayarit, many in the form of trumpets (1965a:24ff; 1966:94ff). This is paralleled by the depiction of conch shells in deep tombs on several painted Moche V Stirrup-spouted vessels from Peru (Donnan 1976:7, 9, 83, plate 8). The tombs, which each contain an individual and two or more conch shells, are probably shaft tombs (R. T. Zuidema, personal communication). Holm (1962/63: 138f) reports finding 55 conch shell beads in a shaft tomb in Guayas province, Ecuador. Also, Zuidema notes that a contact-period huaca or shrine (which had a shamanistic cult) with "two subterranean rooms" (probably shaft tombs) in association with it contained a wall in the form of a conch shell (Zuidema, this volume).

These ideological associations of shaft tombs in both West Mexico and South America--shamanism and conch shells--provide further support for the postulated unitary New World shaft tomb complex. It is true that these associations cannot be demonstrated for all or even most known shaft tombs, but then neither can they be ruled out; the problem concerns the incomplete nature of our knowledge of the contents of shaft tombs. Most of the known New World shaft tombs have been looted (see, for example, Bruhns 1972). The data discussed by Furst come from several tombs in West Mexico whose contents he was able to study after the tombs had been looted. If we had better data on more shaft tombs, the extent of the shamanistic and conch shell associations

could be evaluated more carefully. However, given the present state of our knowledge of shaft tombs, the ideological parallels between the tomb associations in West Mexico and South America should be viewed as highly significant.

The evidence presented above, particularly the four physical traits discussed, points to the existence of an "ideal type," or distinct cognitive category specifying the type of tomb to be used for certain kinds of burials. The individual shaft tombs are all manifestations of this cognitive category, approaching the ideal type with varying degrees of success or accuracy. In this sense shaft tombs can be considered works of art following Kubler (1962), and the shaft tomb complex is thus interpretable as what Kubler calls a "formal sequence." This is defined as a "historical network of gradually altered repetitions of the same trait" (ibid.:37). The process which creates and defines a formal sequence is replication of a known form. According to Kubler,

. . . Replication obeys two contrasting kinds of motion. They may be described as motions towards and away from quality. . . . Diminished quality becomes apparent when the maker reduces the excellence of the replica, either because of economic pressures or because of his inability to comprehend the full scope or import of the model (1962:76)

Thus shaft tombs with very shallow shafts and small rudimentary chambers can be considered "low quality," resulting from a poor replication of the shaft tomb concept. Three of the principle elements of the shaft tomb complex mentioned above (deep shaft, side chamber, hilltop placement) are definitely correlated.³ Tombs with very small, niche-like chambers have only been observed in shallow tombs, and there appears to be a positive correlation between depth of the shaft and placement on hills or rises. Thus when we find a diminishment in "quality" in one aspect of a shaft tomb, other corresponding deviations from the ideal are often found. This strengthens the notion of the shaft tomb complex as a tightly integrated cluster of traits. The many occurrences of shaft tombs of diminished quality in one or more aspects suggest that the accompanying ideology had a high prestige and

was imitated by many groups with an "inability to comprehend the full scope or import of the model."

Examples of this process of replication in the direction of lower quality can be seen in shaft tombs in Colombia and West Mexico. Ford (1944) describes a whole range of shaft tombs from the Western Cordillera in the vicinity of Cali Colombia. These tombs range from shallow tombs with small chambers (ibid.: Figure 2) to deep tombs with large, well-made chambers (ibid.: Figure 7). Tombs at each individual site tend to be relatively homogeneous with respect to "quality," running from the simple rudimentary tombs at sites Valle 10 and Valle 11 (ibid.: Figure 2) through the medium-depth, larger-chambered tombs of Cauca 6 (ibid.: Figure 6) to the deep, high-quality tombs of Cauca 5 (ibid.: Figure 7). An examination of Ford's site-descriptions shows that the sites with deep tombs are usually located on hilltops or mountain ridges, while those with shallow tombs (such as Valle 10) tend not to be so located. Although the dating and interrelationships of these sites have not been completely worked out, we can surmise that inhabitants of sites like Valle 10 knew about the shaft tomb idea but due to cultural distance or economic factors did not participate fully in the shaft tomb complex and produced poor quality replications of the basic concept.

A similar situation is found in the Etzatlán region of Jalisco (Mexico) by Weigand (1974). He divides sites, as defined by circular groups of burial mounds, into five types. These range from small, "basic farming-habitation units" to large ceremonial centers with craft workshops and other signs of cultural complexity. The shaft tombs associated with the different types of sites correspond nicely to the postulated quality gradient: the simplest sites have small mounds, and Weigand says that their shaft tombs "are often very shallow and the offerings are simple" (1974:121). As one moves up Weigand's scale of site types toward the largest, the mounds get larger, the shafts deeper, and the burial goods more numerous and elaborate. The larger sites were culturally more "central" than the smaller ones. Aside from probably having greater access to basic goods and services, these larger cultural centers had greater access to the exchange of

ideas and concepts, including the shaft tomb complex. As Zuidema (this volume) points out, the shaft tomb complex was even present in the Inca capital of Cuzco, far from the shaft tomb "heartland" (see Figure 2).

II. DISTRIBUTION OF SHAFT TOMBS IN SPACE AND TIME

Figure 2 shows the geographical distribution of shaft tombs in the New World. Specific data and references for the tombs are given in Table 1 (see Long 1967 for a similar presentation). The salient features of this spatial distribution are the widespread occurrence of the tombs in northwestern South America and their much more limited distribution in Mesoamerica.

The temporal distribution of tombs can be pictured as a structural parallel of the geographical distribution: widespread in South America and limited in West Mexico. Most of the South American tombs remain undated, although a shaft tomb at San Augustín (Colombia) has a radiocarbon date of 545 B.C. \pm 50 yrs. (GRN-3016; Duque Gomez 1963:104-105, cited in Patterson 1965: 71), making it the oldest securely-dated shaft tomb in the New World. The shaft tombs at Tierradentro, Colombia (not to be confused with the earlier and larger "burial caverns" of the site) are probably contemporaneous with those of San Augustín (Patterson 1965). From this period on up to the contact period, use of shaft tombs is extensive in Colombia and Ecuador, as well as Peru, western Venezuela, and Pacific Panama (Table 1). The use of Shaft tombs for burial well into the 20th Century has been reported for certain areas of Colombia (Joanne Rappaport, personal communication) and Ecuador (Jorge Marcos, personal communication). In West Mexico, by contrast, shaft tombs were used in a single discrete period from approximately 140 B.C. to A.D. 400 (see note 8).

Given the great similarity of the shaft tombs of South America and West Mexico, the spatial and temporal distributional data point to a South American origin of the shaft tomb complex. Because shaft tombs did not "catch on" in Mesoamerica as they obviously did in northwestern South America, the latter is more

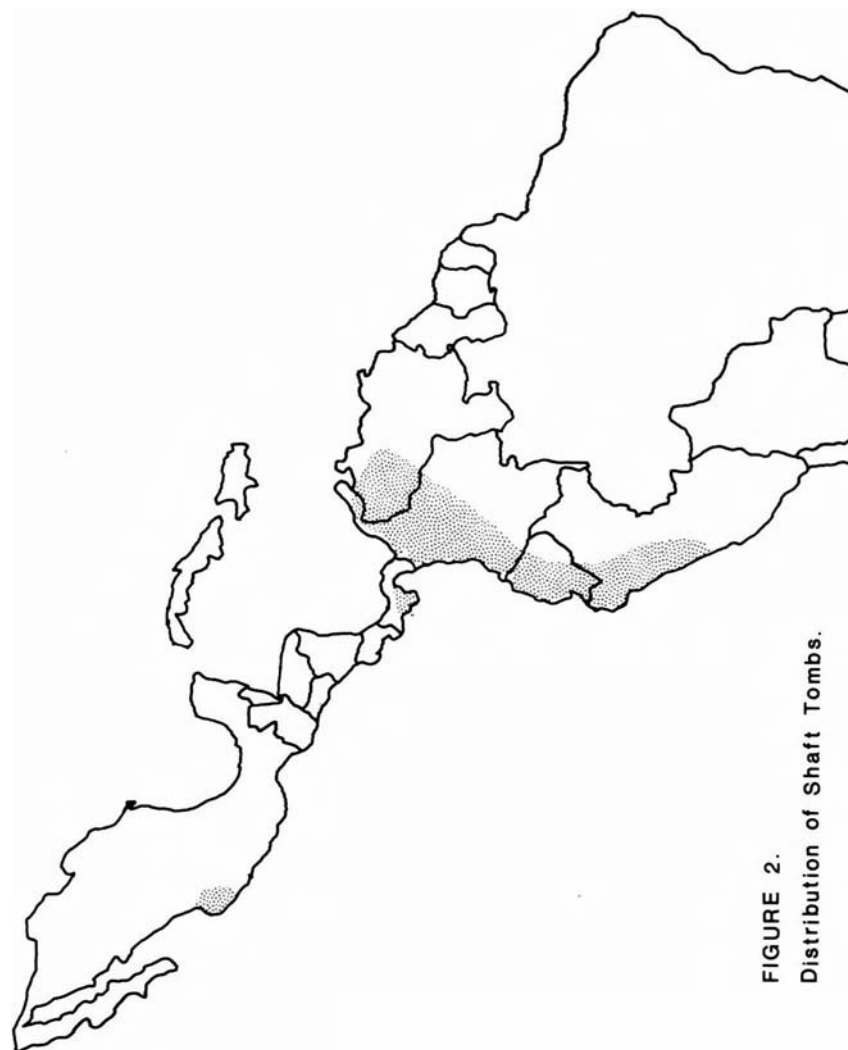


FIGURE 2.
Distribution of Shaft Tombs.

TABLE I
SPATIAL AND TEMPORAL DISTRIBUTION OF SHAFT TOMBS

LOCATION	DATES	SOURCES
<u>COLOMBIA</u>		
Quimbaya Area	ca. 300 B.C. to A.D. 1500	Restrepo T. 1929; Seler 1961; Bennett 1946; 838ff; Reichel-Dolmatoff 1965; Bruhns 1972.
Cauca Valley	uncertain	Wassén 1936; Ford 1944; Reichel-Dolmatoff 1965.
San Agustín	Lavapatas, Mesita and El Paraíso phases (ca. 555 B.C. to A.D. 425) ⁴	Duque Gomez 1963, 1964; Patterson 1965; Reichel-Dolmatoff 1965.
Tierradentro	La Montaña and Belalacázar phases. ⁵	Nachtigall 1955; Patterson 1965.
Tairona area	uncertain	Bennett 1946:845; Long 1967:78.
Nariño area	uncertain	Bennett 1946:832; Long 1967:78.
Chocó area	uncertain	Linné 1929.
Guambía province	recent use: 20th century	Joanne Rappaport, personal communication.
<u>VENEZUELA</u>		
Western Venezuela	Chipepe style of the Tierroid series (post-A.D. 1000)	Rouse and Cruent 1963: 74, 145.
<u>ECUADOR</u>		
Manteño culture (coastal Guayas)	A.D. 1100 to 1300	Marcos 1973.
Ibarra and Quito basin	Cara Phase (ca. A.D. 500 to 1500)	Verneau and Rivet 1912: 115ff; Meggers 1966:142ff; Furst 1966:46ff.
Malchingui (Pichincha province).	A.D. 150 + 60 yrs. (Bonn 2030)	Meyers et al. 1975.
Guayas province	recent use: 20th century	Jorge Marcos, pers. com.
provinces of: Bolívar, Tungurahua, Chimborazo, Carchi, Manabí, Guayas	largely uncertain, probably post-A.D. 500	Evans and Meggers 1966: 259f; Meggers 1966:120.

(Table 1 continued)

LOCATION	DATES	SOURCES
<u>PERU</u>		
Vicús area (Piura Valley)	uncertain ⁷	Matos M. 1965/66.
Recuay Culture (Tumbés area)	ca. 100 B.C. to A.D. 800	Mejía Xesspe 1960.
Pacatnamú (Pacasmayo Valley)	ca. A.D. 100 to 800	Ubbelohde Doering 1959.
Paracas	uncertain	Bennett 1949:47.
<u>PANAMA</u>		
Pueblo Nuevo site	300 B.C. to A.D. 300	Haberland 1969:236.
Veraguas province	uncertain	Lothrop 1948:159.
<u>BRAZIL & CHILE</u>	uncertain	Meggers 1963:fig. 2.
<u>MEXICO</u>		
state of Nayarit	140 B.C. to A.D. 400 ⁸	Furst 1965a; 1966; Corona Núñez 1954.
state of Jalisco	140 B.C. to A.D. 400 ⁸	Furst 1966; Corona Núñez 1955; Long 1966; Weigand 1974.
state of Colima	140 B.C. to A.D. 400 ⁸	Disselhoff 1932; Furst 1966.

likely to have been their area of origin. This view is taken by most people who have studied the West Mexican shaft tombs (e.g. Furst 1966:420ff; Long 1967:84; Evans and Meggers 1966); it will be the purpose of Part III of this article to move beyond this point and suggest a possible mechanism to account for the spread of the shaft tomb complex to West Mexico from South America.

Before turning to the model, however, the tombs from the site of El Opeño (Michoacan, Mexico) should be mentioned (Oliveros 1970, 1974; Noguera 1939, 1971; Furst 1966:50ff). These tombs are much earlier in date than the West Mexican shaft tombs. Associated ceramics are similar to Early Formative Tlatilco culture (1200-900 B.C.) in the Valley of Mexico (Oliveros 1970; Grove n.d.), and Oliveros reports a radiocarbon date of 1500 B.C. from plant material in one of the tombs (1974:193). Although Oliveros (1970, 1974) calls these tombs "shaft tombs" and suggests that they are ancestors of the later West Mexican tombs, I would question this identification. First, the El Opeño tombs have slanting passageways with stairs rather than vertical shafts; and second, they are not very deep. The mean depth of the eight El Opeño tombs pictured in Noguera (1939) and Oliveros (1974) is 1.65 meters, and the chamber ceilings are deeper than one meter in only two of the eight pictured; these tombs hardly look like shaft tombs (compare them with the 16 meter-deep shaft tomb of El Arenal, Jalisco as described by Corona Núñez 1955). Furst agrees, stating that "a direct historical relationship is doubtful" (1974:132). Shallow tombs entered from the side similar to those of El Opeño are common in Formative period Oaxaca (e.g. Bernal 1948/49), but any resemblance to the full shaft tombs of later times is probably fortuitous.

III. THE MODEL

I would suggest that the shaft tomb complex was brought by sea from South America to West Mexico by a group of traders and shamans (or possible trader-shamans) during the period of West Mexican shaft tombs (ca. 150 B.C. to A.D. 400). This interpretation is based on: (1) the close similarity (or even identity) of the shaft tomb complexes in South America and West Mexico;

(2) the likelihood of an established Pacific coastal trade route during the period in question; (3) the shamistic associations of shaft tombs in the two areas; and (4) supporting ethnographic data. In the pages which follow, these and other related elements will be brought together into a model which accounts for more of the known data on the shaft tomb complex (and its West Mexican setting) than do other interpretations in the literature. The model must be regarded as somewhat tentative, but it is hoped that hypotheses derived from it can be tested archaeologically in the future.

The great similarity of all New World shaft tombs and their associated features and ideology led in Part I to the postulation of a single shaft tomb complex with manifestations in northwestern South America and West Mexico. If this is accepted, then there must have been some form of intense, relatively "noise-free" communication between the two areas during the period under consideration. It is unlikely that the shaft tomb complex was transmitted through a large-scale migration of people from South America; the West Mexican ceramic assemblages contemporaneous with and associated with the shaft tomb complex bear little resemblance to contemporaneous South American ceramics.⁹ Rather, the postulated communication between northwestern South America and West Mexico is better viewed as taking place through sea-borne trading relationships.

As Marcos (this volume) amply documents, maritime trade between Ecuador and (unknown) points north was well-developed at the time of Spanish contact (see also Edwards 1965, 1969), and this trade probably connected with southward trade documented from Zacatula (West Mexico) at the same time. A document from 1525 cited by West (1961) states that:

. . . from time to time Indians from certain islands toward the south, which they point to, would come to this coast West Mexico [in large canoes] and they brought there exquisite things which they could trade for local products (Torres de Mendoza 1864-1888, vol. 13:45-84, ref. 63-64, translated and quoted in West 1961:133).

A number of students of the matter have pushed the Pacific coastal trade routes back in time to the Formative period (Marcos,

this volume; Zeidler, this volume; Grove n.d.; Coe 1960; Lathrap 1975:61; Paulsen 1976). Although hard evidence of Formative exchange between South America and West Mexico is generally lacking, ceramic similarities between the two areas are striking in some instances (e.g. Andresen, this volume), and contact through sea-trade is the most reasonable mechanism by which to account for the similarities. Perhaps the most prominent example concerns the West Mexican ceramic complexes of Capacha (Kelly 1970) and El Opeño (Oliveros 1970, 1974) which share many traits with the Tlatilco ceramics of the Valley of Mexico as well as with Machalilla ceramics of Ecuador (Grove n.d.; Meighan 1974: 1256). It is thus not unreasonable to suggest that sea-trade existed between Ecuador and West Mexico as early as 1000 B.C.

Turning back to shaft tombs, there is conclusive evidence that the West Mexicans involved in the shaft tomb complex participated in some form of long-distance exchange to the south: of the 125 conch shells recovered in shaft tomb number 1 at Las Cebollas (Furst 1965a:24ff; 1966:94ff), 120 are of a species (*Xancus angulatus* Solander, or West Indian chank) found naturally only in the Caribbean (Furst 1965a:24). Thus while some varieties of conch were available in the nearby Pacific waters (Keen 1971), the West Mexicans chose to obtain the shells from the Caribbean. While we cannot be sure of the exact trade route used, a Pacific maritime route (crossing to the Caribbean through Central America) is the most likely. First, it is by far the most direct route (cf. Figure 2), and second, contacts between West Mexico and the rest of Mesoamerica were minimal during the shaft tomb period (as opposed to both earlier and later times; see Meighan 1974), thus almost certainly ruling out overland trade routes. This gives us a link between the West Mexican shaft tomb cultures and what was probably an established long-distance maritime trading network, involving exchange of shell at the very least. As the model posits this trade route as the mechanism of transmittal of the shaft tomb complex, it is significant that the shaft tombs of Pacific Panama occur in the same time range, though probably beginning and ending slightly earlier than the West Mexican tombs (Table 1). Long-distance aboriginal maritime

trade was probably not a "non-stop" affair, and stopping places in Panama and other coastal areas along the way are to be expected.

We now have a likely mechanism (maritime trade routes) for the spread of the shaft tomb complex from South America to West Mexico; the details and plausibility of this mechanism remain to be discussed. The following reconstruction is somewhat speculative, but it accounts for the known archaeological data within an ethnographically plausible framework.

Because of the relative complexity of the shaft tomb complex and its highly successful replication in the new cultural setting of West Mexico, it seems probable that it must have been introduced by a group of persons seen as having more prestige, status, or power than simple sea-going traders. I suggest that a group of shamans from South America, who for some reason were thought to possess such superior power or prestige, introduced shaft tombs to Mexico. If important ritual goods were already being obtained by sea trade (e.g. conch and other shells, including *Spondylus*--see Marcos, this volume), then the arrival of powerful shamans who knew the proper use of these goods would be an important event. These supernatural specialists would have advocated the use of shaft tombs, thus providing an effective inducement to the indigenous culture to assume the practice of shaft tomb burial.

The association of power (both political and supernatural) with distant or foreign places has been widely reported in the ethnographic literature (see, for example, Balandier 1970:106). In an interesting paper on the subject, Helms (1977) discusses the power of foreign "esoteric knowledge" and its association with political power in chiefdom societies:

. . . I would add to these the pursuit by elites of esoteric ("sacred") knowledge through prestige-conferring contacts with high ranking teachers at geographically distant centers. Further, given the rivalries and competitions inherent among elites in chiefdoms, I propose that leaders would strive actively to contact ever more distant regions, trying to tap sources of esoteric knowledge different from, or more refined than, those known by their rivals, and that such individual rivalries in pursuit of knowledge automatically would create a widening, self-expanding network of foreign contacts among elites in geographically distant territories (Helms 1977:6).

One of the realms most commonly tied in with concepts of long-distance "power sources" is shamanism. Some excellent examples are found in lowland South America, where foreign shamans are seen as having more power than local practitioners (e.g. Kirchoff 1948:492). The Jívaro of eastern Ecuador look at shamans of the neighboring Canelos people as having vastly superior powers (Harner 1972:116-125). "Canelos shamans are able to perform feats not possible for Jívaro and Achuara shamans" (ibid.:119. See also Whitten 1976:149, 159), and they are in great demand among the Jívaro. Oberem (1974) notes that in eastern Ecuador in general, lowland shamans are usually regarded as more powerful than their highland counterparts.

The Callahuaya of Bolivia provide another interesting example (Wrigley 1917; Otero 1951; Oblitas Poblete 1963). These traveling herbalists and curers are in great demand all over the southern Andes, and much of their considerable power seems to derive from their distant origins (i.e. "outside" of the many local communities in which they practice their arts) and their associations with the lowland jungle areas from which many of their medicines originate (e.g. Otero 1951:131-148). Given this broad ethnographic context, the shamanistic associations of the West Mexican and South American shaft tombs takes on a new importance.

It is probably significant in this context that shamans in non-stratified societies are sometimes exempt from the norms of generalized and balanced economic reciprocity that characteristically prevail (see Sahlins 1965 on reciprocity). Shamans often perform their services in exchange for material goods (e.g. Harner 1972:117; Whitten 1976:146f; Helms 1977:4, 6; Kirchoff 1948:493; Turner 1972:68, 76), and this can lead to an accumulation of goods or wealth beyond that typically found in non-stratified societies. A clear example of this is found among the Jívaro:

. . . In terms of material goods, shamans are invariably the wealthiest persons and usually candidly admit that they supply their services primarily for the purpose of gaining valuables. They expect to be paid for their curing or bewitching services with the most highly valued goods available (Harner 1972:117. See also Stirling 1928:115ff and Oberem 1974:351).

These highly valued goods are usually long-distance trade goods. As Harner shows (ibid.:116ff), Jívaro shamans are important participants in the extensive long-distance trade networks of eastern Ecuador (ibid.:125ff). Although a close relationship between shamans and trade is not widely reported in the ethnographic literature,¹⁰ a number of additional cases are reported from South America (Oberem 1974:351; Colson 1973:45-49; see also the Callahuaya references above).

We can thus suggest that the transplanted South American shamans were involved in long-distance trading activities, based on the Jívaro and other parallels. This could account for the original motivation for the journey from northwestern South America to West Mexico. Weigand (1974:123) lists valuable raw materials found in the Etzatlán region which the "shaft tomb culture" may have been exporting: quartz crystals,¹¹ turquoise, two kinds of obsidian (red and opaque grey), basalt for metates, agates, opals, and the magic mushroom. Some of these goods may have been valued highly enough to have entered the Pacific trade routes (Etzatlán is located near the Ameca River which flows into the Pacific in the Bahía de Banderas). Admittedly this reconstruction is very hypothetical. It does, however, have the advantage of bringing ideological and material factors together into the same system (see also Helms 1977:2). Although the various West Mexican "shaft tomb cultures" were not unified into a common centralized polity, they can be seen as linked together by the shaft tomb complex and by these trade networks. As Bell has noted:

. . . The shaft tomb complex, as such seems not to have existed in a uniform cultural matrix, but undeniably it gave some measure of unity to a wide area (1971:749).

This model could also help explain the disappearance of shaft tombs with the start of heavy Teotihuacan influence in West Mexico (Meighan 1974:1258; Long and Taylor 1966b:1456ff; Weigand 1974:127). During the major period of the shaft tomb complex, there is little evidence of connections between West Mexico and developments in the Valley of Mexico. During the subsequent spread of Teotihuacan influence throughout Mesoamerica (A.D. 200-

450), thin orange and other characteristically Central Mexican ceramic wares turn up in West Mexico (Meighan 1974:1258; Furst 1966:156f; Weigand 1974:127), and Weigand (ibid.) notes a corresponding political centralization in the Etzatlán area. The presence of Teotihuacan ceramics probably signals a major reorientation in trade patterns in West Mexico (as well as elsewhere); the route to Central Mexico could have thus replaced the Pacific route as the main commercial link out of West Mexico. Once this communication link with South America was severed, the major impetus for building shaft tombs (the shamans and traders with the "exquisite things which they could trade for local products," West 1961:133) would be gone. The shaft tomb complex of Mesoamerica soon disappeared, a direct result of these new commercial (and ideological) patterns associated with Teotihuacan influences in West Mexico.

CONCLUSIONS

The model presented above is based on a combination of hard evidence (the form and distribution of shaft tombs; the Caribbean shells in West Mexico; contact-period Pacific seah trade; Teotihuacan influences in West Mexico; etc.), inferences which do not seem unreasonable (the shamanistic associations of shaft tombs; a maritime trade route between 200 B.C. and A.D. 400; etc.) and ethnographic analogies (Jívaro shamans and trade, etc.). As such, it must be treated as tentative and exploratory at this point, pending future archaeological research which can test some of the features of the model. However, the model does not do damage to the range of data covered, and it is more comprehensive than previous interpretations, most of which go no further than positing "diffusion" to account for the shaft tomb complex. The development and testing of models such as this one is a necessary step for a fuller understanding of the nature and extent of prehistoric contacts between Mesoamerica and South America, and it is hoped that future research in the two areas will be carried out with such models in mind.

Notes

1. This article is a shortened and revised version of a paper originally presented in a seminar. The seminar paper was titled "Shaft tombs in Mexico and South America; Evidence for Prehistoric Cultural Interaction," and contains a more detailed discussion of the distribution, characteristics and associations of shaft tombs in the New World. I would like to thank the members of the seminar for helpful comments on the original paper. I am also grateful to Sr. Olaf Holm (of the Casa de la Cultura Ecuatoriana in Guayaquil) for kindly providing me with some hard-to-locate sources.
2. The relevant sources for the placement of shaft tombs on hills or rises are: Mexico: Furst (1965a:14; 1966:68); Long (1966:13); Corona Nunez (1955:5); Bell (1971:720). South America: Linné (1929:191); Restrepo T. (1929:84ff); Seler (1961:68ff); Ford (1944); Furst (1965a:14). Panama: Lothrop (1948:159). Bell (1971:720) notes that in Nayarit (Mexico), "local informants maintained that shaft tombs are always found at elevations somewhat above the habitation sites." Restrepo T. (1929:84) states that for their shaft tombs, the Quimbaya of Colombia "excogían siempre de preferencia las altas comas de los cerros y los elevados picos de la cordillera." Shaft tombs in the Etzatlán region of Jalisco (Mexico), although not located on natural hills, usually have artificial mounds built over them (Weigand 1974).
3. Data on the fourth element, *claraboyas*, is not as complete. These openings are usually filled in with soil when the chamber is investigated, and could easily escape observation if the roof of the chamber is not carefully probed.
4. A radiocarbon date of 545 B.C. \pm 50 years (GRN-3016) has been reported for a Lavapatas phase shaft tomb (Duque Gomez 1963: 104-105, cited in Patterson 1965:71).
5. The Tierradentro shaft tombs (La Montaña and Belalacázar phases) are probably contemporaneous with the shaft tombs of San Agustín (Patterson 1965).
6. This date is from Tomb II. Meyer et al. (1975:126f) note similarities between the offerings of Tomb I at Malchingui and those of a tomb in Otavalo which has a radiocarbon date of 820 B.C. \pm 135 (DIC-195). The Otavalo tomb is not a shaft tomb, but shaft tombs do occur at the same site.
7. The rich Vicús shaft tombs contain ceramics dating from the Early Horizon (Cupisnique) through Moche and on up to the conquest (Matos M. 1965/66:120ff).
8. Taylor (1970) lists eight radiocarbon dates from West Mexican shaft tombs, all of which fall between 140 B.C. and A.D. 400 (cf. Furst 1965b; Long & Taylor 1966a, 1966b). The ceramics associated with the tombs corroborate this period of tomb use (e.g. Furst 1966; Long 1966:97ff; Bell 1971:747; Taylor 1970:104; Meighan 1974:1258).

9. The West Mexican ceramic assemblages concerned are: Ortices, Early Ixtlan, Early Tuxcacuexco, Gavilan, Tamarindo, Tierra del Padre and Early Morett (Bell 1971:747; Kelly 1947; Meighan 1974: 1258). It will be mentioned later that ceramic parallels between West Mexico and South America were striking at an earlier date, but not after 200 B.C.

10. It is very likely that the involvement of shamans in long-distance trading networks is more widespread than the ethnographic literature would suggest. Most ethnographic treatments of trade focus on the goods and the routes, ignoring the role of the trade goods within the society, while treatments of shamanism often mention particular artifacts involved but ignore their points of origin.

11. Weigand (1974:123) notes that quartz crystals "are frequently found in tombs, and ethnographically, as among the Huicholes, they are important items for the shamans' singing trances."

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